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HOME

Welcome to the University of Missouri-Kansas City 2020-2021 catalog! We are pleased to provide an interactive and searchable online catalog.

Use the left hand menus to navigate or search through the catalog. There is also a PDF version available through the Print Options link.

We welcome your feedback and suggestions to make this catalog better for the future. Feedback may be provided by sending an email to umkccatalog@umkc.edu.

Amy Cole (coleamy@umkc.edu), University Registrar

Amy Hall (amyhall@umkc.edu), UMKC Catalog Administrator

UMKC Summary Profile

Located in the heart of Kansas City, Mo., the University of Missouri-Kansas City is a public research university focused on urban issues. At UMKC, your mind will be opened to knowledge, diverse people and outstanding experiences, allowing you to further explore those areas of your life in which you are already engaged.

For more information about UMKC, please visit <https://www.umkc.edu/about/facts.html>.

INTRODUCTION

University of Missouri - Kansas City (UMKC)

General undergraduate academic rules and regulations and graduate academic regulations and information apply to all undergraduate and graduate programs, respectively.

Prospective students should be aware that the University reserves the right to make changes in admission requirements, fees and other specifications in the catalog.

The web site address for the UMKC catalog is <http://umkc.edu/catalog> (<http://www.umkc.edu/catalog/>).

The UMKC catalog is the official record of degree program requirements. Students are expected to become thoroughly familiar with all academic regulations and requirements of this catalog pertaining to their program of study and to comply with its provisions.

The University of Missouri-Kansas City (UMKC) is one of four campuses that constitute the University of Missouri (<http://www.umsystem.edu/ums/about/>). Established in Columbia in 1839 on the ideals of Thomas Jefferson, the University of Missouri became a land-grant institution upon passage of the Morrill Act by Congress in 1862.

The University is governed by the Board of Curators (<http://www.umsystem.edu/curators/>), whose members are appointed by the governor of Missouri and confirmed by the Missouri Senate. The University president (<http://www.umsystem.edu/president/>) directs and coordinates the programs of the four campuses, with staff assistance in finance, business management, research, extension, development, public information and other UM system services.

The activities of each campus are supervised by a chancellor, who directs campus affairs within policies established by the Board of Curators and the president.

Accreditation

"Accreditation" is the primary means of assuring and improving the quality of higher education institutions and programs in the United States. Active for the past 100 years, this private, voluntary system of self-examination and peer review has been central to the creation of a U.S. higher education enterprise that is outstanding in many respects.

– *Council for Higher Education Accreditation*

The University of Missouri - Kansas City is accredited by The Higher Learning Commission, a regional accreditation agency recognized by the U.S. Department of Education.

The Higher Learning Commission

230 South LaSalle Street, Suite 7-500, Chicago, IL 60604

(800) 621-7440

<http://www.hlcommission.org>

The Higher Learning Commission accredits UMKC as a whole. Specific undergraduate, graduate, and professional programs, are also accredited by other programmatic accrediting agencies. The accredited programs and their accrediting agencies are identified in the applicable academic unit and/or program information sections of the catalog.

Mission and Values

Mission (What We Do)

As an urban research university, our mission at the University of Missouri-Kansas City is to promote learning through the discovery, preservation and dissemination of knowledge of public value across a broad spectrum of disciplines and fields of study. UMKC celebrates the individual and embodies diversity and inclusion by intertwining these goals with innovation to enable transformational impact aimed at bringing cultural, social, health and economic prosperity to the metropolitan, regional and global communities we serve.

Vision (Why We Do What We Do)

UMKC aspires to be an exemplary public urban research university of the 21st Century, pursuing excellence as a human-centric learning and discovery community, fostering equity, diversity and inclusion to enrich the lives of the people and regions we serve.

Learn more about the Chancellor's Strategic Plan (<https://www.umkc.edu/about/strategic-plan.html>).

Values

We, the community members of UMKC, are proud to contribute to a student-centered urban university, serving our mission of learning, discovery, research and service, inspired by our commitment to equity, diversity, inclusion and respectful interaction.

Our key values:

- Accountability
- Learning
- Respect
- Diversity
- Collaboration
- Integrity

Learn more about the values of UMKC (PDF) (<https://www.umkc.edu/about/documents/UMKC-Values-Statement.pdf>).

ACADEMIC PROGRAMS

Areas of study are listed in the first column. The actual undergraduate and graduate degrees or certificates to be earned are listed to the right of each field of study. Degrees, emphasis areas (options), certificates, and minors will appear on students' official transcripts.

Pursuant to Missouri HB 1606 (2018), information regarding program lengths, costs, and students' median time-to-degree, as well as employment and wage outcomes, can be found at <https://jobs.mo.gov/jobseeker/training-and-education> (<https://jobs.mo.gov/jobseeker/training-and-education/>). Employment and wage outcomes are limited to completers found employed in Missouri. Students not found as employed may also be working out-of-state, self-employed, or enrolled in continuing education. Additional information on programs and program outcomes may be found by searching at <https://scorecard.mo.gov/Search> (<https://scorecard.mo.gov/Search/>).

Degree Programs (emphasis)	College	Undergraduate	Graduate
Accounting	Management	BS (p. 1792)	MS (p. 1725)
Actuarial Science	Arts & Sciences	Minor (p. 895)	
Anesthesia	Medicine		MS (p. 1829)
Anthropology	Arts & Sciences	Minor (p. 995), BA*(Sociology BA) (p. 991)	
Architectural Studies	Arts & Sciences	Cooperative Program (K-State) (p. 560)	
Art History	Arts & Sciences	Minor (p. 597), BA (p. 583)	MA (p. 592), (i)PhD (p. 1553)
Art and Visual Communication	Arts & Sciences	Minor (p. 596)	
Artist's Certificate	Conservatory		GRCT (p. 1043)
Astronomy	Arts & Sciences	Minor (p. 920), BS*(Physics BS) (p. 931)	
Bioethics and Medical Humanities	Arts & Sciences	Minor (p. 911)	
Bioinformatics	Medicine		MS (https://nextcatalog.umkc.edu/colleges-schools/medicine/graduate-programs/master-of-science-program-bioinformatics/)
Biology	Biological and Chemical Sciences	BA (p. 1152), BS (p. 1158), Minor (p. 1199)	MA (p. 1196)
Biology (Bioinformatics Emphasis)	Biological and Chemical Sciences	BS* (p. 1163)	
Biology (Biomedical Sciences Emphasis)	Biological and Chemical Sciences	BS* (p. 1169)	
Biology (Biotechnology Emphasis)	Biological and Chemical Sciences	BS* (p. 1174)	
Biology (Cellular and Molecular Basis of Health and Disease Emphasis)	Biological and Chemical Sciences	BS* (p. 1179)	
Biology (Clinical Laboratory Science Emphasis)	Biological and Chemical Sciences	BS* (p. 1184)	
Biomedical and Health Informatics	Medicine		(i)PhD (p. 1555)
Black Studies	Arts & Sciences	Minor (p. 612), BLA*(Liberal Arts BLA) (p. 603)	GRCT (p. 608)
Business Administration	Management	Minor (p. 1799)	MBA (p. 1717)
Business Administration (Analytics and Business Intelligence Emphasis)	Management	BBA* (p. 1733)	
Business Administration (Entrepreneurship and Innovation Emphasis)	Management	BBA* (p. 1740)	
Business Administration (Finance Emphasis)	Management	BBA* (p. 1746)	
Business Administration (Health Administration Emphasis)	Management	BBA* (p. 1753)	
Business Administration (Management Emphasis)	Management	BBA* (p. 1759)	

Business Administration (Marketing Emphasis)	Management	BBA* (p. 1766)	
Business Administration (Nonprofit Management Emphasis)	Management	BBA* (p. 1772)	
Business Administration (Real Estate Emphasis)	Management	BBA* (p. 1779)	
Business Administration (Supply Chain Management Emphasis)	Management	BBA* (p. 1786)	
Business Analytics	Management		GRCT (p. 1714)
Cell Biology and Biophysics	Biological and Chemical Sciences		(i)PhD (p. 1557)
Cellular and Molecular Biology	Biological and Chemical Sciences		MS (p. 1197)
Cellular and Molecular Biology (Bioinformatics Emphasis)	Biological and Chemical Sciences		MS* (p. 1197)
Chemistry	Biological and Chemical Sciences	Minor (p. 1222), BA (p. 1210), BS (p. 1214)	MS (p. 1220), (i)PhD (p. 1223)
Civil Engineering	Computing & Engineering	BS (p. 1293)	MS (p. 1300)
Classical Languages and Cultures	Arts & Sciences	BA*(Languages and Literatures BA) (p. 811)	
Classical and Ancient Studies	Arts & Sciences	Minor (p. 617)	
Clinical Research	Medicine		GRCT (p. 1825)
College Teaching and Career Preparation	Graduate Studies		GRCT (p. 1541)
Communication Studies	Arts & Sciences	Minor (p. 646)	
Communication Studies (Film and Media Studies Emphasis)	Arts & Sciences	BA* (p. 627)	
Communication Studies (Interpersonal and Public Communications Emphasis)	Arts & Sciences	BA* (p. 632)	
Communication Studies (Journalism and Mass Communications Emphasis)	Arts & Sciences	BA* (p. 637)	
Computer Science	Computing & Engineering	Minor (p. 1370), BA (p. 1334), BS (p. 1350)	MS (p. 1360), (i)PhD (p. 1564)
Conducting	Conservatory		MM (p. 1046), DMA (p. 1039)
Counseling	Education		MA (p. 1519), EDSP (p. 1504)
Counseling Psychology	Education		PhD (p. 1534)
Criminal Justice and Criminology	Arts & Sciences	Minor (p. 654), BA (p. 655)	MS (p. 660), BA-MS (p. 661)
Cultural Anthropology	Arts & Sciences	BA* (p. 991)	
Curriculum and Instruction	Education		MA (p. 1522), EDSP (p. 1507), (i)PhD (p. 1568)
Dance	Conservatory	BFA (p. 1030)	
Dental Hygiene	Dentistry	BS (p. 1408)	
Dental Hygiene Education	Dentistry		MS (p. 1415)
Dentistry	Dentistry		DDS (p. 1420)
Dentistry-Advanced Education in General Dentistry	Dentistry		GRCT (p. 1390)
Early Childhood Education	Education	BA (p. 1473)	
Earth and Environmental Science (Environmental Science Emphasis)	Arts & Sciences	BS* (p. 683)	
Earth and Environmental Science (Geology Emphasis)	Arts & Sciences	BS* (p. 688)	
Earth and Environmental Science (Physical Geography Emphasis)	Arts & Sciences	BS* (p. 693)	
Economics	Arts & Sciences	Minor (p. 722), BA (p. 714)	MA (p. 721), (i)PhD (p. 719)
Education	Education		EdD (p. 1501)

Educational Administration	Education		MA (p. 1525), EDSP (p. 1508)
Educational Leadership, Policies and Foundations	Education		(i)PhD (p. 1572)
Electrical Engineering	Computing & Engineering		MS (p. 1365)
Electrical and Computer Engineering	Computing & Engineering	BS (p. 1345)	(i)PhD (p. 1573)
Elementary Education	Education	BA (p. 1478)	
Endodontics	Dentistry		GRCT (p. 1391)
Engineering	Computing & Engineering		(i)PhD (p. 1579)
Engineering and Construction Project Management	Computing & Engineering		GRCT (p. 1299)
English	Arts & Sciences	Minor (p. 792), BA (p. 746)	MA (p. 773), (i)PhD (p. 1580)
English (American Literary and Cultural Studies)	Arts & Sciences	BA* (p. 751)	
English (Classical, Medieval, and Early Modern Literature)	Arts & Sciences	BA* (p. 811)	
English (Creative Writing Emphasis)	Arts & Sciences	Minor (p. 791), BA* (p. 761)	
English (Language and Rhetoric Emphasis)	Arts & Sciences	BA* (p. 766)	
English Creative Writing and Media Arts (Creative Nonfiction Emphasis)	Arts & Sciences		MFA* (p. 779)
English Creative Writing and Media Arts (Fiction Emphasis)	Arts & Sciences		MFA* (p. 788)
English Creative Writing and Media Arts (Playwriting Emphasis)	Arts & Sciences		MFA* (p. 781)
English Creative Writing and Media Arts (Poetry Emphasis)	Arts & Sciences		MFA* (p. 784)
English Creative Writing and Media Arts (Screenwriting Emphasis)	Arts & Sciences		MFA* (p. 786)
English Manuscript, Print Culture, and Editing	Arts & Sciences	Minor (p. 794)	
English Writing	Arts & Sciences	Minor (p. 795)	
Entrepreneurial Real Estate	Management		MS (p. 1726)
Entrepreneurship and Innovation	Management	Minor (p. 1799)	PhD (p. 1729), (i)PhD (p. 1582)
Environmental Studies	Arts & Sciences	Minor (p. 700), BA (p. 678)	
Environmental Sustainability	Arts & Sciences	Minor (p. 701)	
Environmental and Urban Geosciences	Arts & Sciences		MS (p. 698)
Exercise Science	Education	Minor (p. 1533)	
Film Studies	Arts & Sciences	Minor (p. 647)	
Film and Media Arts	Arts & Sciences	BA (p. 641)	
Finance	Management		MS (p. 1727)
French	Arts & Sciences	Minor (p. 832), BA*(Languages and Literatures BA) (p. 816)	
Geographic Information Systems	Arts & Sciences	UGCRT (p. 703)	GRCT (p. 698)
Geography	Arts & Sciences	Minor (p. 702)	
Geology	Arts & Sciences	Minor (p. 702)	
Geosciences	Arts & Sciences		(i)PhD (p. 1583)
German	Arts & Sciences	Minor (p. 832)	
German Studies	Arts & Sciences	Minor (p. 833)	
Gerontology	Arts & Sciences	Minor (p. 835)	GRCT (p. 834)
Health Professions Education	Medicine		GRCT (p. 1826), MPHE (p. 1826)
Health Sciences	Nursing & Health Studies	Minor (p. 1908), BHS (p. 1881)	
Historic Preservation	Arts & Sciences		GRCT (p. 571)
History	Arts & Sciences	Minor (p. 861), BA (p. 850)	MA (p. 857), BA-MA (p. 861), (i)PhD (p. 856)

Humanities Consortium	Arts & Sciences		(i)PhD (p. 1587)
Information Technology	Computing & Engineering	BIT (p. 1339)	
Interdisciplinary Leadership in Disability Studies	Graduate Studies		GRCT (p. 1540)
International Studies	Arts & Sciences	Minor (p. 948), BA*(Languages and Literatures BA) (p. 820)	
Jazz Studies	Conservatory	BM (p. 1077)	
Language & Literacy	Education		EDSP (p. 1510), MA (p. 1530)
Languages & Literatures (Classical Languages & Culture)	Arts & Sciences	BA* (p. 811)	
Languages & Literatures (French Language & Literature)	Arts & Sciences	BA* (p. 816)	
Languages & Literatures (International Studies)	Arts & Sciences	BA* (p. 820)	
Languages & Literatures (Spanish Language & Literature)	Arts & Sciences	BA* (p. 826)	
Latinx and Latin American Studies	Arts & Sciences	Minor (p. 864)	
Law	Law		JD (p. 1645), LLM (p. 1665)
Liberal Arts	Arts & Sciences	BLA (p. 867)	
Liberal Arts (Black Studies)	Arts & Sciences	BLA* (p. 603)	
Liberal Studies	Arts & Sciences		MA (p. 871)
Mathematics	Arts & Sciences	Minor (p. 896)	MS (p. 892), (i)PhD (p. 1589)
Mathematics & Statistics	Arts & Sciences	BA (p. 880), BS (p. 885)	
Mechanical Engineering	Computing & Engineering	BSME (p. 1301)	MS (p. 1306)
Medicine	Medicine		MD (p. 1807)
Medieval and Early Modern Studies	Arts & Sciences	Minor (p. 899)	GRCT (p. 897)
Middle School Education	Education	BA (p. 1483)	
Molecular Biology and Biochemistry	Biological and Chemical Sciences		(i)PhD (p. 1591)
Multi/Interdisciplinary	Graduate Studies		PHD (p. 1543)
Music	Conservatory	BA (p. 1054)	MA (p. 1045)
Music (Music Therapy Emphasis)	Conservatory	BA* (p. 1058)	MA* (p. 1045)
Music Composition	Conservatory	BM (p. 1081)	MM (p. 1048), DMA (p. 1036)
Music Education	Conservatory	BME (p. 1063)	MME (p. 1053), (i)PhD (p. 1593)
Music Performance (Guitar Emphasis)	Conservatory	BM* (p. 1085)	
Music Performance (Piano Emphasis)	Conservatory	BM* (p. 1090)	
Music Performance (Voice Emphasis)	Conservatory	BM* (p. 1094)	GRCT* (p. 1044), MM* (p. 1052), DMA* (p. 1041)
Music Performance-Instrumental	Conservatory		GRCT* (p. 1044), DMA* (p. 1041)
Music Performance-Keyboards	Conservatory		GRCT* (p. 1044), MM* (p. 1050), DMA* (p. 1041)
Music Performance-Orchestral and Guitar	Conservatory		MM* (p. 1051)
Music Performance-Wind, Strings, Percussion	Conservatory	BM* (p. 1099)	
Music Performance-Woodwinds	Conservatory		MM* (p. 1051)
Music Theory	Conservatory	BM (p. 1103)	MM (p. 1048)
Musicology	Conservatory		MM (p. 1049)
Nonprofit Management & Innovation	Management		GRCT (p. 1715)
Nurse Anesthetists	Nursing & Health Studies		DNP* (p. 1900)
Nurse Educator	Nursing & Health Studies		GRCT (p. 1909), MSN* (p. 1905)
Nursing	Nursing & Health Studies	RN-BSN (p. 1885), BSN (p. 1885)	MSN (p. 1905), DNP (p. 1900), PhD (p. 1910)
Nursing-APRN	Nursing & Health Studies		MSN-DNP (p. 1900)

Nursing-Acute Pediatric Care Nurse Practitioner	Nursing & Health Studies		Post-MSN GRCT (p. 1911), MSN* (p. 1905), DNP* (p. 1900)
Nursing-Adult Gerontology Nurse Practitioner	Nursing & Health Studies		Post-MSN GRCT (p. 1913)
Nursing-Family Nurse Practitioner	Nursing & Health Studies		Post-MSN GRCT (p. 1912), MSN* (p. 1905), DNP* (p. 1900)
Nursing-Neonatal Nurse Practitioner	Nursing & Health Studies		Post-MSN GRCT (p. 1912), MSN* (p. 1905)
Nursing-Pediatric Nurse Practitioner	Nursing & Health Studies		Post-MSN GRCT (p. 1912), MSN* (p. 1905), DNP* (p. 1900)
Nursing-Psychiatric Mental Health Nurse Practitioner	Nursing & Health Studies		Post-MSN GRCT (p. 1913), MSN* (p. 1905)
Nursing-Women's Health Nurse Practitioner	Nursing & Health Studies		Post-MSN GRCT (p. 1913), MSN* (p. 1905), DNP* (p. 1900)
Oral & Craniofacial Sciences	Dentistry		MS (p. 1417), (i)PhD (p. 1594)
Orthodontics & Dentofacial Orthopedics	Dentistry		GRCT (p. 1394)
Periodontics	Dentistry		GRCT (p. 1396)
Pharmaceutical Sciences	Pharmacy		(i)PhD (p. 1599)
Pharmacology	Pharmacy		(i)PhD (p. 1600)
Pharmacy	Pharmacy		PharmD (p. 1941)
Philosophy	Arts & Sciences	Minor (p. 911), BA (p. 907)	
Physician Assistant	Medicine		MMS (p. 1827)
Physics	Arts & Sciences	Minor (p. 921), BA (p. 922), BS (p. 926)	MS (p. 935), (i)PhD (p. 1602)
Physics (Astronomy)	Arts & Sciences	BS* (p. 931)	
Political Science	Arts & Sciences	Minor (p. 950), BA (p. 944)	(i)PhD (p. 1605)
Propel Certificate (Leadership, Employment, and Community Engagement)	Arts & Sciences	UGRCT (p. 971)	
Psychology	Arts & Sciences	Minor (p. 974), BA (p. 961)	MA (p. 972), PHD(clinical health) (p. 968), PHD(applied cognitive & brain sciences) (p. 966)
Public Administration	Management		MPA (p. 1722), (i)PhD (p. 1605)
Public Administration (Health Services Administration Emphasis)	Management		MPA* (p. 1722)
Public Administration (Nonprofit Management Emphasis)	Management		MPA* (p. 1722)
Public Administration (Urban Policy and Management Emphasis)	Management		MPA* (p. 1722)
Public Health	Nursing & Health Studies	Minor (p. 1909), BS (p. 1896)	
Reading Intervention	Education		GRCT (p. 1514)
Romance Language and Literature	Arts & Sciences		MA (p. 830)
Secondary Education	Education	BA (p. 1487)	
Social Science Consortium	Arts & Sciences		(i)PhD (p. 1607)
Social Work	Arts & Sciences		MSW (p. 1004)
Sociology	Arts & Sciences	Minor (p. 996), BA (p. 986)	
Sociology (Cultural Anthropology)	Arts & Sciences	BA* (p. 991)	

Spanish	Arts & Sciences	Minor (p. 832), BA*(Languages and Literatures BA) (p. 826)	
Special Education	Education		MA (p. 1532)
Statistics	Arts & Sciences		MS (p. 894)
Studio Art	Arts & Sciences	Minor (p. 597), BA (p. 587)	MA (p. 594)
Taxation	Law		LLM* (p. 1674)
Teaching	Education		MAT (p. 1517)
Telecommunications & Computer Networking	Computing & Engineering		(i)PhD (p. 1561)
Theatre	Conservatory	Minor (p. 1123), BA (p. 1117)	
Theatre: Acting & Directing	Conservatory		MFA* (p. 1122)
Theatre: Design & Technology	Conservatory		MFA* (p. 1122)
Urban Planning & Design	Arts & Sciences	BA (p. 561)	
Urban Policy and Management	Management		GRCT (p. 1716)
Urban Studies	Arts & Sciences	Minor (p. 572), BA (p. 565)	
Women's, Gender, & Sexuality Studies	Arts & Sciences	Minor (p. 1008)	

* Indicates an emphasis area (or option) within a parent degree program.

(i)PhD Disciplines that participate in the Interdisciplinary Ph.D. program.

COURSE OFFERINGS

Graduate Course Offerings

Accounting (ACCTNG)

Courses

ACCTNG 5503 Financial Accounting for Decision Making Credits: 3

An introduction to the role of financial accounting in organizational decision making. The course provides students with an understanding of the process for reading, analyzing, and interpreting financial accounting data to make informed business decisions. Students will learn the strengths and limitations of accounting information and how it can be used to create value for the organization.

Prerequisites: Students must be enrolled in a Bloch School graduate program.

ACCTNG 5517 Survey Of Accounting Credits: 3

An overview of financial and managerial accounting. The course introduces the various reports that are used by stockholders, creditors, and managers to assess company performance and evaluate financial health. In addition, techniques are presented that assist firm managers in planning, control, and decision-making activities.

ACCTNG 5550 Accounting Information Systems Credits: 3

This course examines a number of systems employed to process accounting information, the internal control activities typically used in each system, and associated documentation tools.

Prerequisites: ACCTNG 310, MIS 202.

ACCTNG 5551 Governmental/Not-for-Profit Accounting Credits: 3

An overview of accounting for state and local governments and not-for-profit entities. Pronouncements of the accounting profession are emphasized where applicable. Recommended preparation: ACCTNG 310.

ACCTNG 5556 Cost Management Credits: 3

A study of the principles and techniques of cost accounting with emphasis on the structure of cost accounting systems and the processing, summarizing, and reporting of cost information. Topics include various issues relevant for manufacturing and service organizations, and introduction of situations that requires the application of cost information to managerial settings.

Prerequisites: ACCTNG 5517.

ACCTNG 5557 Introduction To Income Taxation Credits: 3

An investigation of the structure of federal, state, and local taxation, along with an examination of the impact of taxes on the management decision process. This course is not open to students who have completed ACCTNG 412.

ACCTNG 5558 Financial Accounting Theory Credits: 3

A study of the theory and practice of financial accounting with emphasis upon financial statement preparation and analysis of asset, liability, and equity measurement.

Prerequisites: ACCTNG 360.

ACCTNG 5559 Advanced Financial Accounting Theory Credits: 3

A study of advanced topics in financial accounting. Topics include business combinations and financial statement consolidation theory and practice. Recommended preparation: ACCTNG 310.

ACCTNG 5560 Introduction To Auditing And Accounting Systems Credits: 3

Fundamentals underlying the design of accounting systems and the processing of accounting data. Current auditing standards and procedures are extensively investigated, with emphasis on the nature of internal control, audit evidence, and audit reports.

Prerequisites: ACCTNG 5558.

ACCTNG 5564 Principles of Internal Auditing Credits: 3

A study of how the internal auditor determines the nature and amount of evidence that should be accumulated considering the unique aspects of an engagement, as well as some idea of how that evidence is evaluated in the context of a financial audit.

Prerequisites: ACCTNG 311 and ACCTNG 350.

ACCTNG 5568 Data Analytics for Accounting Credits: 3

Data Analytics is an investigation of the stories large data stores can tell if only we know how to unravel the story. As such, this course will investigate big data sources from both a data-mining and a hypothesis-testing approach.

Prerequisites: Admission to the MS Accounting degree program.

ACCTNG 5570 Fraud Examination Credits: 3

An examination of the elements of fraud and the fraud auditing process.

Prerequisites: Must be admitted to a graduate program in the Bloch School of Management.

ACCTNG 5572 Tax Theory And Business Applications Credits: 3

A study of substantive issues relating to the taxation of business entities including multi-jurisdictional considerations. Topics include business formation and dissolution, business valuation, selection of business entity, compensation of employees, sales or exchanges of business property, and business tax credits. Recommended preparation: ACCTNG 412 or ACCTNG 5557.

ACCTNG 5575 Managerial Accounting: Issues, Tools And Analysis Credits: 3

A look at various tools used to assist in the planning, control, performance evaluation, and decision-making activities of managers. Contemporary issues that confront management are introduced where appropriate.

Prerequisites: ACCTNG 307.

ACCTNG 5576 Tax Research, Procedure And Practice Credits: 3

An examination of the theory, practice, and research methodology of taxation as applied to individuals and business entities. Recommended preparation: ACCTNG 412 or ACCTNG 5557 or equivalent.

Prerequisites: MS Accounting program student.

ACCTNG 5577 Advanced Auditing Credits: 3

An analysis of real-world cases of audit problems with emphasis on red flags, pressures auditors face, and serious implications of audit failure (both perceived and real). Recommended preparation: ACCTNG 405 or ACCTNG 5560.

ACCTNG 5578 Current Problems In Accounting Credits: 3

This course will focus on an in-depth exploration of specific problems including, but not confined to those accounting problems which have resulted in official positions being published or considered by the accounting profession.

Prerequisites: ACCTNG 360.

ACCTNG 5580 Financial Reporting Systems Credits: 3

Executive decision making and leadership requires financial fluency. Using a blended format, students develop the necessary capacities to manage financial reporting systems. Case materials offer students the opportunity to build on their analytical skill in regards to financial statements.

Prerequisites: Admission to Executive MBA Program.

ACCTNG 5587 Special Topics Credits: 3

This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

ACCTNG 5595 Internship Credit: 1

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

ACCTNG 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

ACCTNG 5899 Required Graduate Enrollment Credit: 1

Anesthesia (ANESTH)

Courses

ANESTH 5505 Anatomy for Anesthesiologist Assistants I Credit: 1

This course is designed to meet the needs of students seeking a Master of Science in Anesthesia degree at UMKC. A thorough understanding of anatomy provides a basic foundation for future coursework and for the profession of Anesthesiologist Assistant. This course covers gross anatomy from a regional (or systemic in some cases) perspective bringing together all body systems present in each defined area of study.

Prerequisites: Acceptance to the MSA program.

ANESTH 5506 Anatomy for Anesthesiologist Assistants II Credit: 1

In this course, students will learn anatomy that directly impacts clinical situations. Diagnostic skills will be enhanced through an understanding of radiologic tests, identification of common chest X-rays, and a basic understanding of transesophageal echocardiography. Students will learn to recognize the basic 4 chamber TEE views and diagnose the most common lesions and abnormalities in patients undergoing cardiac surgery. An ultrasound machine will be used to identify anatomy for a variety of clinical procedures, including intravenous line placement, central line placement, arterial line placement, and peripheral nerve block placement. Students will learn the principles of how to operate and manipulate the ultrasound monitor, and will learn the relevant anatomy and anesthetic implications and management for the most common peripheral nerve blocks used today. In addition, clinically significant anatomy case studies in anesthesia will be presented and discussed.

Prerequisites: Acceptance to the MSA program.

ANESTH 5518 Professionalism for the Anesthesiologist Asst I Credits: 0.5

Introduction to legal and ethical areas of Anesthesiologist Assistant practice; professional behavior, legal obligations of anesthetists and patient, and social and community contexts of health care.

Prerequisites: Acceptance to the MSA program.

ANESTH 5528 Professionalism for the Anesthesiologist Asst II Credits: 0.5

Special topics in Anesthesiologist Assistant practice; impact of substance abuse, cognitive deficiency and mental illness in creating an impaired provider.

Prerequisites: Acceptance to the MSA program.

ANESTH 5538 Professionalism for the Anesthesiologist Asst III Credits: 0.5

Special topics in Anesthesiologist Assistant practice; principles of evidence based medicine and approaches to mastering life long learning and maintaining professional competencies.

Prerequisites: Acceptance to the MSA program.

ANESTH 5540 Patient Monitoring and Instrumentation Credits: 3

This is a three credit hour course which integrates concepts of circuits and engineering with the clinical application of anesthesia instrumentation. To the extent possible, the material covered will be directly linked to clinical scenarios. In order for the monitors to be fully understood from a clinical management perspective, relevant physiology related to the monitors and to the field of anesthesia will be taught and practiced. In addition to the monitors, students will gain an in depth understanding of all parts of the anesthesia machine, anesthesia circuits, central line and arterial line equipment, and the properties of common intravenous and inhalational anesthetics.

ANESTH 5541 Methods of Anesthesia I Credits: 2

In this course, students will be prepared to give safe anesthesia in all types of cardiac surgery, learn how to interpret arterial blood gases, and obtain an in depth understanding of ACLS principles so that they will be prepared for any resuscitation scenario in the OR. A cardiac drug card will be administered. Videos and PPTs will be administered to help students understand the concepts of ACLS, acid base management, cardiac bypass, cardiac surgery monitoring, techniques, and anesthetic management.

Prerequisites: ANESTH 5540.

ANESTH 5548 Anesthesiologist Assistant Senior Seminar Credits: 0.5

This is 0.5 credit hour course taken in the final semester of the Master of Science in Anesthesia Program and is designed to prepare the student for their future roles. This course will prepare the student for the job market and placement and enforce the life-long learning needed within medical professions. The course will contain information on student loan payback, financial literacy after graduation, and leadership opportunities for the graduate. The course will also clinically update the students in basic life saving for the healthcare provider (BLS), advanced cardiac life saving (ACLS) and Pediatric advance life saving (PALS).

ANESTH 5556 Physiology for Anesthesiologist Assistants I Credits: 3

This course is the first of two parts of a human physiology series. The course is designed to provide an understanding of basic neurophysiology, autonomic nervous system, blood, respiratory and cardiovascular physiology. Topics of special interest to anesthesiologist assistants will be highlighted.

ANESTH 5557 Physiology for Anesthesiologist Assistants II Credits: 2

This course is the 2nd of two parts of a human physiology series. The course is designed to provide an understanding of endocrine, reproductive, neonatal, gastrointestinal, and neurophysiology. Topics of special interest to anesthesiologist assistants will be highlighted as it relates to the physiology.

Prerequisites: ANESTH 5556.

ANESTH 5558 Anesthesia & Co-existing Disease I Credits: 2

This course provides an essential anesthesia link to the basic anatomy and physiology classes in the Masters of Science in Anesthesia program. The content outline intentionally corresponds with and builds upon that of the Physiology for Anesthesiologist Assistants coursework. This course focuses on primary cardiac, respiratory and endocrine coexisting diseases that affect anesthetic care. It provides for the student a strategic plan in the management of patients with these disease processes.

Prerequisites: ANESTH 5556.

ANESTH 5559 Anesthesia & Co-existing Disease II Credits: 2

This is the second course that establishes an essential anesthesia link to the basic anatomy and physiology classes in the Masters of Science in Anesthesia program. The content outline intentionally corresponds with and builds upon that of the Physiology for Anesthesiologist Assistants coursework. This course focuses on a variety of coexisting diseases states but all focuses on pediatric and obstetric co-existing disease and how they affect anesthesia management.

Prerequisites: ANESTH 5558.

ANESTH 5560 Introduction to Anesthesia Credits: 2

Introduction to basic concepts dealing with clinical anesthesia. Medical terminology, human anatomy, medical chart interpretation and drug dosage calculations.

ANESTH 5561 Orientation to Simulation and Clinical Application Credits: 5

This skills based course is an introduction to the student's clinical experience in the operating room. The goal is to rapidly engage students in anesthesia patient care. Fundamental procedures and techniques used in administering anesthesia will be emphasized. Simulated clinical models are used to allow students to first practice anesthesia care in a safe, controlled, low pressure environment. Students are prepared for quality immersion into patient care. Operating room set up and etiquette, pre-operative assessment, IV placement techniques, airway management, intraoperative care, and postoperative management are emphasized. Course includes hands on introduction to the operating room and anesthetic management and students obtain 80-100 hours of clinical contact time.

ANESTH 5563 Anesthesia Clinical Experience I Credits: 4

During this course students gain clinical and professional experience in the operating room. In this course students are expected to perform program competencies with the level of assistance developed in the programs goals for skills development. Students will be one on one with a Certified Anesthesiologist Assistant or Anesthesiologist clinical supervisor while obtaining these goals. Students will complete a specific IV, pre-surgical testing and post anesthesia care unit rotation during their clinical experience courses.

Prerequisites: ANESTH 5561.

ANESTH 5564 Anesthesia Clinical Correlation II Credit: 1

This one credit course is designed to help students understand how to effectively research and apply current anesthesia journal articles, and to prepare for the NCCAA certification examination. The students will spend the entire semester studying 6 (Principles of anesthesia/ Instrumentation and monitoring, anesthesia delivery systems, physics / renal, genital urologic / respiratory system / clinical subspecialties) of the 16 topics that are included on the NCCAA certification examination. Homework will include submission of test questions based on their presentations and the 6 assigned NCCAA testing topics. The students will also receive an assignment to find and summarize a journal article from one of the 6 assigned topics. The students will cap off the semester with a clinical final examination, which includes submitted questions from assigned topics.

Prerequisites: ANESTH 5562.

ANESTH 5565 Anesthesia Clinical Experience II Credits: 8

During this course students gain clinical and professional experience in the operating room. In this course students are expected to perform program competencies with the level of assistance developed in the programs goals for skills development. Students will be one on one with a Certified Anesthesiologist Assistant or Anesthesiologist clinical supervisor while obtaining these goals. Students will complete a specific IV, pre-surgical testing and post anesthesia care unit rotation during their clinical experience courses.

ANESTH 5567 Anesthesia Clinical Experience III Credits: 16

Clinical clerkship component of program clinical phase. Students are in the operating room (OR) five days per week and through the combined clinical experience clerkships will receive extended exposure to all clinical subspecialties. Students complete 4 week or 8 week rotations at several hospitals to gain experience with general surgery, obstetrics, pediatrics, trauma surgery, neurosurgery, cardiovascular surgery, orthopedic surgery, intensive care unit and others. Students are expected to perform program competencies with the level of assistance developed in the programs goals for skills development. Students will be one on one with a Certified Anesthesiologist Assistant or Anesthesiologist clinical supervisor while obtaining these goals.

Prerequisites: ANESTH 5565, ACLS and PALS certification.

ANESTH 5568 Anesthesia Clinical Correlation III Credit: 1

This one credit course is designed to help students understand how to effectively research, apply, and prepare for the NCCAA certification examination. The students will spend the entire semester studying 4 (cardiovascular/ Hematology coagulation / Metabolism endocrine / Neurosciences neuromuscular) of the 16 topics that are included on the NCCAA certification examination. Homework will include submission of test questions based on the 4 assigned NCCAA testing topics. The students will cap off the semester with a clinical final examination, which includes submitted questions from the assigned topics. This course also includes a one week in person session where will identify risk management issues for anesthesia providers, learn key strategies when applying for a job and demonstrate key points of patient assessment in the ICU. Recertification for Basic Life Support (BLS) occurs during this course.

Prerequisites: ANESTH 5564.

ANESTH 5569 Anesthesia Clinical Experience IV Credits: 12

Clinical clerkship component of program clinical phase. Students are in the operating room (OR) five days per week and through the combined clinical experience clerkships will receive extended exposure to all clinical subspecialties. Students complete 4 week or 8 week rotations at several hospitals to gain experience with general surgery, obstetrics, pediatrics, trauma surgery, neurosurgery, cardiovascular surgery, orthopedic surgery, intensive care unit and others. Students are expected to perform program competencies with the level of assistance developed in the programs goals for skills development. Students will be one on one with a Certified Anesthesiologist Assistant or Anesthesiologist clinical supervisor while obtaining these goals.

Prerequisites: ANESTH 5567.

ANESTH 5570 Anesthesia Clinical Correlation IV Credit: 1

This one credit course is designed to help students understand how to effectively research and apply current anesthesia journal articles, and to prepare for the NCCAA certification examination. The students will spend the entire semester studying 6 (Peds the Neonatal Period / Pharmacology / Regional Anesthesia Pain Management/ GI Hepatic/ OB Perinatal Management) of the 16 topics that are included on the NCCAA certification examination. Homework will include submission of test questions based on their presentations and the 6 assigned NCCAA testing topics. The students will also receive an assignment to find and summarize a journal article from one of the 6 assigned topics. The students will cap off the semester with a clinical final examination, which includes submitted questions from assigned topics.

Prerequisites: ANESTH 5568.

ANESTH 5571 Anesthesia Clinical Experience V Credits: 16

Clinical clerkship component of program clinical phase. Students are in the operating room (OR) five days per week and through the combined clinical experience clerkships will receive extended exposure to all clinical subspecialties. Students complete 4 week or 8 week rotations at several hospitals to gain experience with general surgery, obstetrics, pediatrics, trauma surgery, neurosurgery, cardiovascular surgery, orthopedic surgery, intensive care unit and others. Students are expected to perform program competencies with the level of assistance developed in the programs goals for skills development. Students will be one on one with a Certified Anesthesiologist Assistant or Anesthesiologist clinical supervisor while obtaining these goals.

Prerequisites: ANESTH 5569.

ANESTH 5573 Anesthesia Clinical Experience VI Credits: 16

Clinical clerkship component of program clinical phase. Students are in the operating room (OR) five days per week and through the combined clinical experience clerkships will receive extended exposure to all clinical subspecialties. Students complete 4 week or 8 week rotations at several hospitals to gain experience with general surgery, obstetrics, pediatrics, trauma surgery, neurosurgery, cardiovascular surgery, orthopedic surgery, intensive care unit and others. Students are expected to perform program competencies with the level of assistance developed in the programs goals for skills development. Students will be one on one with a Certified Anesthesiologist Assistant or Anesthesiologist clinical supervisor while obtaining these goals.

Prerequisites: ANESTH 5571.

ANESTH 5575 Pharmacology for Anesthesiologist Assistants I Credits: 2

Basic concepts in pharmacology: principles of drug action, receptor theory, pharmacokinetics, pharmacodynamics and drug dose calculations. The course will emphasize the primary medications used to provide anesthesia and to support patients during the perioperative period.

ANESTH 5576 Pharmacology for Anesthesiologist Assistants II Credit: 1

This is a one credit hour course designed for the M.S. in Anesthesia Program. The course prepares students to apply knowledge of pharmacotherapy to anesthesia care by taking into account type of surgery and patient coexisting diseases.

ANESTH 5577 Methods of Anesthesia II Credits: 3

In this course, students will be prepared to manage anesthetics for more complex situations. Anesthetic management for certain patient conditions will include permanent implantable pacemakers, fluid electrolyte abnormalities, and congenital heart disease. Clinical management for individual patient populations will include obstetrics and pediatric advanced life support (PALS). In addition, clinically relevant information regarding advanced equipment and techniques will include 12 lead ECG interpretation, ultrasound guided peripheral nerve blocks, neuraxial anesthesia, and physics for anesthesiologist assistants.

ANESTH 5578 Pharmacology for Anesthesiologist Assistants III Credits: 2

This is a two credit hour course designed for the M.S. in Anesthesia Program. The course prepares students to apply knowledge of pharmacotherapy to anesthesia care by taking into account type of surgery and patient coexisting diseases.

Prerequisites: ANESTH 5575, ANESTH 5576.

ANESTH 5585 Physiological Model-based Simulation I Credits: 2

This is a two credit hour course, which utilizes physiological model-based simulation and procedure simulation to integrate anesthesia-associated basic science knowledge into a laboratory setting. The focus for this semester is designed to help student become proficient in central lines, pulmonary artery monitoring, epidural and spinal placement, and managing more complex anesthetic cases involving trouble shooting and crisis management via simulation. Advanced Cardiac Life Saving is obtained during this course.

ANESTH 5586 Physiological Model-based Simulation II Credits: 2

This is a two credit hour course, which builds upon the technical skills learned in ANES 5585. Students will be asked to manage complex anesthetic cases involving multiple co- existing diseases and methods of anesthesia. Pediatric Advanced Lifesaving Saving (PALS) is a certification required to be obtained during this course.

Prerequisites: ANESTH 5585.

ANESTH 5590 Special Topic Credits: 0.5-3

An opportunity to explore new topics or existing topics in greater detail and are not included in the usual course offerings.

Art (ART)

Courses

ART 5405 Practices in the Visual Arts Classroom Credits: 3

Students preparing to student teach in the spring semester read, reflect on and master the use of current research in art education and study, practice and master the use of general education thoughts of today.

ART 5506 Graduate Photography Credits: 3-6

Photography on the graduate level with individual selection of media and technique. May be repeated up to a total of 15 hours.

ART 5510 Graduate Painting Credits: 3-6

Painting on the graduate level with individual selection of medium and technique. May be repeated up to a total of 15 hours.

ART 5513 Graduate Graphic Design Credits: 3-6

Graphic design on the graduate level with individual selection of medium and technique. May be repeated up to a total of 15 hours.

ART 5515 Graduate Drawing Credits: 3-6

Drawing on the graduate level with individual selection of media and technique. Student may pursue selected projects on a group or individual basis. May be repeated up to a total of 15 hours.

ART 5520 Graduate Print Media Credits: 3-6

Print media on the graduate level with individual selection of medium and technique.

ART 5540 Graduate Digital Imaging Credits: 3-6

Digital imaging on the graduate level with individual selection of subject and technique.

Prerequisites: Departmental consent.

ART 5550 Graduate Performance Art Credits: 3-6

Performance art on the graduate level with individual selection of medium and technique. May be repeated up to a total of 15 hours.

ART 5576 Graduate Digital Video and Motion Design Credits: 3-6

Digital video and motion design on the graduate level with individual selection of subject and technique.

Prerequisites: Departmental consent.

ART 5588 Graduate Studio Art Seminar Credits: 3

Studio art seminar for graduate students in any medium. Course will focus on professional practices, as well as the development of a sustainable artistic career. Individual artistic production and shared critiques will be required.

Prerequisites: Studio Art Graduate Students.

ART 5591 Directed Technical Studies Credits: 2-4

Individually directed studies or research in selected projects of a technical nature in studio art. May be repeated up to a total of six hours applicable to a degree program.

ART 5599 Research And Thesis Credits: 1-9

Production and/or writing of thesis. Usually taken in the last term of candidacy.

ART 5899 Required Graduate Enrollment Credit: 1

Art History (ART-HIST)

Courses

ART-HIST 5501 Scope And Methods Of Art History Credits: 3

An exploration of the discipline of art history, including theoretical issues, guiding questions and problems, diverse approaches (historical and current), and research tools. Required of all Art History graduate students and best taken early in one's studies.

ART-HIST 5539 Paris in the Age of Rococo Credits: 3

In the early 18th century, Paris overtook Rome as the artistic center of Europe. We explore all of the visual arts during the vibrant "Rococo," the age of Watteau, Chardin, and Boucher.

ART-HIST 5540 Seminar in French Art: Renaissance and Baroque Credits: 3

A history of French art from the time of Louis XII through the Age of Louis XIV, with emphasis on painting and architecture.

ART-HIST 5541 Seminar in Northern Baroque Art: The Age of Rubens, Rembrandt, and Wren Credits: 3

The arts of England and the Low Countries in the 17th and early 18th centuries. Emphasis on painting and the graphic arts in the Spanish and Dutch Netherlands, and on architecture in England.

ART-HIST 5547 Seminar in Italian Baroque Art: The Age of Caravaggio, Bernini, and Borromini Credits: 3

Painting, sculpture, and architecture in Italy from the creation of the Baroque style in the late 16th century to the beginnings of the Barochetto era.

ART-HIST 5548 Seminar in Span Art: El Greco to Goya Credits: 3

A study of Spanish art from the later 15th Century to the Napoleonic invasion.

ART-HIST 5561 Traditional and Contemporary Native American Art Credits: 3

This course aims to inspire students to appreciate the history and aesthetics of traditional and contemporary Native North American arts. We examine cultural and aesthetic continuities between Meso-American and Native North American Arts. Then we explore how Native American arts reflect the history of North America, including influences from Europeans, and conclude with contemporary Native American artists and their incorporation of various global influences.

ART-HIST 5562 History of Modern Design Credits: 3

This course examines innovations in design, beginning with the Arts and Crafts movement in the 19th century, surveying all the major design trends of the twentieth century, and concluding with contemporary developments in the age of the computer.

ART-HIST 5563 Primitivism and Its Aftermath Credits: 3

This course explores one of the seminal movements of the modern era and its ramifications for the visual arts today. Class discussions will consider the complexities and contradictions of primitivism and its rejection through their appropriations from archaic, folk, and non-western art traditions, from 1800-on, while also situation these creative endeavors within the cultural and political contexts of the period.

ART-HIST 5564 Modern Art and the Grotesque Credits: 3

The course explores how the grotesque shaped the history, practice and theory of art in the nineteenth and twentieth centuries. The grotesque plays a major role in many modern styles, and its expressive possibilities encompass the capriccio, the carnivalesque and burlesque, the fantastic, and the abject and uncanny. Artists have incorporated the grotesque as a means to push beyond established boundaries, explore alternate modes of experience, and to challenge cultural and aesthetic conventions.

ART-HIST 5565 Seminar In American Art Credits: 3

Graduate-level seminar dealing with an announced area in American art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5566 Seminar In 19th-Century Art Credits: 3

Graduate-level seminar dealing with an announced area in 19th-century art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5567 Seminar In 20th-Century Art Credits: 3

Graduate-level seminar dealing with an announced area in 20th-century art. May be repeated once, provided there is a change in the area of concentration

ART-HIST 5568 Participatory Forms of Spectatorship in Contemporary Art Credits: 3

This course explores art practices from the second half of the 20th century that challenge spectators to become more actively involved in the reception and even in the production of art. The course will examine the sociopolitical conditions and technological developments which have contributed to the strengthening of participatory tendencies in contemporary art.

ART-HIST 5569 Sensing, Feeling, Thinking: Contemporary Art and the Mind Credits: 3

Contemporary artists are challenging viewers to reflect on how they perceive, feel and think. This seminar provides an introduction to the mental processes underlying emotion and visual cognition and familiarizes students with contemporary art practices that reveal the dynamic correlations between body, mind and subjectivity.

ART-HIST 5570 Seminar In Renaissance Art Credits: 3

Graduate-level seminar dealing with an announced area in Renaissance art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5571 Seminar In Art Of Africa, Oceania And New World Cultures Credits: 3

Seminar in art of Africa, oceania and new world cultures. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5572 Seminar In Asian Art Credits: 3

Seminar dealing with an announced area in Asian Art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5573 Visual Arts Administration Credits: 3

This course on professional arts administration includes assignments in: copyright laws, database management, ethics issues, evaluation design, gallery museum management, grant writing and budgeting, public relations, resume design, tax laws, and website design and management. Students are required to learn relevant computer programs. This course is also open to music and theatre majors. Research requirements for graduate credit are more comprehensive and professional.

ART-HIST 5575 Seminar In Baroque Art Credits: 3

Graduate-level seminar dealing with an announced area in Baroque art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5576 Site-Specific Art: Within and Beyond the Museum Walls Credits: 3

At a time of increased transnational mobility, contemporary artists are conceiving artworks that catalyze an enhanced awareness of the geographical and socio-political conditions of existence and art making. This seminar examines artworks that are produced outside the studio and are inspired by specific natural environments, museum settings and public spaces.

ART-HIST 5577 Contemporary Artists of the African Diaspora Credits: 3

This course examines cultural and aesthetic continuities between traditional and contemporary arts and artists in Africa and in the Americas, including the study of contemporary Africans whose cultures had the greatest influence in the Americas, as well as contemporary African-American artists in Brazil, Cuba, Haiti, and the United States.

ART-HIST 5579 From the Parthenon to the Altar of Peace Credits: 3

The course centers on the many different styles of Greek and Roman art from the fifth century B.C. to the early first century A.D. Attention is also paid to the political and literary forces behind its imagery. Three monuments serve as the pillars upon which the course rests: the Parthenon, Pergamon Altar, and the Ara Pacis. The lessons learned about style, the interaction of politics, literature, and art and the foibles of scholarship are intended to be applied to other fields of art history.

ART-HIST 5580 Art Museums: History and Practice Credits: 3

This course will familiarize students with the history of art museums and collecting practices. It will cover theories of museum government, curating, and object interpretation. Students will explore changes in the functions of art museums and will develop practical skills for future museum employment.

ART-HIST 5590 Directed Studies In Art History Credits: 1-6

Individually directed studies or research in selected topics or problems in art history. May be repeated up to a total of six hours applicable to a degree program.

ART-HIST 5599 Research & Thesis Credits: 1-9

Production and/or writing of thesis. Usually taken in the last term of candidacy.

ART-HIST 5699 Research And Dissertation Credits: 1-12

Dissertation Research and writing in Art History.

ART-HIST 5899 Required Graduate Enrollment Credit: 1

Arts & Sciences - General (A&S)

Courses

A&S 5500 Interdisciplinary Colloquium On Aging Credits: 3

This course will introduce students to gerontology as a field of study and as a profession. The context for the emergence of the field is set in important demographic transitions of the 20th century. Identification and understanding of major issues and controversies in the field will help locate the contributions of a range of disciplines to aging studies. The connection of these issues with the development of social policies will be discussed.

A&S 5500C Interdisciplinary Colloquium On Aging III Credits: 1-2**A&S 5500L Special Readings Topics/Philosophy Credits: 1-3****A&S 5500P Special Topics-Readings Psychology Credits: 1-3****A&S 5500Q Special Readings/Topics Theatre Credits: 1-3****A&S 5501 Special Readings/Topics Credits: 1-3**

This is a designated Arts and Sciences course which gives all departments in the College the flexibility to offer, on demand and as the need arises, a graduate-level readings course in a particular area of specialization in any discipline in the College. The individual departments determine the content of the course in any given semester in the same manner as any reading course, special topics, or independent study is presently handled. The departments are responsible for approving individuals or groups for the course and determine whether or not the course will be included as a part of a post-baccalaureate degree in their disciplines.

A&S 5501B Special Topics: Critical Thinking In Social Studies Credits: 1-3**A&S 5501D Special Readings/Topics Credits: 1-3****A&S 5501E Special Readings/Topics Credits: 1-3****A&S 5501K Special Topics Credits: 1-4****A&S 5502 Introduction To African American Studies Credits: 3**

This course provides an introduction to the contexts, theories, and methodologies that undergird African American studies. In addition to substantial time spent covering particular research skills and resources, students will also be introduced to African American culture and the issues related to African studies from several perspectives: history, literature, sociology, communication studies, and the like. Influences and perspectives from Africa, the Caribbean, and South America will also be covered. The course will thus provide a broad background in African American culture and history, an introduction to the methodologies of several disciplines, and discussion of particular contemporary and historical issues such as slavery, segregation and integration, the Civil Rights Movement, Pan-Africanism, Afrocentrism, and current political debates.

A&S 5505 Career Education And Transition In Special Education Credits: 3

This course is designed to increase awareness and knowledge about current disabilities legislation, vocational education, vocational rehabilitation, quality transition programs, school to work, self advocacy, workplace accommodations and comprehensive life skills learning.

Prerequisites: EDUC-SP 407.

A&S 5509 Methods Of Inquiry: Research Issues And Methods In The Liberal Arts Credits: 3

This course serves as an introduction to various methods of inquiry and research in the humanities, social sciences, and sciences. This course includes graduate level instruction in library research use of computer generated research tools and a strong emphasis on academic writing.

A&S 5515 The Aging Body: Causes and Consequences Credits: 3

This course will explore biological changes that occur with aging. Plasticity, frailty, stress, coping, and chronic illness will be viewed through the bio-psycho-social lens. Biomedical discoveries and implications for the future of aging will be discussed.

A&S 5520 Critical Choices: Final Research Project And Capstone Seminar Credits: 3

This seminar is designed as a capstone experience for students in the last semester of their studies in the Master of Arts in Liberal Studies program. Each student defines a final research project, spends the semester developing it, and presents his or her findings to the seminar at the conclusion of the course. Each project is intended to be thought-provoking and to be researched from an interdisciplinary point of view.

A&S 5535 Directed Studies In Liberal Arts Credits: 1-3

Open to students in the Master of Arts in Liberal Studies Program, this course offers students the opportunity to pursue independent work at the graduate level on selected topics of an interdisciplinary nature, working with faculty members from at least two different departments. The course may not be repeated beyond a total of three credit hours.

A&S 5540 Liberal Arts Thesis Credits: 1-3

Open to students in the Masters of Arts in Liberal Studies Program who wish to include a written thesis in their program of studies. The course may not be repeated beyond a total of three credit hours.

A&S 5550 Seminar In Social Science Perspectives Study Of Community Credits: 3**A&S 5571A Seminar In The Social Sciences Credits: 1-6**

This is a designated Arts and Sciences course which gives all departments in the College the flexibility to offer, on demand and as the need arises, a graduate level seminar in a particular area of specialization in any discipline in the college. The individual departments determine the content of the course in any given term in the same manner as any seminar is currently handled.

A&S 5572 Seminar In Philosophy Of Science I Credits: 3**A&S 5591 Practicum In Community Social Science Research Credits: 3****A&S 5592 Field Practicum In Aging Credits: 3-8**

Students spend 180-480 hours in a field placement with the supervision in a community agency or organization which services or advocated for older persons and keep a journal documenting and reflecting on the practicum activities and experiences, particularly as related to gerontological theory and research. Students will study a particular subject relevant to their placement and describe this in a written project.

A&S 5899 Required Graduate Enrollment Credit: 1

Basic Medical Science (BMS)

Courses

BMS 5590 Special Topics Credits: 1-3

An opportunity to explore new topics or existing topics in modified or greater detail; topics which are not included in the usual course offerings.

BMS 9265 Human Biochemistry I - Medical Credits: 5

Presents basic principles of human biochemistry. Addresses structure, function, biosynthesis, degradation and utilization of the major constituents of living systems. Employs an integrative approach to the basic science and clinical medicine aspects of normal and defective metabolism.

BMS 9296 Human Structure Function I Credits: 6

Part 1 of a 4 part series (January-February). Integrated course in anatomy, histology, embryology, physiology and biochemistry. This unit covers introductory principles and the musculoskeletal system.

BMS 9297 Human Structure Function II Credits: 5

Part 2 of a 4 part series (February-April). Integrated course in anatomy, histology, embryology, physiology and biochemistry. This unit covers cardiopulmonary and gastrointestinal systems.

BMS 9298 Human Structure Function III Credits: 5

Part 3 of a 4 part series (April-May). Integrated course in anatomy, histology, embryology, physiology and biochemistry. This unit covers urinary and reproductive systems.

BMS 9300 Human Gross Anatomy I Credits: 5

Regional study of the anatomy of the chest, abdomen and pelvis. A systematic and regional study of the anatomy of the maxillofacial and anterior neck structures with emphasis on the biomedical applications of the anatomy studies.

BMS 9301 Human Gross Anatomy II Credits: 5

A continuation of BMS 9300.

BMS 93065 Anatomy of the Head & Neck Credits: 2

A regional approach to the study of the head and neck. Content will include a brief discussion of human anatomy and didactic information on the structures of the head and neck as they relate to the practice of dental hygiene.

BMS 9308 Histology Credits: 2.5

A motivative microanatomic study of the normal morphology of cells, tissues, organs and organ systems to stimulate the learning of terminology and basic cellular structure of the human body.

BMS 9310 Medical Neurosciences Credits: 9

Lecture-based course covering major neurological disorders and disease states. Specific neurologic diseases will be correlated to the didactic sessions by clinicians. Laboratory component is oriented around brain dissection sessions. Laboratory experience will demonstrate gross lesions and integrate the lesions with the clinical symptoms. A variety of supplemental audiovisual material also supports the class.

Prerequisites: BMS 9298.

Co-requisites: BMS 9399.

BMS 9311 Medical Microbiology Credits: 5

Covers basic scientific principles of virology, bacterial physiology and genetics. Presents information relevant to the pathogenesis of human infections caused by viruses, bacteria, fungi, protozoa and helminthes. Provides a concise presentation of basic immunological principles and their clinical relevance. Provides a concise review of antimicrobial therapeutic regimens including mechanism of action and clinical settings in which specific agents might be used. Utilizes case presentations to illustrate the manner in which reasonable differential diagnoses are developed and a rational approach toward empiric antimicrobial usage.

BMS 9399 Human Structure Function IV Credits: 6

Part 4 of a 4 part series (June-July). Integrated course in anatomy, histology, embryology, physiology and biochemistry. This unit covers the head and neck system. Includes a comprehensive examination for the Human Structure Function Series I-IV.

BMS 9701 Clinical Anatomy of Head and Neck Credits: 2-4

A detailed dissection of the maxillofacial and anterior neck regions, with the emphasis being placed on the clinical application of the surgical procedures used in these areas. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline-specific requirements for the Interdisciplinary Ph.D. program.

Bassoon (BASSOON)

Courses

BASSOON 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons or recital.

BASSOON 5500A Graduate Bassoon-Secondary Credits: 2**BASSOON 5500B Special Applied Studies Credits: 2**

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

BASSOON 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

BASSOON 5501 Graduate Bassoon - Masters Performance Credits: 4**BASSOON 5601 Graduate Bassoon - Doctoral Performance Credits: 4**

Biological Sciences (BIO-SCI) - Oral & Craniofacial Sciences

Courses

BIO-SCI 5700 Biomaterials Teaching Credits: 2

Through this course, students will acquire teaching experience in graduate and undergraduate biomaterials.

BIO-SCI 5706 Growth and Development I Credit: 1

A course designed to teach the general principles of normal and abnormal physical, psychological and social growth and development of children and adolescents. The growth and development of the craniofacial structures is emphasized. The diagnosis of malocclusions is stressed. Consideration is given to possible approaches to their treatment.

BIO-SCI 5707 Growth and Development II Credits: 1-2

A comprehensive study of the genetical aspects of growth and development with special analysis of the molecular control of these processes by both intrinsic and epigenetic factors.

Prerequisites: BIO-SCI 5706.

BIO-SCI 5710 Genetics and Biochemistry of Cranial Facial Biology Credits: 2

Biochemistry of oral structures and the effect of oral diseases on these structures. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline-specific requirements for the Interdisciplinary Ph.D. programs.

BIO-SCI 5739 Biomaterials for the Dental Specialist Credit: 1

Discussion of basic biomaterials principles and terminology including explanation of physical, mechanical and surface chemical properties, metallurgy, polymer chemistry, ceramics and composites. Clinical examples of how these principles apply to Prosthodontics, Endodontics and Orthodontics will be presented. Students cannot take both this course and BIO-SCI 5742 for credit.

BIO-SCI 5740 Oral Pathology I Credits: 2

A study of the clinical and histopathologic features of oral diseases, including inflammatory, degenerative, metabolic, and neoplastic diseases and developmental disturbances.

BIO-SCI 5742 Biomaterials for the Restorative and General Dentist Credits: 2

A thorough discussion of basic biomaterials principles and how they apply to the practice of general and restorative dentistry. Students cannot take both this course and BIO-SCI 5739 for credit.

BIO-SCI 5743 Advanced Seminar in Dental Biomaterials Credits: 1-2

The use and behavior of dental biomaterials in Pediatric Dentistry, Prosthodontics, Orthodontics, and Restorative Dentistry will be discussed in depth. Current basic and clinical literature related to these areas will be discussed and research information to improve dental practice will be presented.

Prerequisite: BIO-SCI 5739 (or BIO-SCI 5742).

BIO-SCI 5747 Research Instrumentation Used in Dental Biomaterials Credits: 2-4

A discussion and laboratory use of instrumentation employed in dental biomaterials research. Practical hands-on experience will include calibration and use of specific research equipment including the Instron, metallurgical mounting and polishing equipment, measuring microscope, metallograph, and contact angle goniometer.

BIO-SCI 5750 Special Problems in Dental Biomaterials Credits: 2-4

The student will select or be assigned a special research problem including appropriate literature reviews of a special topic in dental biomaterials. Emphasis will be placed on the correlation between basic and clinical research. The design and conduct of clinical research will be discussed.

BIO-SCI 5751 Elements of the Scientific Method Credits: 1-2

Through individualized instruction with thesis committee chair, student will conduct a literature review in preparation for developing a research question leading to the thesis research proposal. Students will select and rotate through a minimum of four laboratories in the Department of Oral Biology conducting a short research project in each. At the end of the semester, a report is required reviewing the research project and the instrumentation in each laboratory. Students are also required to attend the weekly Department of Oral Biology Seminar Series and the monthly Professional Development Seminar Series. Research presentations cover a variety of biological, engineering and psychological disciplines relevant to oral science education and the oral health care profession. Presentations will be by faculty, students, and invited guest lecturers.

BIO-SCI 5752 Research Methods in Oral and Craniofacial Sciences Credits: 1-5

Student will write the thesis research proposal in consultation with committee chair and members plus obtain appropriate IRB and/or IACUC approvals. For the MS degree qualifying exam, the student will write the research proposal, present the research proposal at a committee meeting, and answer related questions. Following the successful completion of the qualifying exam, the research proposal is the basis of the MS thesis project. As the student identifies a research focus for the dissertation project, they will begin reviewing the literature.

BIO-SCI 5759 Special Problems in Pharmacology Credits: 2

Pharmacologic and therapeutic problems of special interest in the practice of dentistry.

BIO-SCI 5760 Physiology of Oral Mineralized Tissues Credits: 2

A study of the physiology of the oral hard tissues with emphasis on the mechanisms of the growth, remodeling, and healing of maxillomandibular bones and on the mechanism of dentinogenesis. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline-specific requirements for the Interdisciplinary Ph.D. program.

BIO-SCI 5780 Teaching Of Dentistry Credits: 1-2

A consideration of the problems of teaching in dental schools. Each department of the School of Dentistry will report on its teaching methods. The student will observe lectures and laboratory teaching in each department.

BIO-SCI 5790 Directed Research In Oral and Craniofacial Sciences Credits: 1-6

Student utilizes beginning research skills to design, conduct and report an individual research project under the direction of the faculty.

BIO-SCI 5799 Research And Thesis Credits: 1-9

The satisfactory completion of an original research project. Results of the research and critical review of the pertinent literature are incorporated into a thesis. Credit is awarded after the student's thesis is successfully defended and accepted by the School of Graduate Studies.

BIO-SCI 5801 Readings in Immunology Credits: 1-3

A detailed study of special topics in immunology. Specific topics to be arranged with the instructor. This course may be repeated by doctoral students for a maximum of 3 credit hours.

Prerequisites: BIOLOGY 435.

BIO-SCI 5802 Immunopathology Credits: 2

A detailed study of selected topics in immunopathology with emphasis on physicochemical barriers such as cutaneous and mucosal immune systems.

Prerequisites: BIOLOGY 435.

BIO-SCI 5805 Molecular Biology of Oral Microflora Credits: 2-3

Lecture and discussion. The course will provide an overview of the ecology of oral microbial flora and its role in oral health and disease. Students will examine the taxonomy and ecology of normal and pathogenic oral microbial flora, acquisition of the oral microbiota and the formation of dental plaque as a biofilm. The course will also explore other aspects of microbial biology, such as; bacterial virulence factors and pathogenesis; host defense mechanisms; systemic complications of periodontal disease; antibiotics and antibiotic resistance. The second part of the course will review the effect of recent advances in molecular biology and protein biochemistry on oral diagnosis and treatment.

BIO-SCI 5830 Structural Characterization of Dental Biomaterials Credits: 3

A detailed study of the techniques commonly used to determine the composition and structure of dental biomaterials. Surface and near-surface characterization techniques will be emphasized. The student will be expected to complete laboratory projects on the scanning and transmission electron microscopies available in the School of Dentistry.

BIO-SCI 5899 Required Graduate Enrollment Credit: 1

Biology (BIOLOGY)

Courses

BIOLOGY 5501 Proposal Writing Credit: 1

This course addresses how to develop a testable hypothesis, and write a NIH-style proposal to convince the reader of the significance of the proposed studies. Students will write a proposal that will form the basis of their oral comprehensive exam in the Cell Biology and Biophysics (CBB) and Molecular Biology and Biochemistry (MBB) disciplines. The is limited to doctoral students with CBB and MBB coordinating disciplines that have a plan of study filed with the School of Graduate Studies.

BIOLOGY 5510 Gross Anatomy for Nurse Anesthetists Credits: 3

This course will present and examine the anatomic concepts and conditions essential for critical thinking and decision making by the nurse anesthetist. Specifically, the course will provide the foundation upon which patient interventions may be based during the perioperative period.

Prerequisites: Graduate status.

Co-requisites: BIOLOGY 5510L.

BIOLOGY 5510L Gross Anatomy for Nurse Anesthetists Credit: 1

This laboratory course will present and examine the anatomic concepts and conditions essential for critical thinking and decision making by the nurse anesthetist. Specifically, the course will provide the foundation upon which patient intervention may be based during the perioperative period.

Prerequisites: Graduate status.

Co-requisites: BIOLOGY 5510.

BIOLOGY 5511 Professional Development Credit: 1

The purpose of this course is to facilitate a competitive application to professional health programs for student seeking the M.A. in Biology. Students will gain an understanding of the application process, including decisions for where to apply, assessing fit, developing a personal statement, strategies for letters of evaluation, and an execution of a successful interview.

Prerequisites: Admission to the M.A. Biology program, or by instructor consent.

BIOLOGY 5515 Biochemistry Credits: 4

The chemistry and mechanisms involved in biosynthesis, degradation and utilization of the major constituents of living systems and the biochemistry of specialized tissues, hormones, nutrition and regulation.

Prerequisites: Admission to the UMKC MA Biology program.

BIOLOGY 5516 Global Health: New and Emerging Infections Diseases Credits: 3

This course will discuss infectious diseases that are newly identified, or increasing in prevalence throughout the world. Several aspects of each disease will be discussed, including transmission, symptoms, treatment, prevention, and diagnosis. The course is meant for students interested in a health-related career (medicine, dental, pharmacy, public health), but other students with a basic biology background are welcome.

Prerequisites: BA or BS in Biology or related field

BIOLOGY 5517 From Bench to Bedside: Translational Research Credits: 3

This course explores the interplay between basic biological research and bedside clinical practice, delving into the topic “what is translational research?” By engaging with people from the community involved at all levels of translational research, students will gain an appreciation for the civic issues behind medical research, the interdisciplinary nature of research, and the part that Kansas City institutions play in regional life and health sciences. As part of the course, students will produce a “public service announcement” style video that explains a particular aspect of translational research for consumption by people within the broader Kansas City community.

Prerequisites: Must be in a graduate program in the School of Biological Sciences or instructor consent.

BIOLOGY 5518 Graduate Histology Credits: 2

Animal tissues and their specialization in the organism, with major emphasis on higher organisms.

Prerequisites: BA or BS in Biology or Chemistry, or permission of the instructor.

BIOLOGY 5519 Principles of Evolution Credits: 3

Synthesis of the modern concepts of evolution. Discussion of the biological processes that produce organic diversity through phyletic change.

Discussed are variation, mutation, population genetics, natural selection and adaptation.

Prerequisites: BIOLOGY 206.

BIOLOGY 5525 Bioinformatics and Data Analysis Credits: 3

Methods and procedures for the storage, retrieval and analysis of information in biomolecular and biological databases. Emphasis will be given to the use of database information in biological research and to recent developments in genomics and proteomics.

Prerequisites: BIOLOGY 441, LS-BIOC 360.

BIOLOGY 5528 Human Genomic Epidemiology Credits: 3

This course is designed for biological researchers and clinicians interested in studying common human diseases using state-of-the-art genomics/genetics epidemiological approaches. The course provides a basic yet comprehensive introduction to key topics in human genome epidemiological research, including basic concepts and methodologies of quantitative/statistical genetics, an introduction to emerging technologies and analytical methods for genomic science, basic study for various types of genomic research approaches, utilization of widely-used software packages for analyses of genomic data, and examples of human genome epidemiology information improving health, and ethical, legal and social issues in the design and conduct of human genome epidemiology studies.

BIOLOGY 5534 Cardiovascular Pulmonary Physiology Credits: 3

Function of the cardiovascular and pulmonary systems at the cellular, tissue, and system levels with particular emphasis on regulation, maintenance of homeostasis and integration with other systems.

Prerequisites: BIOLOGY 316.

BIOLOGY 5539 Mammalian Physiology Credits: 4

Study of the physiological functions and controls in human and related mammalian systems, with emphasis on fundamental processes that underlie normal and abnormal clinical conditions.

Prerequisites: BIOLOGY 316.

BIOLOGY 5540 Pathophysiology Credits: 4

Pathophysiology will focus on the physiological basis of cellular and tissue function, and the consequences of dysregulated metabolic/cellular expression on essential homeostatic processes in cells, cytoplasmic compartments and primary organ systems.

Prerequisites: BIOLOGY 5539.

BIOLOGY 5542 Neurobiology Credits: 3

Neurobiology will consist of the presentation of theory and data concerning cellular and molecular fundamentals of the nervous system, synaptic mechanisms, sensor-motor systems, and higher-order functions of the nervous system.

Prerequisites: LS-BIOC 304.

BIOLOGY 5591 Directed Individual Studies Credits: 1-6

Intensive readings and/or research in an area selected by the graduate student in consultation with the instructor. Not to be identified with thesis research.

BIOLOGY 5592 Master of Arts Topics in Biology Credits: 1-6

Special problems and topics in biology specifically intended to satisfy the project or report requirement for the master of arts degree in biology.

Prerequisites: Nine hours of graduate work in Biology.

BIOLOGY 5593 Master of Science Topics Credits: 1-4

Investigation of problems and topics to satisfy the M.S. topics requirement for the master of science degree in Cellular and Molecular Biology.

Prerequisites: LS-MBB 5561, LS-MBB 5562.

BIOLOGY 5899 Required Graduate Enrollment Credit: 1

Black Studies (BLKS)

Courses

BLKS 5502 Conceptual and Theoretical Foundations in African American Studies Credits: 3

This course will provide an in-depth examination of the theoretical and conceptual parameters of African American studies. We will study the evolution of the field, key scholars and creative intellectuals, and seminal categories of thought.

BLKS 5503 Writing for African American Studies Credits: 3

This course instructs students in how to produce advanced knowledge in the field of African American studies. It provides training in the construction of quality research papers for graduate, scholarly, and professional work and exposes students to a wide array of scholarly journals, databases, and authoritative resources in African American studies. Each time the course is taught, students will develop their research around a specific topic defined by the instructor.

BLKS 5504 Research Seminar Credits: 3

This course introduces the logic, theory, and techniques of empirical research and applies them to African American Studies. It exposes students to a variety of research approaches in order to examine their utility for producing knowledge within the field.

BLKS 5510 African American Art History: Part II, 1960-Present Day Credits: 3

This course presents a survey of African American visual arts from 1960 to the present. The Black Arts Movement, the Black Aesthetic, mainstream arts institutions and Black collectors are reviewed. Visual arts include new media and processes for Diaspora artists. Students investigate contemporary artists within African Diaspora visual culture.

BLKS 5520 Critical Health Issues in Black Communities Credits: 3

Beginning with the African context and the imposition of chattel slavery, this course examines social, cultural, and historical factors affecting the health status of African Americans to the present era.

BLKS 5521 The Black Family & Male-Female Relationships Credits: 3

The course examines the historical evolution and current status of the African American family in the United States. Utilizing the African experience as its starting point, the course conveys a broad understanding of the role of the family in human survival and progress. We investigate such issues as male-female relationships, sexual practices, dating, marriage, single parenting, the education issues, including institutionalized inequality, that affects the viability of today's African American family.

BLKS 5525 African American Business Development Credits: 3

This course investigates the various challenges to African American business development and entrepreneurship in the United States. We study the lives of successful, pioneering African American businesswomen and men in order to assess how they managed to transcend the barriers of racism and structured inequality. We explore why certain kinds of enterprises emerged among African Americans and why others did not, and we scrutinize the traditional business problems for African Americans of capitalization, distribution, market penetration, and wealth creation.

BLKS 5530 African American Migrations in Literature Credits: 3

The course examines representations of two different trajectories of migration in African American literature: African American journeys from the south to northern and mid-western regions of America, and concurrent migrations of Caribbean people to the US in the early twentieth century.

BLKS 5534 From Field Shout to Hip Hop: African American Poetic Traditions Credits: 3

This course examines the development of African American poetry from its early forms as field shouts, ballads, and blues to present forms including spoken word and hip hop. Includes authors such as Phillis Wheatley, Paul Lawrence Dunbar, Langston Hughes, Gwendolyn Brooks, Tupac Shakur, and Jessica Care Moore.

BLKS 5535 Stages toward Freedom: African American Dramatic Traditions Credits: 3

This course explores the development of African American dramatic traditions from the eighteenth century through the Harlem Renaissance, Black Arts Movement, to current postmodernism. Includes authors such as W.W. Brown, Zora N. Hurston, Amiri Baraka, Sonia Sanchez, August Wilson, Suzan-Lori Parks.

BLKS 5537 The Civil Rights Movement in African American Literature Credits: 3

This course examines how African American literature shaped ideas about freedom, rights, citizenship and race in the civil rights movement. It draws on a variety of literary forms—speeches, essays, autobiographies, fiction, drama, poetry and film—to explore the movement's impact on communities and cultures as well as its various debates and competing visions.

BLKS 5538 Women's Literature in Africa and the African Diaspora Credits: 3

This course is a comparative examination of the variety of literary works produced by women of African descent in the United States, the Caribbean and Africa. Students will explore the cross-cultural implications of texts in light of the intersections of gender, race and class.

BLKS 5539 Slave Narratives: Race, Gender and Writing Freedom Credits: 3

A truly American, home grown genre and powerful force in the development of American political and social realities, the African American Slave Narrative is an established, recognized influence in the development of African American and American literary history. You will have the opportunity to explore the historical trajectory of the Slave Narrative, looking at early formulations of its structure, purpose and conventions—especially in terms of gender and race, subsequent various permutations, and the eventual development of the Neo-slave Narrative as its resurrection, which adds to the complexity and theoretical impact of the literary autobiography from black perspectives.

BLKS 5549 Symbols and Codes from the Diaspora: African American Visual Arts Survey Credits: 3

This course provides an examination of the theoretical and conceptual parameters of African and African American visual aesthetics. Through the writings of key scholars in African American aesthetics, students will study symbolic forms and patterns from various African cultures throughout the Diaspora and investigate formal image categories within African Diaspora visual culture.

BLKS 5551 African American Art History: Part I, 1600-1960 Credits: 3

This course presents a comprehensive survey of African American visual art from 1600 through 1960. Critical issues in early American art history highlight the expressions of African American artists and scholars. The Negro Crafts Movement, New Negro Movement and Harlem Renaissance. Students will investigate artistic expressions of this period.

BLKS 5580 Special Topics/Seminar Credits: 1-3

In-depth exploration of special topics in Black Studies.

BLKS 5590 Directed Study/Research Credits: 1-6

Individual research and learning projects supervised by a faculty member.

BLKS 5596 Internship in Black Studies Credits: 1-6

This Internship course presents an opportunity for graduate students to integrate their academic studies in the discipline of Black Studies with community service and engagement. As a student intern within a business or professional organization in the urban Metropolitan community, the student gains critical information about the processes and procedures of this business entity in relation to African American community members.

BLKS 5599 Research Thesis Credits: 1-6

Individually directed research leading to preparation and completion of a thesis.

BLKS 5699 Research and Dissertation Credits: 1-12

Individually directed research leading to preparation and completion of a doctoral dissertation.

BLKS 5899 Required Graduate Enrollment Credit: 1

Enrollment required during the completion of a thesis/dissertation.

Cello (CELLO)

Courses

CELLO 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

CELLO 5500A Graduate Cello - Secondary Credits: 2

CELLO 5500B Special Applied Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

CELLO 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

CELLO 5501 Graduate Cello - Masters Performance Credits: 4

CELLO 5601 Graduate Cello - Doctoral Performance Credits: 4

Chemistry (CHEM)

Courses

CHEM 5511 Laboratory Safety And Health I Credit: 1

An introduction to laboratory safety and health. Topics to be discussed include good laboratory practice; laboratory hazards; safe chemical handling; storage and disposal; first aid; protective equipment; and federal regulations.

CHEM 5520R Survey Of Organic Chemistry Credits: 3

An intensive advanced survey of the structure, synthesis and reactions of organic compounds.

CHEM 5521R Mechanisms Of Organic Reactions Credits: 3

A comprehensive course in which the mechanisms of organic reactions are discussed in light of modern chemical principles.

Prerequisites: CHEM 322R and CHEM 432.

CHEM 5522 Synthetic Organic Chemistry Credits: 3

A critical approach to the synthesis and modification of organic molecules; newer methods will be emphasized.

Prerequisites: CHEM 322R and CHEM 432.

CHEM 5529 Selected Topics In Organic Chemistry Credits: 3

Selected topics from the chemistry and theories of organic structures with particular attention to recent developments.

CHEM 5530 Systematic Physical Chemistry Credits: 3

An intensive and comprehensive review of the principles of physical chemistry. This course may either emphasize thermodynamics with an introduction to principles of quantum mechanics or emphasize quantum mechanical description of atoms and molecules, molecular spectroscopy, statistical mechanics and kinetics.

CHEM 5530A Physical Chemistry I Credits: 3

This graduate course reviews principles of physical chemistry, focusing on thermodynamics, equilibria and electrochemistry.

CHEM 5530B Physical Chemistry II Credits: 3

This graduate course reviews principles of physical chemistry, focusing on quantum chemistry, molecular spectroscopy and structure, and kinetics.

CHEM 5531 Classical Thermodynamics Credits: 3

A rigorous treatment of the laws of thermodynamics and their application to ideal and non-ideal equilibrium systems.

CHEM 5532 Chemical Kinetics Credits: 3

Empirical analysis of chemical reaction rates. Theories of unimolecular and bimolecular reactions, reactions in solution and complex reactions. Review of modern and classical techniques used to study chemical kinetics.

CHEM 5533 Quantum Chemistry Credits: 3

Application of quantum mechanical methods to the study of systems of chemical interest. Exact solutions and approximate methods will be discussed.

CHEM 5534 Molecular Spectroscopy Credits: 3

A theoretical introduction to molecular spectroscopy and its relation to structure. Electronic, vibrational and rotational spectra of chemical systems will be discussed.

CHEM 5535 Statistical Thermodynamics Credits: 3

A rigorous treatment of the fundamental concepts of statistical thermodynamics, with applications to specific systems that reflect the interests of students participating in the course.

CHEM 5539 Selected Topics In Physical Chemistry Credits: 3

Selected topics and recent developments in physical chemistry.

Prerequisites: CHEM 5530.

CHEM 5541R Advanced Analytical Chemistry Credits: 3

An intensive review of modern concepts of analytical chemistry.

Prerequisites: CHEM 432.

CHEM 5551R Advanced Inorganic Chemistry I Credits: 3

A systematic treatment of bonding, structure, reactions and reaction mechanisms of inorganic compounds, with emphasis on classical transition metal compounds and organometallic compounds.

Prerequisites: CHEM 451R.

CHEM 5559 Selected Topics In Inorganic Chemistry Credits: 3

Various special topics in the inorganic area to be offered in different semesters.

Prerequisites: CHEM 5551R.

CHEM 5567 Advanced Bioorganic Chemistry Credits: 3

This course examines the organic chemistry and laboratory synthesis of the major biopolymers and organic chemistry related to biological systems. Emphasis is on literature and library research and natural product and solid phase organic synthesis, combinatorial synthesis, bioconjugates and applied bioorganic chemistry.

CHEM 5571R Introduction To Polymer Chemistry Credits: 3

Survey of organic and inorganic monomers and polymers; the occurrence, synthesis, structures and properties of natural and synthetic polymers; discussion of general properties of plastics, elastomers, fibers, resins and plasticizers.

Prerequisites: CHEM 432.

CHEM 5580R Computer Applications To Chemical Problems Credits: 3

The purpose of this course is to survey the field of computational chemistry, concentrating on methods, programs and general utility to the research chemist. The student will learn the principles of the theory underlying the methods and will use selected software to carry out chemical calculations.

Prerequisites: CHEM 320 / CHEM 320L or CHEM 322R / CHEM 322L with "C-" or better.

CHEM 5587 Environmental Chemistry I Credits: 3

A survey of how chemical principles can be applied to the environment. Included will be topics in aquatic chemistry, atmospheric chemistry and chemistry of the geosphere and soil.

CHEM 5588 Environmental Chemistry II Credits: 3

Discussion of selected topics in advanced environmental chemistry, such as environmental toxicology, environmental risk, the chemistry of hazardous wastes and their treatment, and environmental analytical chemistry.

CHEM 5590 Directed Studies Credits: 1-3

Intensive readings and/or research in an area selected by the graduate student in consultation with the instructor.

CHEM 5598 Research Methodology Conference Credits: 3

Student will meet on an individual basis with two faculty members who are involved in research. The student's adviser will coordinate this course.

CHEM 5599 Research And Thesis Credits: 1-9

Research for thesis.

CHEM 5611 Chemistry Seminar Credit: 1

Presentation and discussion of topics currently appearing in United States and foreign literature.

CHEM 5699 Research And Dissertation Credits: 1-16

Research for dissertation.

CHEM 5899 Required Graduate Enrollment Credit: 1

Civil Engineering (CIV-ENGR)

Courses

CIV-ENGR 5500 Problems Credits: 1-6

Supervised investigation in civil engineering to be presented in the form of a report.

Prerequisites: Graduate standing.

CIV-ENGR 5501 Advanced Topics in Civil Engineering Credits: 1-3

Current technical developments in civil engineering.

CIV-ENGR 5501AE Advanced Topics in Civil Engineering Credits: 1-3

CIV-ENGR 5504 Project Management of Integrated Design and Construction Credits: 3

Provide a body of knowledge that includes the principles, knowledge areas, skills, and tools applicable to successful project management for the performance of integrated design and construction of capital projects, specifically as applicable to the post-award period. This post-award period is the time from the formal Project award by the owner through Project design and construction, testing, commissioning, close-out and completion of the Project warranties.

CIV-ENGR 5505 Capital Project Delivery Methods Credits: 3

Provide a body of knowledge that acquaints students with the capital project delivery methods in both public and private business sectors of the U.S design – construction industry. Project delivery means how a capital project comprising both design and construction is planned, procured, contracted and implemented by an owner to achieve desired objectives. Delivery methods include traditional design – bid- build, design – build, design-build plus added services such as operations and maintenance, CM @ Risk and other approaches. Roles and responsibilities of owners, owner consultants, and design and construction firms are presented and discussed. Owner procurement approaches, project risk.

CIV-ENGR 5506 Construction Project Risk Management Credits: 3

Risk management skill sets are necessary tools for the successful project manager. Project Management Institute's (PMI) 6 steps of project risk management constitute the basis of the content, which includes an expanded knowledge of risk identification, qualitative and quantitative risk analysis, risk control, contract risks, and risk transfer options. Business and project risks such as client selection, project planning, and project execution, will be considered as well as legacy risks that remain with the business and participants beyond the project completion. Different risk management strategies will be discussed, including risk avoidance, risk mitigation, and risk transfer.

CIV-ENGR 5515 Engineering Leadership & Ethics Credits: 3

Analysis of leadership, including 360-degree assessment of students' leadership. Discussion of leadership cases and application to engineering careers. Frequent analysis of engineering ethics cases using the NSPE Code.

Prerequisites: Graduate status.

CIV-ENGR 5516 Advanced Engineering Mathematics Credits: 3

The class is a review of and introduction to advanced mathematical theories and methods for graduate students in Civil and Mechanical Engineering. The basic topics include 2nd-order ODE/PDEs, advanced linear algebra, continuous and discrete Fourier transform, advanced probability and statistics methods, and commonly numerical methods (e.g. linear and generalized linear regression, iterative methods, and maximum likelihood estimation. Successful completion of Calculus III and working knowledge of a mathematical software package (Matlab preferred) is recommended.

CIV-ENGR 5517 Advanced Structural Analysis Credits: 3

The course is designed as a continued study of structural analysis methods with emphases on indeterminate structures (trusses, beam/columns, and frames), advanced analysis methods, and introduction to nonlinear structural effects including geometric nonlinearity and inelasticity. Advanced structural analysis methods including force, displacement, matrix, energy, and limit analysis methods will be introduced and practiced. Both computer based and hands on analysis will be involved.

Prerequisites: Undergraduate coursework in structural analysis strongly recommended.

CIV-ENGR 5521 Matrix Methods of Structural Analysis Credits: 3

An introduction to the fundamentals of stiffness and flexibility methods for analysis of truss and frame structures. Application of the computer programs to three dimensional structures.

Prerequisites: CIV-ENGR 321.

CIV-ENGR 5523 Advanced Structural Steel Design Credits: 3

Design of steel building structures. Topics include composite deck and beam design, stability design, plastic design, plate girder design, simple and eccentric shear connections, and partial and fully restrained moment resistant connections.

Prerequisites: CIV-ENGR 323.

CIV-ENGR 5526 Prestressed Concrete Credits: 3

Design and behavior of prestressed concrete structures; material and system or pretensioned and post tensioned systems; prestress losses; flexure, shear, bond, deflections and partial prestress in determinate structures; indeterminate beams-introduction.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 5527 Advanced Reinforced Concrete Design Credits: 3

Advanced Topics in the design of footings, retaining walls two way floor slabs, torsion and continuous structures, shear friction, strut and tie design, precast design.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 5529 Advanced Design of Structures for Blast and Fire Credits: 3

General overview of Blast Design; risk assessment and design criteria; simplified Blast Effects Analysis; ground shock, material response; antiterrorism design considerations; weapons effects and mitigation; internal explosions; progressive collapse analysis; and introduction to Fire Design.

CIV-ENGR 5531 Fund of Geomaterial Characterization Credits: 3

A geomaterial is any construction material comprised primarily of soil. This course overviews state-of-the-art instrumental techniques for analysis of the physio-chemical properties of soils, aggregates, hydraulic concrete, and asphaltic concrete. Evaluation techniques will be applied to determining beneficial reuse opportunities for industrial by-product materials from the Kansas City region. Prerequisites are CE 335 Soil Mechanics and CE378 Civil Engineering Materials, or equivalent. 3 credit hours.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

CIV-ENGR 5532 Foundation Engineering Credits: 3

Design of basic foundation structures, footings, retaining walls, pile foundations, dams.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 5536 Advanced Soil Mechanics Credits: 3

Theoretical soil mechanics as applied to solution of specific engineering problems.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 5542 Hydraulic Structures Credits: 3

A review of the history and hydraulic design procedures for a variety of hydraulic structures including spillways, water measurement structures, canal structures and energy dissipation structures.

Prerequisites: CIV-ENGR 452 (or CIV-ENGR 5552).

CIV-ENGR 5544 Unit Processes in Environmental Engineering Credits: 3

Typical chemical and physical relationships are applied to unit processes of water and wastewater. Troubleshooting for operation problems is emphasized.

Prerequisites: CIV-ENGR 342.

CIV-ENGR 5545 Environmental Engineering Microbiology Credits: 3

Theory and application of fundamental principles of microbiology, toxicology, ecology, and aquatic biology of the microorganisms of importance to environmental engineers.

Prerequisites: CE342.

CIV-ENGR 5546 Limnology Credits: 3

A survey of the physical, biological, and chemical issues important in surface fresh waters. Includes carbonate chemistry, algal assay and Thermocline analysis.

Prerequisites: CHEM 211, MATH 345.

CIV-ENGR 5547 Contracts and Law for Engineers Credits: 3

This course covers a broad range of substantive legal topics giving the student a grounding in the legal implications of certain situations that they may encounter during their careers. The course includes coverage of basic contract law, environmental regulations and compliance, construction law, antitrust law, intellectual property law, civil procedure, employment law, business entities (corporate law) product liability and criminal law and procedure. The objective of the course is to provide students with a fundamental understanding of the wide range of federal and state laws governing behavior in our complicated and rule of law driven society.

CIV-ENGR 5549 Environmental Compliance, Auditing, & Permitting Credits: 3

This course provides a high level overview of the most important statutes that have been enacted to protect the environment. The course covers regulation of hazardous waste, the Clean Air and Clean Water Acts, the Resource Conservation and Recovery Act, the All Appropriate Inquiry Rule and the law addressing sites contaminated with hazardous substances and the technology options employed to remediate those sites. In addition, the course provides coverage of environmental audits and emergency planning for extremely hazardous substances, the regulation of underground storage tanks, safe drinking water and the National Environmental Policy Act among other statutes.

CIV-ENGR 5552 Hydraulics of Open Channels Credits: 3

This is a first course in the fundamentals of open channel (free surface) water flow. Over ninety-nine percent of all the water that is moved on the planet's surface is by free surface flow. Study of free surface flow is essential to the study of storm water drainage systems, flood control, water and wastewater treatment and the study of the form and processes of river evolution. This class provides the fundamental physical principles of free surface flow as a prelude to a significant number of other topics that pertain to engineering and geomorphic analysis.

Prerequisites: CIV-ENGR 351.

CIV-ENGR 5553 Hydraulics and Variability of Rivers Credits: 3

This course introduced concepts of alluvial channel behavior, evolution and change due to natural and man-induced modifications to streams and watersheds. Numerous case studies of river behavior are studied from the perspective of hydraulics, geomorphology and sediment transport.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 5554 River Stability and Scour Credits: 3

Bridge hydraulics, stream stability, scour at bridge piers and abutments, hydraulic modeling of floods, countermeasures for protection of bridge infrastructure.

Prerequisites: CIV-ENGR 452 or CIV-ENGR 5552.

CIV-ENGR 5556 Urban Hydrology Credits: 3

Analysis of urban drainage systems in accordance with published municipal criteria. This course is an in-depth, follow on course for senior undergraduate students interested in the hydrological sciences and for graduate students specializing in water resources. Specifically this course will focus on the engineering procedures and techniques specified by municipalities to design and maintain efficient, safe, storm drainage systems. This course also focuses on the unique issues associated with estimating and designing for rainfall/runoff in urban metropolitan areas, including channel and reservoir routing of floods through stream channels, retention structures, culverts, and storm sewers.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 5563 Construction Law Credits: 3

This course introduces professional, ethical, and legal concepts of the professional practice of engineering, and the role of the consulting engineer, specifically in the A/E/C industry during the design, procurement, and construction processes. A conceptual framework is developed for understanding the industry standard agreements (AIA, EJCDC, ConCensus) and the various participants roles and duties in project execution. The engineer's "professional standard of care" is examined and revisited throughout the semester, specifically what it means to be a "Professional Engineer". Emphasis is placed on project and contract management and the applicable law. Skills are developed in finding online resources of law, legal, and practice advice relevant to the practice of engineering and the construction industry

CIV-ENGR 5565 Project Finance Credits: 3

This class introduces students to the financial concepts faced by engineers in the businesses in which they work and for the projects to which they are assigned. Throughout the course students are reminded of the impact of two key variables – money and time – on their work. While not attempting to turn good engineers into mediocre accountants, the course includes a strong emphasis on managerial accounting. Students will learn how to read and apply financial statements and how to use these same financial concepts in developing pro formas to evaluate and support major capital investments. The effect of time on the value of money, appropriate discount factors, and the internal rate of return will be explored in the class. Students will learn to combine these financial factors with electronic spreadsheets to evaluate business opportunities and practices. All students will be required to develop a comprehensive financial model to evaluate/justify a real world capital project.

CIV-ENGR 5566 Green Building and Sustainable Infrastructure Credits: 3

This course provides a broad overview of what sustainability means to construction and our built environment. Specific green infrastructure rating systems of LEED and Envision will be discussed in detail to quantify the "greenness" of construction of buildings residential subdivisions, highways, roads, and airports. Upon completion of this course students will have a substantial background and understand the aspects needed for the LEED Green Associates and Envision ISI exams. Two major additional aspects of green building important to sustainable infrastructure include stormwater management using "green" techniques and methods to mitigate the urban heat island. The course will also discuss infrastructure project sustainability from a life cycle cost perspective and determining the life cycle inventory of various materials. Upon completion of the course, students will better understand what sustainability means and how it applies in the context of our built environment and have a good idea of how technology will impact our sustainable future.

CIV-ENGR 5567 Introduction to Construction Management Credits: 3

This course will introduce the students to basic construction management related topics including structure of the construction industry, construction drawings and specifications, estimating and bidding, construction contracts, bonds and insurance, planning and scheduling of construction operations, project management, computer techniques.

CIV-ENGR 5568 Construction Planning and Scheduling Credits: 3

This course is intended to provide an in-depth examination of the construction planning and scheduling process, as it relates to civil engineering projects. Topics will include planning and scheduling of construction operations by the critical path method, Network diagramming, scheduling computations, and time-cost trade-offs. Manpower and equipment leveling. Computer and noncomputer techniques.

Prerequisites: CIV-ENGR 467 or CIV-ENGR 5567.

CIV-ENGR 5569 Construction Methods and Equipment Credits: 3

Introduction to methods used to plan, construct and manage heavy civil projects. Topics will include development, project control, equipment productivity, earthmoving fundamentals, formwork design, and other issues in heavy civil projects.

Prerequisites: CIV-ENGR 467 or CIV-ENGR 5567.

CIV-ENGR 5570 Corrosion Engineering Credits: 3

This course will cover the physical interaction of metallic materials with their environments, called corrosion. Corrosion is an electrochemical process and the thermodynamics and kinetics of corrosion processes will be discussed. Students will be expected to identify different forms of corrosion and be able to select appropriate materials for their working environment to prevent corrosion related problems. Second half of the class will concentrate on corrosion of metals in concrete and prevention methods.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 5571 Advanced Portland Cement Concrete Credits: 3

This course will cover topics such as cement chemistry, concrete proportioning, aggregates, mineral and chemical admixtures, fresh and hardened properties of concrete, and durability of concrete. Design and proportioning of concrete mixtures for desired fresh and hardened properties will be emphasized. Specialty concrete types such as high strength/high performance concrete, lightweight concrete, pervious concrete, high volume fly ash concrete, and fiber reinforced concrete will also be covered.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 5573 Durability of Civil Engineering Materials Credits: 3

This course will explore the identification, causes of, and remediation of material-related durability deterioration in civil engineering projects. The primary focus will be on reinforced concrete, plain concrete, and soil for a variety of applications. Course content will be delivered primarily through laboratory activities and handouts. Lab activities will use advanced analysis techniques and help the students identify and measure deterioration mechanisms. Various non-destructive evaluation techniques will be discussed. Students have hands on experiences with samples production, data collection, and data analysis for all of the lab activities.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

Cross Listings: CIV-ENGR 473.

CIV-ENGR 5575 Seismic Design of Structures Credits: 3

Introduction to basic analysis and design principles for the seismic design of buildings (concrete, steel, wood). General seismic principles, codes and loads, static lateral force procedure, dynamic lateral force procedure, topics in rigidities of buildings.

Prerequisites: CIV-ENGR 323 (or CIV-ENGR 422WI), MEC-ENGR 285.

CIV-ENGR 5582 Advanced Traffic Engineering Credits: 3

This course covers the review of traffic flow characteristics, the field survey practices and studies, traffic signal designs, freeway operation, and the introduction to Intelligent Traffic Systems (ITS).

Prerequisites: CIV-ENGR 319.

CIV-ENGR 5584 Pavement Materials, Design, Maintenance, and Rehabilitation Credits: 3

This course will explore the identification, causes of, and remediation of material-related durability deterioration in civil engineering projects. The primary focus will be on reinforced concrete, plain concrete, and soil for a variety of applications. Course content will be delivered primarily through laboratory activities and handouts. Lab activities will use advanced analysis techniques and help the students identify and measure deterioration mechanisms. Various non-destructive evaluation techniques will be discussed. Students have hands on experiences with samples production, data collection, and data analysis for all of the lab activities.

Prerequisites: CIV-ENGR 378WI.

CIV-ENGR 5585 Principles of Railroad Engineering Credits: 3

The engineering analysis and design of railroad systems including the study of the dynamics of track/trains; wheel/rail interaction related to acceleration and braking; horizontal and vertical geometric design of railroads and rail-bed design, rail structures; freight and passenger operations; and, rail-highway interaction and safety.

CIV-ENGR 5599 Thesis Research Credits: 1-6

Independent investigation in the field of civil engineering to be presented in the form of a thesis.

CIV-ENGR 5602 Directed Reading in Civil Engineering Credits: 1-3

Faculty supervised readings course.

Prerequisites: Graduate standing.

CIV-ENGR 5607 Numerical Methods in Engineering Credits: 3

Classification and numerical solution of engineering problems—ordinary and partial differential equations, algebraic equations. Includes initial, boundary, eigen-# and characteristic-value problems.

Prerequisites: MATH 345.

CIV-ENGR 5622 Theory of Elasticity Credits: 3

Stress and strain at a point. General equations of elasticity. Plane stress, plain strain problems; torsion of prismatic bars. Energy methods.

CIV-ENGR 5623 Theory of Plates and Shells Credits: 3

Bending of plates with various loading and boundary conditions. Deformations, stresses in thin shells.

Prerequisites: CIV-ENGR 5622.

CIV-ENGR 5624 Theory of Elastic Stability Credits: 3

Buckling of columns, beams, rings, curved bars, thin plates, shells.

Prerequisites: CIV-ENGR 5622.

CIV-ENGR 5625 Advanced Prestressed Concrete Credits: 3

Design and behavior of prestressed concrete structures; material and system of pretensioned and post tensioned systems; prestress losses; flexure, shear, bond, deflections and partial prestress in determinate structures; indeterminate beams-introduction.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 5629 Adv. Design of Structures for Blast and Fire Credits: 3

General overview of Blast Design; risk assessment and design criteria; simplified Blast Effects Analysis; ground shock, material response; antiterrorism design considerations; weapons effects and mitigation; internal explosions; progressive collapse analysis; and introduction to Fire Design.

CIV-ENGR 5645 Water Quality Modeling Credits: 3

Derivation and application of models for describing oxygen budget, nutrient exchange, and biological productivity in streams, lakes and estuaries.

Prerequisites: CIV-ENGR 342.

CIV-ENGR 5646 Physiochemical Treatment Processes Credits: 3

Fundamental principles, analysis and modeling of physical and chemical processes for water and wastewater treatment.

Prerequisites: CIV-ENGR 342.

CIV-ENGR 5647 Biochemical Treatment Processes Credits: 3

Biochemical principles, kinetic models and energy considerations in the design of biological wastewater treatment processes.

Prerequisites: CIV-ENGR 342.

CIV-ENGR 5648 Environmental Engineering Practicum Credits: 3

Numerical water quality modeling of actual site data for wasteload allocation.

Prerequisites: CIV-ENGR 5645.

CIV-ENGR 5649 Design of Water and Wastewater Treatment Facilities Credits: 3

Development of design criteria and their application to the design of water and wastewater treatment facilities.

Prerequisites: CIV-ENGR 5646 or CIV-ENGR 5647.

CIV-ENGR 5651 Fundamentals of Fluid Mechanics Credits: 3

Fundamentals of fluid motion, lecture and laboratory. Instrumentation, technique and analysis for experimental studies in fluid mechanics.

CIV-ENGR 5655 Sediment Transport Credits: 3

The study of sediment transport in rivers: the relationship between sediment transport and the fundamentals of fluvial geomorphology. Computation of sediment transport and sediment transport modeling.

Prerequisites: CIV-ENGR 452 (or CIV-ENGR 5552).

CIV-ENGR 5656 Advanced Hydraulic Engineering Credits: 3

Rapidly varied flow and design of transition structures. Hydraulic design of spillways, reservoirs and related structures.

CIV-ENGR 5675 Advanced Seismic Design of Structures Credits: 3

Introduction to basic analysis and design principles for the seismic design of buildings (concrete, steel, wood). General seismic principles, codes and loads, static lateral force procedure, dynamic lateral force procedure, topics in rigidities of buildings.

Prerequisites: CIV-ENGR 323 (or CIV-ENGR 422WI), MEC-ENGR 285.

CIV-ENGR 5679 Dynamics of Structures Credits: 3

Study of the dynamic behavior of structures. Analysis of equivalent lumped parameter systems for the design of structures in a dynamic environment.

Prerequisites: CIV-ENGR 276 (or CIV-ENGR 421), MEC-ENGR 484 (or MATH 345, MEC-ENGR 285).

Cross Listings: MEC-ENGR 5679.

CIV-ENGR 5681 Traffic Flow Theory Credits: 3

This course covers the review of macroscopic and microscopic traffic flow characteristics, the traffic flow models, and the traffic simulation applications.

Prerequisites: CIV-ENGR 319.

CIV-ENGR 5682 Transportation Network Modeling Credits: 3

This course is about modeling, solving, and understanding network flow problems, especially in the transportation discipline. This course covers equilibrium traffic assignment, network design, fleet assignment, fleet routing, and crew scheduling.

Prerequisites: CIV-ENGR 319.

CIV-ENGR 5699 Research and Dissertation Credits: 1-9
 Doctoral dissertation research.

Clarinet (CLARINET)

Courses

CLARINET 5300 Studio Class Credits: 0
 Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

CLARINET 5500A Graduate Clarinet-Secondary Credits: 2

CLARINET 5500B Special Applied Studies Credits: 2
 One-hour lesson weekly. This courses is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

CLARINET 5500C Applied Study of a Second Instrument Credit: 1
 One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

CLARINET 5500JC Applied Jazz Study of a Second Instrument Credit: 1
 One half-hour lesson weekly. Applied study for those students who wish to pursue applied jazz study in an area other than, and in addition to, their primary performance study.
Prerequisites: Graduate status.

CLARINET 5501 Graduate Clarinet - Masters Performance Credits: 4

CLARINET 5601 Graduate Clarinet - Doctoral Performance Credits: 4

Communication Studies (COMM-ST)

Courses

COMM-ST 5554 Graduate Seminar: Screenwriting Credits: 3
 Students will complete their feature screenplay, focusing on acts two and three and then ready the script for submission to contests and industry contacts. We will focus on in-depth scene work, polishing dialogue and deepening theme.
Prerequisites: COMM-ST 454 or ENGLISH 429B.

COMM-ST 5597 Directed Graduate Studies: Readings Credits: 1-6
 Special Projects on the graduate level.

COMM-ST 5598 Directed Graduate Studies: Non-Thesis Research Credits: 1-6
 Special projects on the graduate level.

Computer Science & Electrical Engineering (CSEE)

Courses

CSEE 5110 Network Architecture I Credits: 3
 This course provides an introduction to fundamental concepts and principles in the design and implementation of computer communication networks, their protocols, and architectures. Topics to be covered include: layering, and addressing, naming, routing, internetworking, Internet protocols, reliable transfer, congestion control, link control, multiple media access, and network measurement and management.
Prerequisites: COMP-SCI 421A, COMP-SCI 431.

CSEE 5111 Network Architecture II Credits: 3
 In this course, advanced principles, protocols, and architectures of computer networks will be studied with specific emphasis on emerging technologies. The focus will be on the latest networking protocol designs with particular attention to the TCP/IP and application layers.
Prerequisites: CSEE 5110.

CSEE 5113 Network Routing Credits: 3
 Algorithms, protocols and analysis for network routing. Routing in different networks such as circuit-switched networks, Internet, broadband networks, and transmission networks are covered.
Prerequisites: CSEE 5110, CSEE 5112.

CSEE 5590 Special Topics Credits: 1-3
 This course is intended to allow faculty and visiting scholars to offer special courses in selected topics.

CSEE 5690 Advanced Special Topics Credits: 1-3

A lecture course presenting advanced research level topics. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

CSEE 5697 Directed Readings Credits: 1-3

Readings in an area selected by the doctoral student in consultation with a doctoral faculty member. Arrangements must be made prior to registration.

CSEE 5699 Research and Dissertation Research in Telecommunications and Computer Networking Credits: 1-12

Doctoral Research in Telecommunications and Computer Networking.

CSEE 5899 Required Graduate Enrollment Credit: 1

Required Graduate Enrollment.

Computer Science (COMP-SCI)

Courses

COMP-SCI 5101 Discrete Structures Review for Graduate Students Credits: 1-3

A review of mathematical logic, sets, relations, functions, mathematical induction, and algebraic structures with emphasis on computing applications. Recurrence relations and their use in the analysis of algorithms. Graphs, trees, and network flow models. Introduction to Finite state machines, grammars, and automata. Students must have completed College Algebra before taking this course.

COMP-SCI 5102 Operating Systems Review for Graduate Students Credits: 1-3

This course covers concurrency and control of asynchronous processes, deadlocks, memory management, processor and disk scheduling, parallel processing, and file system organization in operating systems.

Prerequisites: Data Structures, Computer Architecture.

COMP-SCI 5103 Advanced Data Structures and Analysis of Algorithms Review for Graduate Students Credits: 1-3

A review of linear and hierarchical data structures, including stacks, queues, lists, trees, priority queues, advanced tree structures, hashing tables, dictionaries and disjoint-sets. Asymptotic analysis techniques and algorithms: from design strategy (such as greedy, divide-and-conquer, and dynamic programming) to problem areas (such as searching, sorting, shortest path, spanning trees, transitive closures, graph algorithms, and string algorithms) arriving at classical algorithms with efficient implementation. Introduction to the basic concepts of complexity theory and NP-complete theory. Students must have taken courses in Linear Algebra, Discrete Structures, Data Structures, and Applied Probability before taking this course.

COMP-SCI 5514 Optical Fiber Communications Credits: 3

Fiber optic cable and its characteristics, optical sources and transmitters, optical detectors and receivers, optical components such as couplers and connectors, WDM and OFDM techniques, modulation and transmission of information over optical fibers, design of optical networks, single and multihop fiber LANs, optical carrier systems.

Prerequisites: COMP-SCI 411.

COMP-SCI 5525 Cloud Computing Credits: 3

Cloud computing systems operate in a very large scale, and are impacting the economics and the assumptions behind computing significantly. This special topics course provides a comprehensive overview of the key technical concepts and issues behind cloud computing systems such as compute, storage and network resource virtualization and management. We will cover a range of topics of cloud computing including: Cloud system architectures and taxonomy, Computing virtualization techniques, Virtual machine resource management, Data center networking issues, Big data transfer protocols and management, Large scale distributed file system examples (Google File System), Cloud programming.

Prerequisites: CSEE 5110, COMP-SCI 431.

COMP-SCI 5531 Advanced Operating Systems Credits: 3

Components of an operating system, scheduling/routing mechanisms, process control blocks, design and test various operating system components.

Prerequisites: COMP-SCI 431.

COMP-SCI 5540 Principles of Big Data Management Credits: 3

This course will introduce the essential characteristics of Big Data and why it demands rethinking how we store, process, and manage massive amounts of structured and unstructured data. It will cover the core technical challenges in Big Data management i.e., the storage, retrieval, and analysis of Big Data. It will emphasize on fundamental concepts, analytical skills, critical thinking, and software skills necessary for solving real-world Big Data problems. Tools such as Apache Hadoop, Pig, Hive, HBase, and Apache Spark will be covered. Extensive reading of research papers and in-class presentations will be heavily emphasized in this class.

Prerequisites: COMP-SCI 431 and COMP-SCI 470.

COMP-SCI 5542 Big Data Analytics and Applications Credits: 3

Big Data analytics focus on analyzing large amounts of data to find useful information and to make use of the information for better business decisions. This course introduces students to the practice and potential of big data analytics and applications. In this course, students will have hands-on experience with Big Data technologies (Hadoop and its ecosystems) and tools (Cloudera, RMAhout, HBase) for the analysis of large data sets across clustered systems. Students will learn how to develop highly interactive applications for business intelligence.

Prerequisites: COMP-SCI 451.

COMP-SCI 5543 Real-time Big Data Analytics Credits: 3

This course teaches students fundamental theory and practice in the field of big data analytics and real time distributed systems for real time big data applications. In this course, students will have hands-on experience for the development of real-time applications with various tools such as Twitter's Storm, Apache Flume, Apache Kafka for real time analysis of stream data such as twitter messages and Instagram images.

Prerequisites: COMP-SCI 451.

COMP-SCI 5551 Advanced Software Engineering Credits: 3

Current concepts in software architecture and design, comparative analysis for design, object-oriented software design, software quality criteria for evaluation of software design. Introduction to metrics, project management and managerial ethics.

Prerequisites: COMP-SCI 451R.

COMP-SCI 5552A Formal Software Specification Credits: 3

Formal modeling including specification and deviation of abstract data types, completeness issues in the design of data types and data structures, implementation of data structures from a formal data type specification, verification of abstract to concrete data mapping.

Prerequisites: COMP-SCI 291, COMP-SCI 303.

COMP-SCI 5553 Software Architecture and Design Credits: 3

The course introduces a number of basic concepts and enabling technologies of software architecture, including architecture styles, architecture description languages, architecture-implementation mapping, and product line architectures. It also covers some advanced topics, such as the REST architecture style and Web Services. Students will read research papers, analyze the existing results, write critiques, give presentations, and exercise the research results with real examples. In addition, students will have an opportunity to work in groups and study the architecture of some real software systems.

Prerequisites: COMP-SCI 451R.

COMP-SCI 5555 Software Methods and Tools Credits: 3

Software methods and tools are extensively used in current software production to improve software productivity and quality. In this course, we are going to learn a number of popular software methods and tools being used in industry. These methods include object-oriented design and analysis (e.g. UML, design patterns), architecture styles, code generation, and unit testing. The covered software tools include Microsoft Project, IBM Rational Systems Developer, Eclipse Plug-ins, Emacs, JUnit, Subversion, and GIT. The course emphasizes practice, and students will be using these methods and tools to develop a software system, from the initial planning to the final deployment.

COMP-SCI 5560 Knowledge Discovery and Management Credits: 3

This course teaches students fundamental theory and practice in the field of knowledge discovery and management and also provides them with hands-on experience through application development.

Prerequisites: COMP-SCI 5551, COMP-SCI 461.

COMP-SCI 5561 Advanced Artificial Intelligence Credits: 3

AI systems and their languages, implementations and applications, case studies of various expert systems, current research topics in AI, logic programming using PROLOG.

Prerequisites: COMP-SCI 461.

COMP-SCI 5565 Introduction to Statistical Learning Credits: 3

Introduction to Machine Learning; Multivariate Distributions; Information Theory; Linear Algebra (Eigenanalysis); Supervised/Unsupervised Learning, Classification/Regression; Linear/Non-linear Learning; Introduction to Bayesian Learning (Bayes rule, Prior, Posterior, Maximum Likelihood); Parametric/Non-parametric Estimation. Recommended preparation: MATH 300; Familiarity with MATLAB.

Prerequisites: COMP-SCI 394R.

COMP-SCI 5566 Introduction to Bioinformatics Credits: 3

This course introduces students to the field of Bioinformatics with a focus on understanding the motivation and computer science behind existing Bioinformatic resources, as well as learning the skills to design and implement new ideas.

Prerequisites: COMP-SCI 303, a course or background in Biology (Genomics or Meta Models preferred).

COMP-SCI 5567 Machine Learning for Data Scientists Credits: 3

This course teaches the theoretical basis of methods for learning from data, illustrated by examples of applications to several domains. Recommended preparation: COMP-SCI 5565.

Prerequisites: COMP-SCI 303, COMP-SCI 394R.

COMP-SCI 5568 Fundamentals of Probabilistic Graphical Models Credits: 3

Many real world systems are probabilistic in nature. Probability theory gives us the basic tools for modeling many real world systems, allowing us to understand complex behavior. Probabilistic graphical models allow us to model complex probabilistic relationships using graphs. This framework, which spans methods such as Bayesian networks and Markov networks, allows us to manipulate complex probability distributions that often involve hundreds or even many thousands of variables. These methods have been used for an enormous range of applications, which include: web search, turbo coding, robot navigation, image identification, epidemic identification in complex networks, medical diagnosis and speech recognition. Recommended preparation: COMP-SCI 5565.

Prerequisites: COMP-SCI 303, COMP-SCI 394R.

COMP-SCI 5570 Architecture of Database Management Systems Credits: 3

Covers in detail, architecture of centralized database systems, database processing, management of concurrent transactions, query processing, query optimization, data models, database recovery, datawarehousing, workflow, World Wide Web and Database performance, and reviews the architecture of some commercial centralized database systems.

Prerequisites: COMP-SCI 431, COMP-SCI 470.

COMP-SCI 5572 Mobile Computing Credits: 3

This course covers in detail the architecture of mobile and wireless network. It discusses and develops relevant concepts and algorithms for building mobile database systems (MDS), which is necessary for managing information on the air and E-commerce.

Prerequisites: COMP-SCI 5570.

COMP-SCI 5573 Information Security and Assurance Credits: 3

This course deals with information security and assurance and covers the concepts necessary to secure the cyberspace. It introduces security models, assurance policies, security policies and procedures, and technology. It enables students to understand the need for information assurance, identify security vulnerabilities, and devise security solutions that meaningfully raise the level of confidence in computer systems. It teaches students how to design secured database and computer systems.

Prerequisites: COMP-SCI 470.

COMP-SCI 5574 Large Scale Semistructured Data Management Credits: 3

This course will cover topics related to managing large scale semistructured data modeled using the Extensible Markup Language XML and the Resource Description Framework (RDF). This will include storing XML (e.g. natively, using a relational database), indexing XML (e.g. numbering schemes, structural indexes, sequencing paradigms), XML query processing algorithms (e.g. join-based, subsequence-based), RDF DATA STORAGE (e.g. triple stores, graph stores), RDF indexing and SPARQL query processing algorithms. The course will also cover emerging many core processor architectures (e.g. Intel Single-chip Cloud Computer) and the opportunities they provide for building next-generation semistructured data management solutions. Extensive reading of research papers and in-class presentations will be a core part of this class. Grades will be based on in-class presentations of research papers, exams, and a research project (to be done in groups).

Prerequisites: COMP-SCI 470.

COMP-SCI 5581 Parallel Computer Architecture I Credits: 3

Parallelism in computer architecture, pipelined processors, array processors and multi-processor systems, algorithms for SISD, SIMD, MISD and MIMD organizations, vectorization, pipelining algorithms.

COMP-SCI 5582 Computer Vision Credits: 3

The image is an essential form of information representation and communication in modern society. This course focuses on topics of computer vision, teaching computer how to understand images. Topics include image formation, color and texture features, key points detection, aggregation, subspace methods in image modeling, and deep learning image classification, with many applications in photography, media and entertainment, education, defense and medicine.

COMP-SCI 5590 Special Topics Credits: 1-6

Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

COMP-SCI 5590AW Special Topics Credits: 1-3**COMP-SCI 5590BD Special Topics Credits: 1-3****COMP-SCI 5590CC Special Topics In Computer Science Credits: 1-3****COMP-SCI 5590CI Special Topics Credits: 1-3****COMP-SCI 5590CN Special Topics Credits: 1-3****COMP-SCI 5590HI Special Topics Credits: 1-3****COMP-SCI 5590MT Special Topics Credits: 1-3****COMP-SCI 5590NN Special Topics Credits: 1-3**

Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

COMP-SCI 5590OS Special Topics Credits: 1-3

COMP-SCI 5590PB Special Topics Credits: 1-3
Special Topics

COMP-SCI 5590PG Special Topics In Computer Science Credits: 1-3

COMP-SCI 5590SA Special Topics In Computer Science Credits: 1-3

COMP-SCI 5590WW Special Topics Credits: 1-3

COMP-SCI 5590WX Special Topics Credits: 1-3

COMP-SCI 5590XX Special Topics Credits: 1-3

COMP-SCI 5590YL Special Topics Credits: 1-3

COMP-SCI 5592 Design and Analysis of Algorithms Credits: 3

Combinatorial analysis, searching and sorting, shortest path algorithms, spanning trees, search and traversal techniques, backtracking, branch and bound, heuristics, algebraic simplification and transformation.

Prerequisites: COMP-SCI 303 and COMP-SCI 404.

COMP-SCI 5596A Computer Security I: Cryptology Credits: 3

Study of theory, and algorithmic techniques, of the fields of number theory and cryptology, as they are applied in the general area of computer and network security.

Prerequisites: COMP-SCI 291.

COMP-SCI 5596B Computer Security II: Applications Credits: 3

Application of the algorithmic techniques learned in COMP-SCI 5596A to provide suitable security countermeasures to the variety of security threats across the spectrum of computing.

Prerequisites: COMP-SCI 5596A.

COMP-SCI 5597 Directed Readings Credits: 1-3

Readings in an area selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

COMP-SCI 5598 Research Seminar Credits: 1-3

Graduate research based on intensive readings from the current research literature under the direction of a faculty member. Arrangements must be made prior to registration.

COMP-SCI 5599 Research and Thesis Credits: 1-6

A project investigation leading to a thesis, or written report under the direction of a faculty member. A prospectus must be accepted prior to registration.

COMP-SCI 5690 Advanced Special Topics Credits: 1-3

A lecture course presenting advanced research level topics. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

Prerequisites: Ph.D. Candidacy.

COMP-SCI 5690ND Advanced Special Topics Credits: 1-3

COMP-SCI 5697 Directed Readings Credits: 1-3

Readings in an area selected by the doctoral student in consultation with a doctoral faculty member. Arrangements must be made prior to registration.

COMP-SCI 5698 Advanced Research Seminar Credits: 1-3

Advanced research by a group of doctoral students based on intensive readings from the current research literature under the direction of one or more doctoral faculty. Original research results of each student are exchanged by presentations and group discussion. Arrangements must be made prior to registration.

COMP-SCI 5699A Research And Dissertation Research In Computer Science Credits: 1-12

Doctoral research in computer science.

COMP-SCI 5899 Required Grad Enrollment Credit: 1

Conservatory (CONSVTY)

Courses

CONSVTY 5042 Styles and Genres in Music Credits: 3

Styles and Genres in Music presents an overview of Western music history through three lenses: chronology, genre, and musical style. It is intended for students who have previously studied music history and wish to take a broader view of music history than the view offered through period-specific classes.

CONSVTY 5116 Minor Opera Role Credit: 1

This is a performance-based course of a minor role in the operatic repertoire and based on the specific repertoire chosen by the Vocal Studies Division. The student may choose to take this course as an elective and will be required to audition for the course at the beginning of the academic school year in order to take this course. Each student who is selected and has accepted the minor operatic role will work with the Conservatory faculty, including the stage director, vocal coaches, voice teachers, and musical director, towards the final staged performance of the selected opera production.

Prerequisites: You must be a graduate student in Vocal Performance in the Conservatory of Music and Dance

CONSVTY 5302 Orchestra Credit: 1

The Conservatory Orchestra comprises string, wind, brass and percussion students of the highest level in the Conservatory and performs repertoire of the highest caliber available to the medium. The repertoire includes the great works for orchestra considered the "standard repertoire" from approximately 1770 to today, and includes orchestral, opera, and choral/orchestral works. Sensitivity to outstanding musicianship, historical styles, and appropriate performance practices are required. In addition to the highest expectations as an instrumentalist, your ability to apply intellect and spirit in meaningful ways during rehearsals and concerts is also demanded. Membership is open to any student who qualifies through audition.

CONSVTY 5305A Principles of Chamber Music Credit: 1

The study and performance of chamber music for strings, piano, winds, brass, and voice. Weekly coaching.

CONSVTY 5305H Chamber Orchestra Credit: 1

The Conservatory Chamber Orchestra comprises instrumental students of the highest level in the Conservatory and performs repertoire of the highest caliber available to the medium. The repertoire includes the "standard repertoire" for chamber orchestra from the Baroque period to new works. The ensemble also "reads" "standard repertoire" for orchestras of all sizes, preparing students for playing these works in a professional setting. Sensitivity to outstanding musicianship, historical styles, and appropriate performance practices are required. Membership is open to any student who qualifies through audition.

CONSVTY 5306A Conservatory Wind Ensemble Credit: 1

A select concert band ensemble, designed for high-level, artistic, public performances of major literature for winds and percussion. As a member of this Wind Ensemble, you are contributing to the three hundred year legacy of concert band music in the western world. Sensitivity to outstanding musicianship, historical styles, and appropriate performance practices are required. In addition to the highest expectations as an instrumentalist, your ability to apply intellect and spirit in meaningful ways during rehearsals and concerts is also demanded. Membership in the Wind Ensemble is open to any student who qualifies through audition.

CONSVTY 5306C Wind Symphony Credit: 1

The Wind Symphony comprises wind, brass and percussion students of the highest level in the Conservatory and performs repertoire of the highest caliber available to the medium. The curriculum is well balanced between traditional, modern, and chamber music and requires advanced musical and technical facility amongst its members. The class is open to all UMKC students by audition.

CONSVTY 5307B Conservatory Singers Credit: 1

This select choir of 32 singers performs chamber chorus repertoire of the 16th-21st centuries at the highest possible artistic level. This class is open to all UMKC students by audition.

CONSVTY 5325 Graduate Piano Pedagogy I Credits: 3

This course will provide an introduction to piano pedagogy by focusing on best practices for teaching elementary piano students. Topics will include average-age piano methods, technical concepts for the elementary student, rote teaching strategies, learning modalities, motivation theories, andragogy, business practices, and technology for teaching. After briefly reviewing several historical piano methods, students will examine current piano methods and assemble a curriculum that will be used to teach a weekly 30-minute lesson to a beginning piano student.

CONSVTY 5326 Graduate Piano Pedagogy II Credits: 3

This course will examine pedagogical topics related to intermediate students. Topics will include intermediate repertoire by standard composers, technical considerations for intermediate students, effective practice strategies, sight reading, memorization, and strategies for teaching phrasing. After reading through a variety of standard repertoire from Levels 3-7, students will compile an anthology of intermediate pieces with annotated practice guides. They will also perform selections during an in-class recital.

CONSVTY 5395 Clinical Foundations I Credits: 3

This course provides the first-semester clinical graduate student practice and implementation of direct services, procedures, and documentation of the music therapy treatment process (assessment, setting goals and objectives, treatment plan, interventions, data collection, and evaluation). Students will participate in supervision and clinical experiences within the context of community-dwelling older adult populations.

CONSVTY 5444 The Teaching Performer Credits: 2

The class will focus on teaching techniques for the performing musician, highlighting the advantages of becoming distinguished as a performer and a pedagogue. Premised on the synergistic relationship between teaching and performing, the class will provide a structure for clarifying the essential elements of teaching and musical artistry, and connecting them to such tangible situations as setting up a studio, teaching a master class, interviewing for a job, judging competitions, and recruiting students. The class will provide resources for individuals interested in being university applied faculty, music pedagogy teachers, and professionals looking to add effective teaching to their artistic repertoire.

CONSVTY 5445 Teaching and Learning in Music Credits: 2

This course explores the fundamental principles of music learning and provides opportunities for students to practice applying those principles to music teaching. Students will analyze their effectiveness at structuring meaningful learning experiences when teaching others in authentic settings (by analyzing videos from rehearsals, lessons, or classrooms) and when structuring learning experiences for themselves (by analyzing videos of practice).

CONSVTY 5490 Independent Study Credits: 1-3

Intensive reading, research projects, creative work, or special performance in the student's major field, selected by the student in consultation with the appropriate faculty.

CONSVTY 5510 Studies in Music and Gender Credits: 3

Variable topics focusing on connections and intersections between music and gender; may include study of such topics in particular historical periods (e.g., Baroque, Classical), geographical locations, in specific areas of gender studies (e.g., queer studies, women in music), and/or noted musical works and composers.

Prerequisites: Graduate student in the Conservatory of Music and Dance.

CONSVTY 5512 Career Paths in Composition Credits: 3

This course is an introduction to career paths in composition. Two overlapping threads will be discussed which follow academic and entrepreneurial trajectories. Students will gain knowledge of aspects of college teaching, as well as aspects of freelance career building in composition.

Prerequisites: Graduate Composition Major in the Conservatory

CONSVTY 5516 Major Opera Role Credits: 2

This is a performance-based course of a major role in the operatic repertoire and based on the specific repertoire chosen by the Vocal Studies Division. The student may choose this course as an elective experience and will be required to audition at the beginning of the academic school year and be awarded a major role in order to take this course. Each student who is selected and has accepted the major operatic role will work with the Conservatory faculty, including the stage director, vocal coaches, voice teachers, and musical director, towards the final staged performance of the selected opera.

Prerequisites: You must be a graduate student in vocal performance at the Conservatory of Music and Dance.

CONSVTY 5517 Advanced Opera Workshop: Audition Techniques Credit: 1

Students will work on specific audition techniques for the operatic solo singer, which may include dramatic interpretation of repertoire, stage movement, resume building, and other aspects to assist the performer in the audition process.

Prerequisites: You must be a graduate student in the Conservatory of Music Dance to take this course.

CONSVTY 5518 Current Issues and Trends in American Music Theory Credits: 3

This course introduces graduate music majors to current issues and trends in American music theory. Through surveys of prominent journals, article reviews and presentations, class discussion, and a final research or review article, students will be introduced to the variety of music-theoretical subfields, learn about the types of questions music theorists explore, practice the conventions of academic writing, and explore the connections between music theory, music performance, teaching, and composition.

Prerequisites: Graduate music majors in the Conservatory who have passed both theory and aural skills matriculation exams or equivalents.

CONSVTY 5520 Theory Seminar in the Works of a Composer Credits: 3

Intensive analytical study of the music of a specific composer. Variable topic as selected by the instructor. May be repeated if a different topic.

Prerequisites: Graduate status in the Conservatory of Music and Dance.

CONSVTY 5523 Analytical Procedures Credits: 3

An introduction to recent methods of stylistic and formal analysis including twelve-tone, Schenkerian and set theoretic approaches.

Prerequisites: Graduate standing in the Conservatory. Passing grades on the written theory and aural skills matriculation exams or successful completion of CONSVTY 421A and/or CONSVTY 421B.

CONSVTY 5524B Advanced Analysis II: 1600-1900 Credits: 3

Theory and analysis of selected works from the 17th through the mid-19th century.

Prerequisites: CONSVTY 5523.

CONSVTY 5524C Advanced Analysis III: 20th Century to the Present Credits: 3

Theory and analysis of selected works from the late 19th century to the present.

Prerequisites: CONSVTY 5523.

CONSVTY 5526A Introduction to Schenkerian Theory and Analysis Credits: 3

An introduction to the theories and analytic methodology of Heinrich Schenker (1868-1935).

Prerequisites: Graduate standing in the Conservatory. Passing grades on the written theory and aural skills matriculation exams or successful completion of CONSVTY 421A and/or CONSVTY 421B.

CONSVTY 5526B Schenkerian Theory and Analysis Credits: 3

Continuation of CONSVTY 5526A, emphasizing the acquisition of advanced skills in Schenkerian analysis.

Prerequisites: CONSVTY 5526A.

CONSVTY 5527 18th-Century Counterpoint Credits: 3

Analysis and writing in 18th-century style and forms including canon, invention and fugue.

Prerequisites: Graduate music student in the Conservatory.

CONSVTY 5528 Introduction to Post-Tonal Theory Credits: 3

Analysis and writing in contemporary styles.

Prerequisites: CONSVTY 428.

CONSVTY 5529 Aspects of Time and Music Credits: 3

A course offering a broad-based, multi-disciplinary exploration of the natures of time preparatory to an in-depth study of some of music's primary temporal aspects; these focus on complex treatments of rhythm and meter in tonal music.

Prerequisites: Graduate standing in the Conservatory. Passing grades on the written theory and aural skills matriculation exams or successful completion of CONSVTY 421A and/or CONSVTY 421B.

CONSVTY 5531 Advanced Orchestration Credits: 3

Analysis of advanced orchestration techniques with a focus on relatively recent music for large instrumental ensembles. Discussion of student works-in-progress for orchestra or wind ensemble.

Prerequisites: CONSVTY 431.

CONSVTY 5532 Composition Seminar in the Works of a Composer or Genre Credits: 3

Intensive analytical and compositional study of a specific genre or compositional trend. Variable topic as selected by the instructor. May be repeated if a different topic.

Prerequisites: Graduate status in the Conservatory of Music and Dance

CONSVTY 5533 Advanced Composition Credits: 3

Intensive work in advanced composition in the large forms for various vocal and instrumental ensembles and orchestra. May be repeated for credit.

CONSVTY 5534 Advanced Electronic Music Composition Credits: 3

Creative, original composition of music in diverse styles utilizing the full range of equipment and techniques available. May be repeated for credit.

CONSVTY 5534B Advanced Computer Music Language Study Credits: 3

This course is designed to fulfill the computer language option of the foreign language requirement for DMA students in composition. Focus will be on development and mastery of skills in computer languages specifically related to musical composition, such as MAX or Csound, or in compositional uses of more general languages such as html, C, and Lingo.

Prerequisites: CONSVTY 335.

CONSVTY 5534C Electroacoustic Music Aesthetics and Analysis Credits: 3

An overview of the context and practice of electroacoustic music in two parts: 1) new aesthetic parameters of sonic composition made possible by technology; and 2) creating a cogent analysis of a work by developing individual, personalized analytical tools. Offered in rotation with CONSVTY 5534 and CONSVTY 5534B.

CONSVTY 5536 Improvisation in Music Therapy Credits: 3

This course is designed to learn, lead, and participate in the theory and practice of improvisation in music therapy for clients and therapists.

CONSVTY 5537 Administration of Music Therapy Credits: 3

This course is designed for the person who wishes to become a music therapy professor either entering into an existing program or starting one's own program. It also may be valuable to those considering academia or to be better informed about the academic process when dealing with music therapy programs.

CONSVTY 5540B Advanced Methods In Instrumental Music Credits: 2

Organizational and rehearsal techniques for programs from the beginning bands and orchestras through high school and college ensembles. Includes information regarding methods, materials and program building.

CONSVTY 5540C Advanced Methods In Choral Music Credits: 2

Addresses the organization of secondary and college choral classes and ensembles. Areas of study include methods, materials and program building.

CONSVTY 5541 Theories and Practice of Music Therapy Credits: 3

This course addresses the history and development of the music therapy profession in the United States and other countries. This course is open to music therapy graduate students.

CONSVTY 5542 Clinical Supervision in Music Therapy Credits: 3

This course prepares the music therapist for clinical supervision of music therapy students across training levels and situations. The course includes both theoretical background on supervisee development, issues of clinical supervision, and practical application and skill development in the area of clinical supervision of music therapy students.

CONSVTY 5543 Psychology of Music Credits: 3

The study of psychological aspects of music including acoustical phenomena and factors affecting musical preference, perception and taste. A review of related literature and basic methodology for experimental investigation and quantification of related variables will be included.

CONSVTY 5544 Advanced Clinical Experience Credits: 2

This course provides the graduate student with board certification in music therapy an opportunity to refine and enhance current clinical skills and to develop individually specified American Music Therapy Association Advanced Level Competencies. Students will demonstrate the ability to integrate advanced competencies in musicianship, theory and clinical practice. Students will conform to the AMTA Code of Ethics and standards for Clinical Practice and the CBMT Scope of Practice. The course includes a weekly seminar and clinical rotations at a mutually agreed upon clinical facility.

CONSVTY 5545 Seminar In Music Therapy Credits: 2

This course is designed to address relevant topics in the theory, practice and research of music therapy to promote an advanced level of practice in the music therapist. Topics will be based on faculty scholarship and advanced practice expertise, as well graduate student interest. Course structure will involve weekly meetings with the instructor and independent research and reading by the student.

CONSVTY 5546 Jazz Revolutions: A Historical Perspective Credits: 3

Jazz Revolutions surveys the styles and innovations of jazz musicians who are considered pioneers in the development of jazz. It then places those musicians in a rich cultural and musical context, showing the impact those innovators had on their contemporaries and the musical practices of today both inside and outside of jazz.

Prerequisites: CONSVTY 5593, CONSVTY 5593N.

CONSVTY 5547 Opera History Credits: 3

The history of opera from its origins to the present.

Prerequisites: CONSVTY 5593.

CONSVTY 5548 Opera Literature Credits: 2

A survey of opera literature, opera synopsis, and operatic stagecraft from 1600 to present.

Prerequisites: CONSVTY 5547.

CONSVTY 5550 Musicology Seminar in the Works of a Composer Credits: 3

Intensive study of the music, life, and culture of a specific composer. Variable topic as selected by the instructor. May be repeated if a different topic.

Prerequisites: Graduate status in the Conservatory of Music and Dance.

CONSVTY 5554 Music of the Medieval Era Credits: 3

Seminar in the music of the Middle Ages, from 800 to 1400.

Prerequisites: CONSVTY 5593.

CONSVTY 5555 Music Of The Renaissance Credits: 3

Seminar in the music of the Renaissance, from 1400 to 1600.

CONSVTY 5556 Music of the Baroque Era Credits: 3

Seminar in the music of the Baroque era, from 1600 to 1750.

Prerequisites: CONSVTY 5593.

CONSVTY 5557 Music of the Classical Era Credits: 3

Seminar in the music of the Classical era, from 1750 to 1828.

Prerequisites: CONSVTY 5593.

CONSVTY 5558 Music of the Romantic Era Credits: 3

Seminar in the music of the Romantic era from 1828 to 1914.

Prerequisites: CONSVTY 5593.

CONSVTY 5559A Music Since 1900: 1900-1945 Credits: 3

Seminar in music from 1900 to 1945.

Prerequisites: CONSVTY 5593.

CONSVTY 5559B Music Since 1900: 1945 to the Present Credits: 3

Seminar in music since 1945.

Prerequisites: CONSVTY 5593.

CONSVTY 5560A Seminar: History Of Russian Vocal Music Credits: 3**CONSVTY 5560B Seminar: Nineteenth-Century Nationalism In Music Credits: 3****CONSVTY 5560C Seminar: History Of American Music Credits: 3****CONSVTY 5560D American Musical Theater Credits: 3**

A survey of trends in the American musical theater from the 18th century to the present.

CONSVTY 5560E Music and Film Credits: 3

This course will survey the use of music in cinema. It will include sections on music, technology, the film medium and the various ways in which music adds to the cinematic experience.

Prerequisites: Graduate status.

CONSVTY 5560F Music of Asia Credits: 3

This course surveys music in East Asia, from historical styles to traditional music to contemporary composition.

Prerequisites: Graduate status.

CONSVTY 5560G Music of Latin America Credits: 3

Survey of selected musical traditions (sacred and secular, folk, traditional, and concert music) and representative composers of Central and South America.

Prerequisites: CONSVTY 5593.

CONSVTY 5564 History And Literature Of Chamber Music Credits: 3

A study of masterpieces of chamber literature, vocal and instrumental, from various periods, through research, listening, and performance.

CONSVTY 5566A Advanced Vocal Literature: French Melodies Credits: 2

In-depth study of the French melodies of Duparc, Faure, Debussy, Ravel, and Poulenc.

CONSVTY 5566B Advanced Vocal Literature: German Lieder Credits: 2

In-depth study of the German lieder of Schubert, Schumann, Brahms, Wolf, Mahler, and Strauss.

CONSVTY 5566C Advanced Vocal Literature: Nationalistic Art Songs Credits: 2

In-depth study of Nationalistic art songs of Russia, Scandinavia, Spain, and Middle Europe.

CONSVTY 5566D Advanced Vocal Literature: 20Th Century Amer & Engl Art Songs Credits: 2

In-depth study of the 20th Century American and English art songs.

CONSVTY 5569 Graduate Piano Literature Seminar Credits: 2

Advanced study of piano literature through research, analysis and performance. Topics will vary from semester to semester.

CONSVTY 5574 Contemporary Issues in Music Education Credits: 3

This course guides graduate students in exploration of philosophical and social/historical frameworks as a foundation for addressing opportunities and challenges as a music educator in contemporary American schools.

CONSVTY 5576 Professional Aspects Of College Teaching Credits: 2

Designed for graduate students planning a career in college teaching. Covers preparation of job application materials; presentation of a master class; interviews with a search committee and dean; faculty loads and evaluation procedures; tenure and rank, and relationships with students, colleagues and administrators.

CONSVTY 5577 Advanced Vocal Diction Credits: 2

This course is designed to review and hone diction skills in Italian, French and German on the level of professional opera, recital and oratorio performance; the vocal literature is approached through the text with both reading and singing practice, It is limited to graduate vocal majors.

CONSVTY 5578 Research for Music Teachers Credits: 3

This course examines common practitioner-based research designs used by music educators. During this class, students will learn about and complete projects that utilize rigorous research design procedures and concepts.

CONSVTY 5580 Advanced Choral Conducting-Masters Level Credit: 1

An overview of conducting topics, including score preparation technique, and performance problems. May be repeated for credit.

CONSVTY 5582A Advanced Choral Conducting - Technique Credits: 2

An introductory study of the techniques of choral conducting. An overview of conducting topics, including score preparation, rehearsal techniques and performance problems. May be repeated for credit.

CONSVTY 5582B Advanced Choral Conducting - Style Credits: 2

A study of conducting problems of music of the Renaissance, Baroque, Classic, Romantic and Twentieth century; further examination of performance problems associated with choral performances of madrigals, chamber music, a cappella works and music utilizing advanced compositional techniques. May be repeated for credit.

CONSVTY 5582C Advanced Choral Conducting-Rehearsal Techniques Credits: 2

An advanced study of methods and rehearsal procedures in the development and organization of choral performance; includes concepts of tone quality, diction, programming, and development of communication skills. May be repeated for credit.

CONSVTY 5583A Advanced Instrumental Conducting Credits: 2

An introductory study of the techniques of instrumental conducting. An overview of conducting topics, including score preparation, rehearsal techniques and performance problems.

CONSVTY 5583B Advanced Instrumental Conducting - Orchestra Credits: 2

A further study of the techniques of instrumental conducting, including such topics as string techniques, performance practice, baton technique and the art of accompaniment.

Prerequisites: CONSVTY 5583A.

CONSVTY 5583C Advanced Instrumental Conducting - Band Credits: 2

A further study of the technique of band conducting, including such topics as wind/percussion techniques, performance practice, baton technique, and contemporary wind chamber repertoire.

Prerequisites: CONSVTY 5583A.

CONSVTY 5584 Systematic and Integrated Reviews in Music Credits: 2

Maintaining an awareness of the vast array of information available in the literature and integrating it into practice is a vital skill for evidence-based and best practice in music-based professions. This course will introduce graduate students to a methodological system of analyzing and synthesizing high quality research to answer a relevant question. The pursuit of scholarly dissemination of information for the advancement of music-based professions will be encouraged.

CONSVTY 5585 Introduction to Descriptive Research in Music Credits: 3

This course examines common descriptive research designs and statistical concepts used by music therapists and music educators. During this class, students will learn about and complete projects that utilize nonparametric and parametric statistical tests.

CONSVTY 5586A Seminar In Orchestral Literature Credits: 2

Advanced study of a variety of styles, periods, and analytical procedures encountered by orchestral conductors. Content will vary from semester to semester. May be repeated for credit.

CONSVTY 5586B Seminar In Wind/Band Literature Credits: 2

Advanced study of a variety of styles, periods, and analytical procedures encountered by instrumental conductors of wind ensembles/bands. Content will vary from semester to semester. May be repeated for credit.

CONSVTY 5587 Seminar In Choral Literature Credits: 2

Each seminar is concerned with the conductor's viewpoint of a segment of the literature from the specified historical periods and styles, and explores the analysis, interpretation, historical context, and conducting problems of that literature. May be repeated for credit.

CONSVTY 5589 Academic Portfolio Credits: 1-3

Creative synthesis of coursework or clinical experience resulting in original products such as research documents, pedagogical materials, technology applications, music compositions or arrangements, and musical improvisation applications. Portfolio item may not include materials used to meet admission requirements. May be repeated for credit.

CONSVTY 5589A Academic Portfolio II Credits: 1-3

Additional coursework or clinical experience resulting in original products.

Co-requisites: CONSVTY 5589.

CONSVTY 5590 Special Topics Credits: 1-3

A seminar in selected topics in various fields and idioms of music. May be repeated for credit when the topic varies.

CONSVTY 5590AC Special Topics Credits: 1-3

CONSVTY 5590AD Special Topics Credits: 1-3

CONSVTY 5590BC Special Topics Credits: 1-3

CONSVTY 5590BJ Special Topics Credits: 1-3

CONSVTY 5590CA Special Topics Credits: 1-3

CONSVTY 5590CE Special Topics Credits: 1-3

CONSVTY 5590CF Special Topics Credits: 1-3

CONSVTY 5590CJ Special Topics Credits: 1-3

CONSVTY 5590CL Special Topics Credits: 1-3

CONSVTY 5590CT Special Topics Credits: 1-3

CONSVTY 5590CY Special Topics Credits: 1-3

CONSVTY 5590DC Special Topics Credits: 1-3

CONSVTY 5590EC Special Topics Credits: 1-3

CONSVTY 5590EP Special Topics Credits: 1-3

Special Topics

CONSVTY 5590FC Special Topics Credits: 1-3

CONSVTY 5590HE Special Topics Credits: 1-3

CONSVTY 5590HG Special Topics Credits: 1-3

CONSVTY 5590HS Special Topics Credits: 1-3

CONSVTY 5590IG Special Topics Credits: 1-3
Special Topics

CONSVTY 5590IN Special Topics Credits: 1-3

CONSVTY 5590IT Special Topics Credits: 1-3

CONSVTY 5590JDT Special Topics Credits: 1-3
Special Topics

CONSVTY 5590JH Special Topics Credits: 1-3

CONSVTY 5590JP Special Topics Credits: 1-3
Special Topics

CONSVTY 5590LM Special Topics Credits: 1-3

CONSVTY 5590MB Special Topics Credits: 1-3

CONSVTY 5590OL Special Topics Credits: 1-3

CONSVTY 5590OW Special Topics Credits: 1-3

CONSVTY 5590PA Special Topics Credits: 1-3

CONSVTY 5590PC Special Topics Credits: 1-3

CONSVTY 5590PO Special Topics Credits: 1-3

CONSVTY 5590PP Special Topics Credits: 1-3

CONSVTY 5590PS Special Topics Credits: 1-3

CONSVTY 5590SE Special Topics Credits: 1-3

CONSVTY 5590SV Special Topics Credits: 1-3

CONSVTY 5590TD Special Topics Credits: 1-3
Special Topics

CONSVTY 5590TF Special Topics Credits: 1-3

CONSVTY 5590TJ Special Topics Credits: 1-3

CONSVTY 5590TT Special Topics Credits: 1-3

CONSVTY 5591E Group Piano Pedagogy Credits: 3

Study of teaching techniques and materials related to teaching group piano at the college level. Course responsibilities include both observation and supervised teaching.

CONSVTY 5591G Pedagogy of Music Theory Credits: 3

Study and application of methods, philosophies, materials and current trends in music theory pedagogy. Students engage in supervised teaching, research projects, and observations of music theory faculty.

CONSVTY 5591H Advanced Pedagogy I - Voice Credits: 2

CONSVTY 5591J Advanced Pedagogy I-General Credits: 2

An overview of basic pedagogical practice including modes of instruction, feedback, reinforcement, and assessment. Students will review current literature in this area and develop a project related to their own teaching.

CONSVTY 5591K Pedagogy of Music History Credits: 3

Techniques and materials related to teaching music history and music appreciation combined with supervised teaching.

CONSVTY 5591N Pedagogy of Instrumental Music Credit: 1

A study of the pedagogical materials and methods used in teaching applied instrumental music.

CONSVTY 5592E Advanced Piano Pedagogy Credits: 3

Study of teaching techniques and materials related to teaching applied piano at the collegiate level. Course responsibilities include both observation and supervised teaching.

CONSVTY 5592H Advanced Pedagogy II - Voice Credits: 2

CONSVTY 5593 Introduction To Research And Bibliography In Music Credits: 3

A survey of procedure in bibliography, research, and scholarly writing.

CONSVTY 5593N Introduction to Research and Bibliography in Music Credits: 3

A survey of procedures in bibliography, research, and scholarly writing.

CONSVTY 5594A Research and Analysis in Music and Behavior Credits: 3

This course provides students with an introduction to research in music and human behavior. Course topics include literature review, proposal writing, design, data analysis and scholarly writing styles used in music research.

CONSVTY 5594B Research Applications in Music and Behavior Credits: 3

Further study in the area of research in music and behavior. Data gathering procedures specific to music, research ethics in music, preparation for publishing in music journals and in-depth critiques of important literature in music education, music therapy and performance are addressed.

Prerequisite: CONSVTY 5594A

CONSVTY 5597 Master's Recital Credits: 4

For voice students, a one hour weekly participation in Vocal Performance Seminar is required.

CONSVTY 5597A Master's Conducting Performance Credits: 4

CONSVTY 5597B Master's Recital II Credits: 4

CONSVTY 5597CE Master's Recital Credits: 4

CONSVTY 5598 Research Problems Credits: 2

Individual study with a member of the graduate faculty that will culminate in a final project. The project must be completed within two consecutive semesters, submitted to and graded by the supervising professor, and submitted to the Associate Dean of Graduate Studies for archiving.

CONSVTY 5598B Research Problems In Computer Languages And Music Credits: 1-3

Individual study with a member of the adjunct, associate, or graduate faculty. Study will culminate in the production of a project (computer program, CD-ROM, composition, or other document) that demonstrates skills in computer languages specifically related to music. This course fulfills the computer language option of the foreign language for DMA students in composition.

CONSVTY 5599 Thesis Credits: 1-9

CONSVTY 5693 Advanced Research and Bibliography In Music Credits: 3

Advanced procedures in bibliography, research, and scholarly writing.

Prerequisites: CONSVTY 5593.

CONSVTY 5695 Practicum In Music Education Credits: 3-6

Individual conference course requiring the development of a research paper in a special subject and designed to resolve a practical problem of special interest to the student. Conference.

CONSVTY 5697 Doctoral Recital Credits: 4

For voice students, a one hour weekly participation in Vocal Performance Seminar is required.

CONSVTY 5697A Doctoral Lecture Recital Credits: 4

CONSVTY 5697B Doctoral Conducting Performance Credits: 1-4

CONSVTY 5697BP Doctoral Conducting Performance Paper Credit: 1

Individual study with the student's conducting teacher. Study will culminate in the writing of a formal paper addressing aspects of a doctoral conducting performance.

CONSVTY 5697C Additional Doctoral Recital Credits: 1-4

The additional doctoral recital is supervised by the applied professor. The recital is graded in the same manner as other recitals for the Performance degree and can count for one doctoral research point.

CONSVTY 5697CP Doctoral Recital Paper II Credit: 1

Additional individual study with the student's applied teacher. Study will culminate in the writing of another formal paper addressing aspects of a doctoral recital.

Co-requisites: CONSVTY 5697P.

CONSVTY 5697D Doctoral Conducting Performance II Credits: 1-4

CONSVTY 5697DP Doctoral Conducting Performance Paper Credit: 1

Additional individual study with the student's conducting teacher. Study will culminate in the writing of another formal paper addressing aspects of a doctoral conducting performance.

Co-requisites: CONSVTY 5697BP.

CONSVTY 5697P Doctoral Recital Paper Credit: 1

Individual study with the student's applied teacher. Study will culminate in the writing of a formal paper addressing aspects of a doctoral recital.

CONSVTY 5698 Research Problems Credits: 2

Individual study with a member of the adjunct, associate, graduate or doctoral faculty. Study will culminate in the writing of a scholarly paper.

CONSVTY 5698A Doctoral Research Problems II Credits: 2

Additional study with a member of the adjunct, associate, graduate or doctoral faculty. Study will culminate in the writing of another scholarly paper.

Co-requisites: CONSVTY 5698.

CONSVTY 5698B Doctoral Music Product Credits: 1-4

Individual study with a member of the adjunct, associate, graduate, or doctoral faculty. Study will culminate in the writing of a creative, original composition, arrangement or edition of music.

CONSVTY 5699 Dissertation Research Credits: 1-16

CONSVTY 5899 Required Graduate Enrollment Credit: 1

Counseling Psychology and Counselor Education (CPCE)

Courses

CPCE 5500 Introduction To Professional Counseling Credits: 3

This course introduces students to the professions of counseling and counseling psychology as practiced in a variety of settings. The course provides and overview of basic concepts of mental health, client problems, history of the profession, ethical and professional standards, counseling in a multicultural and pluralistic society, and licensure and credentialing. The course also orients students to the counseling program at UMKC. May be taken prior to admission.

CPCE 5502 Fndtns Of Elementary & Secondary School Counseling & Guidance Credits: 3

The course will present an overview of theory and practice in the field of school counseling and will examine the roles and functions of guidance counselors. For School Counseling Emphasis only.

CPCE 5503 Psychopathology: Diagnoses And Classification Credits: 3

This course is designed to provide students with an opportunity to study psychopathological patterns, mental disorders, and other reactions in client behavior, which are encountered by therapists, counselors, and psychologists in contemporary psychological service systems. The major focus of the course will be on learning current diagnostic criteria and making differential diagnoses. Attention will also be given to the etiology, development, dynamics, and treatment of psychopathology. In addition, the influence of culture on behavior and treatment will be discussed.

Prerequisites: CPCE 5500.

CPCE 5504 School Counseling Programs Credits: 3

This course will provide knowledge and skills in the development and management of school guidance programs, including program planning, implementing and evaluation.

CPCE 5505 Career Development I Credits: 3

Theories of career development and vocational choice and their implications in counseling. Emphasizes knowledge of occupational and career information sources and use of these data by counselors and counseling psychologists. Open to any student who has been admitted to an advanced degree program.

CPCE 5515 Assessment Methods In Professional Counseling Credits: 3

This course provides an understanding of assessment process and assessment techniques. Students will develop skills in selection, administration, and interpretation of representative assessment instruments.

Prerequisites: CPCE 5500.

CPCE 5520 Theories of Counseling Credits: 3

Theoretical positions in counseling; significance of these theories in professional practice. To be taken prior to CPCE 5531.

Co-requisites: CPCE 5500, CPCE 5530.

CPCE 5521 Special Counseling Methods - Substance Abuse Credits: 3

Theories and methods of counseling as applied to clients with substance abuse problems. Includes assessment, treatment strategies, and evaluation. Skills practice in implementing methods.

CPCE 5523 Counseling the Older Adult Credits: 3

This course provides an overview of the basic biological, psychological and social aspects of later life as preparation for counseling the diverse older adult population. Current evidence-based theory related to this specific population is presented along with refinement of interpersonal and counseling skills to support counseling intervention with older adults and their families in the multiple contexts they are served. Best practice examples for meeting the needs and providing mental health services to older adults are reviewed.

CPCE 5527 Theory And Methods Of Sexual Counseling Credits: 3

The focus of this course is on sexual development and the acquisition of therapeutic skills to work with problems relating to human sexual functioning and sexual dysfunctions.

Co-requisites: CPCE 5520.

CPCE 5528 Introduction to Play Therapy Credits: 3

Course covers the philosophy and rationale for using play media in counseling with children and the history of play therapy. The client-centered theoretical approach will be examined with an emphasis on creating and maintaining a relationship with the child that allows for the effective use of play media.

CPCE 5530 Methods Of Counseling Credits: 3

This course is designed to introduce students to the fundamental concepts and methods of counseling. Students will apply ethical and multicultural principles to the helping relationship while learning the basic methods of humanistic, psychodynamic, and cognitive behavioral approaches as they relate to the helping process. A main focus of this course is the acquisition of basic helping skills. Students will also become familiar with counseling outcome research and will increase their level of counselor self-awareness.

Prerequisites: CPCE 5520.

CPCE 5531 Counseling Practicum I Credits: 3

Closely supervised therapeutic counseling with individuals; translation of theory into practice; clinical and professional techniques and issues.

Prerequisites: CPCE 5553.

CPCE 5532 Counseling Practicum II Credits: 3

Supervised therapeutic counseling with individuals and consultation in professional settings.

Prerequisites: CPCE 5531.

CPCE 5533 Couples And Family Therapy Practicum Credits: 3-6

Supervised application of theories and methods of family therapy with individuals, couples and families.

Prerequisites: CPCE 5532 and CPCE 5542.

Co-requisites: CPCE 5541.

CPCE 5534 Practicum For The Assessment Of Children And Adolescents Credits: 3

The practicum for the assessment of children and adolescents covers the facilitation of psychological evaluations for this population and includes maintaining a caseload of assessment evaluations to complete through the CCS Assessment Center. Specialized assessment evaluations and conceptualization issues are covered in the second half of the course, with evaluations for ADHD and other learning disorders emphasized. Special topics will be discussed at the end of the course.

Prerequisites: CPCE 5515.

CPCE 5539 Continuing Counseling Practicum Credits: 1-6

Supervised therapeutic counseling with individuals.

Prerequisites: CPCE 5532.

CPCE 5540 Theories And Methods In Group Counseling Credits: 3

Theories and research in group counseling, including knowledge and skills in establishing and maintaining a counseling group; effective group leadership; therapeutic factors in groups; strategies for group development; and ethical and multicultural considerations in group work. Requires participation in a professional growth group.

Prerequisites: CPCE 5530.

CPCE 5541 Couples And Family Therapy Credits: 3

Introduction to family relationships and the application of life cycle stages to working with couples and families. Focus also includes the study of a range of family configurations and issues with attention to diversity.

CPCE 5542 Theories and Techniques of Family Systems Therapy Credits: 3

A study of major family systems theories and their applied practices in family therapy. Students will develop skills in family assessment techniques and family therapy processes.

Prerequisites: CPCE 5530.

CPCE 5547 Psychology of Stress and Trauma Credits: 3

This course is designed to introduce students to the psychology of stress and trauma. Students will learn about the effects of stress and trauma, as well as counseling interventions that address the effects of stress and trauma. Specifically, students will learn about vicarious trauma, the psychophysiology of stress and trauma, diagnostic and assessment-related issues with stress and trauma, therapeutic approaches to working with trauma survivors, multicultural and social justice considerations, and trauma therapy as applied to specific populations.

Prerequisites: Admission to a degree program in the Counseling and Educational Psychology (CEP) division at UMKC, or if from a program outside of CEP, approval from the course instructor.

CPCE 5550 Organization And Administration Of Counseling Programs Credits: 3

Organization, administration, and planning of counseling programs with emphasis on their practical aspect; counseling practice in schools and agencies; intraprofessional relationships; legal and ethical considerations. Course to be taken near completion of the master's program.

CPCE 5551 Counseling in a Pluralistic Society Credits: 3

Addresses the needs of diverse populations served by counselors and addresses developing intervention methods of working with these populations. Focuses on advocacy and change agent roles of counselors.

Prerequisites: CPCE 5520.

CPCE 5553 Ethics And Professional Issues In Counseling Credits: 3

This course is designed to examine the major ethical and professional issues within the counseling profession. More specific, ethical dilemmas and professional issues relevant to the practice of mental health, marriage and family, school and substance abuse counseling are the major foci of this course. In addition, instruction is designed to enhance student understanding of the ethical standards such that students can effectively apply the critical thinking necessary to practice ethical behavior with clients, professional colleagues, consultees, and the communities in which they work.

CPCE 5575A Internship In Counseling I Credits: 3-16

First semester of a sequence of applied experiences in a planned, supervised program. Seminar accompanies internship experiences. The following areas of specialization are available: a) Marriage and Family, b) Mental Health, c) School, and d) Substance Abuse.

Prerequisites: CPCE 5532.

CPCE 5575B Internship In Counseling II Credits: 3-16

Second semester of a sequence of applied experiences in a planned, supervised program. Seminar accompanies internship experiences. The following areas of specialization are available: a) Marriage and Family, b) Mental Health, c) School, and d) Substance Abuse.

Prerequisites: Admission to Educational Specialist program in counseling, CPCE 5575A.

CPCE 5575C Internship In Counseling III Credits: 3-16

Third semester of a sequence of applied experiences in a planned, supervised program. Seminar accompanies internship experiences. The following areas of specialization are available: a) Marriage and Family, b) Mental Health, c) School, and d) Substance Abuse.

Prerequisites: Admission to Educational Specialist program in counseling.

CPCE 5589 Special Topics Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed in the semester bulletin.

CPCE 5589CA Special Topics Credits: 1-6**CPCE 5589GC Special Topics Credits: 3****CPCE 5589NP Special Topics Credits: 1-6****CPCE 5589PL Special Topics Credits: 1-6****CPCE 5589SE Special Topics Credits: 1-6**

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed in the semester schedule.

CPCE 5590 Prevention, Consultation, and Program Evaluation in Community Settings Credits: 3

Course provides an overview of mental health consultation and collaboration in community settings. Models and theories of consultation and considerations for ethical practice in diverse settings are reviewed. The course also introduces prevention and program development and evaluation as roles for professional counselors. The course will briefly review the history of prevention, and allow students to develop a prevention program for a population of interest.

Prerequisites: CPCE 5532 or CPCE 5533.

CPCE 5598 Individual Studies Credits: 1-6

Review of the research and trends relative to selected problems.

CPCE 5599 Research And Thesis Credits: 1-9

Research and Thesis

CPCE 5600 Introduction To Counseling Psychology Credit: 1

This course is intended to assist new doctoral students in their orientation to UMKC and to the profession of Counseling Psychology. The course also introduces students to the ethical principles and code of conduct for psychologists.

CPCE 5605 Career Development II Credits: 3

Major theories and research in vocational psychology and career development and implications for the work of the counseling psychologist and counselor.

Prerequisites: CPCE 5505.

CPCE 5609 Assessment II: Intellectual And Cognitive Assessment Credits: 3

This course is designed to provide students with a foundation in the use of intellectual and cognitive assessment instruments in clinical evaluation. The course covers theoretical issues pertinent to intellectual and cognitive assessment as well as basic assessment skills including administration, scoring, interpretation, and communication of results for commonly used measures.

Prerequisites: Admission to the Ph.D Program in Counseling Psychology.

CPCE 5610 Theoretical And Professional Issues In Counseling Psychology Credits: 3

This course is designed to introduce first year doctoral students to the fundamental concepts and methods of psychology conceived as the application of scientific and ethical reasoning to human problems. It will provide an in-depth examination of the American Psychological Association code of ethics and its application to the conduct of psychologists. Critical and analytical thinking will be emphasized in all aspects of the course. The course will cover broad models of clinical and counseling psychology and their historical and scientific foundations, issues in diagnosis, cross-cultural applications and professional problems in light of ethical principles, professional standards, scientific data multi-cultural contexts.

CPCE 5611 Objective Personality Assessment Credits: 3

This course is designed to help students develop knowledge and skills related to the selection, administration, and interpretation of some representative objective personality assessment instruments used in counseling/clinical settings. Students will also learn to integrate data obtained from an assessment battery to write comprehensive psychological reports.

CPCE 5615 Survey Of Research In Counseling Psychology Credits: 3

Survey of significant research in counseling psychology. Critical evaluation of research procedures, instrumentation, and clinical application of results.

Prerequisites: EDUC-R&P 5605 and EDUC-R&P 5608.

CPCE 5620 Advanced Theories And Methods Of Counseling Credits: 3

Personality and learning theories and their implications for professional practice in counseling psychology. Emphasis on critical evaluation of assumptions, methods, comprehensiveness and usefulness of the theories, with reference to related research.

Prerequisites: CPCE 5532.

CPCE 5631 Advanced Counseling Practicum Credits: 3

Advanced supervised therapeutic counseling with individuals and supervised consultation in clinical settings.

Prerequisites: CPCE 5532.

CPCE 5632 Practicum In Group Counseling Credits: 3

Leading groups under supervision. Focus on problems and experiences of counselors and counseling psychologists when leading groups.

Prerequisites: M.A. in Counseling, CPCE 5540.

CPCE 5633 Advanced Couples & Family Practicum Credits: 3

Advanced supervised application of theories and methods of family therapy with individuals, couples and families.

Prerequisites: CPCE 5542.

CPCE 5634 Assessment Practicum Credits: 3

The practicum for assessment of children, adolescents, and adults covers the administration of psychological evaluations and includes maintaining a caseload of assessment evaluations. Specialized assessment evaluations and conceptualization issues as well as special topics are covered, with evaluations for ADHD and learning disorders emphasized.

Prerequisites: CPCE 5611, 5609, 5531, 5532.

CPCE 5639 Continuing Advanced Counseling Practicum Credits: 1-6

Supervised therapeutic counseling with individuals, beyond the advanced level.

Prerequisites: CPCE 5631.

CPCE 5640 Theories And Methods Of Counseling Supervision Credits: 2

This course offers an overview of counseling supervision theories and models, and contemporary research. It also addresses supervision process and tasks, diversity in supervision, and supervisor's ethical and legal responsibilities.

Prerequisites: CPCE 5631.

CPCE 5641 Supervision Practicum Credit: 1

This course is designed to provide students with an opportunity to practice supervision. Students will be assigned 2 to 3 counselors-in-training from a CPCE 5531 and CPCE 5532 practicum class to supervise over the course of a semester. The practicum instructor will provide weekly supervision.

Prerequisites: CPCE 5640.

CPCE 5645 Projective Testing Credits: 3

Course focuses on the diagnostic use of projective assessment techniques, with a special focus on the Rorschach Inkblot Test.

Prerequisites: CPCE 5515, Enrolled in Doctoral Psych. Program, and Measurement of Intelligence or Cognitive Assessment course.

CPCE 5650 Prevention and Consultation in Counseling Psychology Credits: 3

An overview of the psychologist's role in consultation, program development and evaluation in the context of prevention. Students will also apply their knowledge and develop skills in prevention and consultation by developing a prevention program for a real-life setting.

CPCE 5675 Internship In Counseling Psychology Credits: 1-16

Applied experiences in a professional setting under supervision of licensed psychologists.

CPCE 5690 Special Problems Credits: 1-6

Individual studies; thesis exploration; special reading.

CPCE 5699 Research And Dissertation Credits: 1-16
Research and Dissertation.

Criminal Justice and Criminology (CJC)

Courses

CJC 5500 Sociology Of Law Credits: 3

A sociological study of the legal system with focus on organizational analyses of the legal profession, courts as a social system, the bureaucratization of the legal process, stratification and the allocation of legal services and careers.

CJC 5511 Sociological Methods II Credits: 3

Quantitative research is the primary focus of the course; emphasis is placed on problem formulation; research design; sampling procedures, questionnaire construction and interviewing techniques; data collection; problems of scaling, computer statistical programs; linking appropriate statistical analyses with data analysis; and report writing.

Prerequisites: CJC 483.

CJC 5515 Qualitative Research Methods in Criminal Justice Credits: 3

This course focuses on qualitative research methods, such as interviewing techniques, focus groups, content analysis, and field observation. Emphasis is placed on research design, data collection, and data analysis.

Prerequisites: CJC 483.

CJC 5516 Intermediate Statistics Credits: 3

A systematic development of the logic and practice of selected statistical methods used in sociological research. Included are analysis of variance and covariance, regression analysis, multiple contingency, and non-parametric tests.

Prerequisites: CJC 363.

CJC 5518 Advanced Criminological Theory Credits: 3

This course provides an understanding of past as well as present criminological theories by examining each criminological tradition (beginning in the 18th century and continuing into the present.) The primary aim of the course is to determine the root causes of deviant and criminal behaviors. Moreover, this course offers special attention to how society has historically reacted and responded to crime and deviant behavior. Furthermore, by examining crime and deviant behavior from a historical context, the students are able to determine how criminological theories have influenced public policies designed to reduce and control criminal behavior. In the final analysis, students will examine the rationales that society use to justify efforts toward punishment and treatment.

Prerequisites: CJC 319.

CJC 5520 Juvenile Justice Credits: 3

This course provides a historical and contemporary overview of the juvenile justice system via a critical examination of the function of this system and theories explaining delinquency in adolescence. We will explore special topics within juvenile justice and proposals for juvenile justice reform.

CJC 5551 Seminar In Policing Credits: 3

This course addresses the important topics related to the institution of policing. Through readings and class discussions, students will gain a better understanding of both historical aspects of policing as well as the future of policing. Topics include selection, training and socialization, police management, deviance and corruption, use of force, community oriented policing.

CJC 5565 Seminar In Crime Prevention Credits: 3

This seminar examines variations in methods to reduce crime in America, including strategies from the criminal justice system as well as other institutions. Building on established criminological theory, this seminar will evaluate the best practices to prevent crime across a variety of social contexts.

CJC 5570 Contemporary Corrections And Correctional Policy Credits: 3

Present-day correctional alternatives are considered regarding the correctional policy that is, or potentially can be, carried out within the various programs. Prisons, probation, parole community-based programs are evaluated as to the theory of punishment demonstrated within these programs. Emphasis is placed on what constitutes a rational and workable corrections policy and the form of correctional programs needed to realize such policy.

CJC 5575 Correctional Rehabilitation And Treatment Credits: 3

This course will begin with a thorough examination of the rise, fall, and recent resurrection of "rehabilitation and treatment" in American correctional strategies. Both past and current treatment strategies will be studied regarding their effectiveness in reducing recidivism. This will be done through a survey of the quantitative literature base. There will be some emphasis on treating special needs offenders (e.g., sex offenders, juvenile offenders, offenders with developmental disabilities or mental illnesses.)

CJC 5576 Seminar In Criminal Justice And Criminology Issues Credits: 3

This course is an advanced exploration of the relationship between the criminal justice system and criminal behavior from at least one of the following perspectives: psychological, sociological, economic, legal, political or administration/ management. Will include discussions and analysis of contemporary readings and on-going research in the selected perspective.

CJC 5580 Seminar: Policy And Decision Making In Criminal Justice Credits: 3

The focus of the course is assessment of the character and recent crime trends in the United States, with attention to identifying elements that shape justice system policies in response to crime. Consideration is given to the nature and scope of policy and decision-making processes in legal institutions and law enforcement bureaucracies, how such policies have impacted crime, and alternative policies address the problem of crime.

CJC 5590 Directed Studies In Criminal Justice And Criminology Credits: 1-3

Individual research and study in the student's field of interest as approved and directed by major professors. The work involves examination and reporting of selected problems affecting the various agencies of our legal system. A. Law Enforcement B. Court Operations and Administration C. Corrections D. Legal Theory and Philosophy E. Criminological Theory F. Sociology of Law.

CJC 5592 Advanced GIS For Crime Analysis Credits: 3

This course provides an overview of crime mapping as it relates to the spatial and temporal analysis of crime. Utilizing theory related to criminal offending, this course will provide students with hands-on experience in geographic profiling and crime prevention strategies.

Prerequisites: GEOG 203.

CJC 5595 Crime Analysis Internship Credits: 3

This experience involves working with crime analysts in the field. Students will learn and hone practical skills while being supervised by department faculty or staff.

Prerequisites: CJC 5592.

CJC 5599 Research And Thesis Credits: 1-6

Directed specialized research. Before writing a thesis, the student must clear the topic and research design with the Supervisory Committee.

CJC 5699 Dissertation Research Credits: 1-12

Individual directed research leading to preparation and completion of doctoral dissertation.

Prerequisites: Ph.D. course requirements completed.

CJC 5899 Required Graduate Enrollment Credit: 1

Curriculum and Instruction (EDUC-C&I)

Courses

EDUC-C&I 5504 Social Studies In the Schools Credits: 3

Trends and curricular developments in social studies. Focus on the development of social studies concepts, the development of critical thinking skills, and analysis of values.

EDUC-C&I 5505 Introduction To Curriculum Theory Credits: 3

An introduction to curriculum theory with the recognition that knowledge, power, ideology and schooling are connected to patterns of complexity and contradictions. Emphasis will be placed on curricula that cultivate theoretical discourses about the quality and purpose of schooling and human life.

EDUC-C&I 5506 Curriculum Design Credits: 3

This course is designed to enhance educators' skills in the areas of curriculum design and interpretation. Students will apply and adapt strategies for curriculum development as well as for interpreting and adapting existing curricula.

EDUC-C&I 5508 Curriculum And Methods For Teaching The Non-Motivated Learner Credits: 3

Analysis of materials relevant to reluctant learners; student-teacher prepared consumable materials; current research; methods for presenting material.

EDUC-C&I 5509 Reducing Risk Factors For Students In Educational & Community Stn Credits: 3

The course offers an overview of current research and of special programs that deal with students who are likely to fail at school or in life. The roles of the larger society in helping create such problems will be considered. There will be an emphasis on early identification of such students and a consideration and evaluation of a number of programs designed to help them. The course will also present descriptions of the roles that educators can implement in programs designed for prevention and intervention.

EDUC-C&I 5510 Differentiating Instruction Through Teaching/Learning Styles Credits: 3

Teaching practices based upon teaching/learning styles are explored and modeled. Through differentiated instruction students learn to use style preferences to meet the needs of learners in a typical classroom including the culturally diverse, at-risk, the remedial, the learning disabled, the gifted, and the special needs students. Differentiation emphasizes learning centers, self-selection, self-pacing, subgrouping, contracting and peer tutoring. (K-12).

EDUC-C&I 5511 Developing Multidisciplinary Problem Solving Skills Credits: 3

Development of heuristic strategies in problem analysis, information processing, modeling and logical thinking. Study of methods and materials for teaching problem solving strategies, with applications from several school curriculum areas and instructional settings. Use of microcomputers to develop skills.

EDUC-C&I 5512 Strategies For Effective Classroom Management Credits: 3

The course presents several current approaches to classroom management and how they might be applied to the classroom. The approaches are evaluated in terms of psychological theory and research. Direct experiences with discipline problems are offered through simulation and role-playing.

EDUC-C&I 5513 Effective Communication In The Classroom Credits: 3

This course will emphasize the relationship between communication and classroom climate, and the influence of communication on motivation and student behavior. Communication with large groups, small groups, and individuals is studied and practiced.

EDUC-C&I 5514 Overview of Culturally Responsive Pedagogy Credits: 3

An introduction to ways of thinking about the relationship among teaching, learning, learner characteristics and experiences, and learning outcomes for traditionally underserved students. Particular attention will be given to a framework for understanding the meaning of culture in framing the curriculum and engaging students in meaningful learning experiences and tasks. A practice-based approach to improving learning for traditionally underserved students will be employed. Each participant will be required to participate in and facilitate discussion, develop a personal inventory, and conduct a historical analysis of her/his school and its relation to the community.

EDUC-C&I 5515 Integrated Arts As A Model For Classroom Instruction Credits: 3

This course provides background on theory, research and practice in arts education. Students will learn to integrate the arts across the curriculum and explore the value of the arts as conveyors of information, powerful tools of communication and bridges to the broader culture. This course will also give the students the opportunity to create, study and experience the arts as a model for classroom instruction.

EDUC-C&I 5516 Understanding the Crisis in Urban Schools Credits: 3

The participants in this course will develop deep knowledge of practices related to long-term and persistent challenges in urban schools. Participants will examine well-documented accounts of conditions and situations within and outside that influence the culture and learning outcomes in high performing and low performing urban schools. These accounts will represent multiple perspectives including those of teachers, administrators, students, parents, and other stakeholders. The insights gained from the documented accounts examined in this course will be used to conceptualize new context-specific approaches and frameworks for improving practices, policies, and learning outcomes in urban schools

EDUC-C&I 5517 Teaching Methods And Practices Credits: 3

This course is designed to present and evaluate basic instructional methods and techniques and to determine the ways in which instruction is affected by the social and cultural context of the school.

EDUC-C&I 5518 Assessment of Diverse Learners, Engagement and Motivation Credits: 3

A framework for assessing diverse learners and implementing culturally responsive pedagogy, leading to increased learner engagement and motivation. An overview of the purposes of assessments, how assessment measures are aligned to the principles of culturally responsive pedagogy, and implications for overall learner academic, personal and social growth. Finally, specific strategies for building engagement and motivation, particularly for learners living in poverty and those from ethnically diverse backgrounds are provided.

EDUC-C&I 5519 Discipline Specific Pedagogy for Diverse Learners Credits: 3

An introduction to the use of research-based, discipline specific pedagogy for traditionally under served students in core subject areas of reading, mathematics, science and social studies. Additionally, participants examine the philosophy and theoretical perspectives that support different pedagogical approaches and the social context for learning in classrooms with diverse students.

EDUC-C&I 5520 English Curriculum In The Middle And High School Credits: 3

Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examination of program objectives, teaching methods, and instructional materials in English.

Prerequisites: valid regular teaching certificate, undergraduate special methods or equivalent, teaching experience.

EDUC-C&I 5522 Language Arts Curriculum In The Elementary And Middle School Credits: 3

Consideration of language concepts as they relate to the teaching of the Language Arts in Grades K through 8. Significant research and its application to current trends in teaching the language arts will be explored.

Prerequisites: an undergraduate course in Language Arts or reading.

EDUC-C&I 5523 Advanced Literature For Children Credits: 3

This course emphasizes the critical analysis and selection of a variety of genres of multicultural children's print, digital, and online literature in order to create "windows and mirrors" (Bishop, 1990) through literature for diverse educational settings. It will emphasize using literature with culturally and linguistically diverse groups of students, explicitly modeling literacy skills and teaching literacy strategies, and exploring prevalent myths and stereotypes in society that are often reflected in children's and young adult literature.

EDUC-C&I 5524 Advanced Methods of Teaching English Language Arts for Grades 5-9 Credits: 3

Students will study research-based, developmentally appropriate pedagogies for teaching English Language Arts in grades 5-9. Course will foreground processes of analytic inquiry and cycles of planning, enacting, interpreting and translating learning experiences to meet the needs of all students. Topics will include methods of teaching reading, literature, writing, language study, speaking/listening, research skills, as well as technology integration.

EDUC-C&I 5525 The Craft of Writing Credits: 3

Students will learn inquiry-based pedagogies for teaching writing in grades 5-9. The course will address the role of the ELA teacher as lead writer in the classroom, and students will develop their own writing process and practice across a range of genres. Students will learn how to create a classroom community of writers through a variety of evidence-based frameworks and practical strategies for effective writing instruction. Topics will address processes of conferencing for instruction, feedback and evaluation supported by current research. Students also will learn effective methods for embedding meaningful stylistic and mechanical instruction to support writer/writing development.

EDUC-C&I 5526 The Craft of Reading Credits: 3

Students will examine inquiry-based pedagogies for teaching reading in grades 5-9. The course will address the role of the ELA teacher as lead reader in the classroom, and students will examine their own reading process and strategies through a variety of interpretive and analytic approaches supported by current research, including reader response and close reading. Topics will address evidence-based frameworks for effective reading instruction, comprehension strategies of diverse readers, and methods of reading assessment, data analysis and reflective practice.

EDUC-C&I 5528 Teaching Nonfiction Texts for Grades 5-9 Credits: 3

Students will gain an understanding of pedagogies for teaching both the craft and criticism of nonfiction texts. Emphasis will be placed upon integration of nonfiction via thematic pairing with existing texts. Topics will include analysis and application of text structures, text features, rhetorical strategies and literary devices, as well as deconstruction and interrogation of state and national standards relating to the teaching of nonfiction texts.

EDUC-C&I 5531 Mathematics Learning Difficulties: Identification and Intervention Credits: 3

Designed for inservice and preservice teachers to explore the interrelation of mathematics concepts and instructional strategies to enhance the mathematical learning of students who underachieve in mathematics and/or struggle with mathematics.

Prerequisites: Any mathematics teaching methods course.

EDUC-C&I 5536 Specialized Secondary School Curriculum Mathematics Credits: 3

Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examinations of program objectives, teaching methods and instructional materials in Mathematics.

Prerequisites: valid regular teaching certificate, undergraduate Special Methods or equivalent, teaching experience.

EDUC-C&I 5539 Mathematics Curriculum Development Credits: 3

Application of principles of curriculum development to the mathematics content and instructions. Development of a rationale for objectives and content selection and for evaluation. Study and evaluation of current programs, trends and experiments.

EDUC-C&I 5540 Evaluation Of Computer Software Credits: 3

The goals of the course are to provide students with a systematic evaluation process which analyzes the hardware resources and application needs of various user groups. This course provides the student with both an academic understanding of evaluation and requirement analysis for educational user groups. The course includes a practicum activity for application projects.

EDUC-C&I 5541 Teaching Mathematics With Computer Credits: 3

The use of a variety of technologies and the appropriate software in teaching secondary mathematics will be investigated and the resulting impact on curriculum will be covered.

Prerequisites: Mathematics teaching certificate or the equivalent of an undergraduate degree in mathematics.

EDUC-C&I 5542 Methods of Teaching English as a Second Language Credits: 3

This course covers the historical and current approaches, methods, and techniques of teaching English to speakers of other languages, from grammar translation to audiolingual and communicative approaches. Additionally, successful classroom practices that address the needs of culturally and linguistically diverse students will be presented.

EDUC-C&I 5543 English Grammar for ESOL Teachers Credits: 3

This course is about teaching English grammar and methods of teaching grammar for graduates, prospective and current teachers of English to speakers of other languages. It includes analysis of the major grammatical structures of American English, discussion of the role of teaching grammar, effective classroom methods and techniques for the English as a second/foreign language classroom.

EDUC-C&I 5544 Theory and Research in Second Language Teaching and Learning Credits: 3

This course covers both second language learning theories and second language research and design. It will also contain a survey of both qualitative and quantitative research literature.

EDUC-C&I 5545 Linguistics for ESOL Teachers Credits: 3

This course is an introduction to linguistic theories focusing on topics that are particularly relevant to ESOL teachers in culturally and linguistically diverse settings. It also covers applying these theories to practice in ESOL classrooms. The contents include basic practical knowledge in phonetics, phonology, morphology, syntax, pragmatics and semantics.

EDUC-C&I 5546 Intercultural communication Credits: 3

This course serves as an introduction to the background of English language learners (ELL) from many countries of the world. It also serves to facilitate ESOL students' success in ELL and mainstream classrooms. The course will introduce culture in general at first and then focus on how to better understand the ELL students' cultures. Class participants will learn to develop lessons that enhance intercultural communication and understanding among all students.

EDUC-C&I 5547 Second Language Acquisition Credits: 3

The course focuses on the foundations of second language learning and teaching. Major theoretical approaches to second language acquisition and second language learning will be discussed. The course is also one of the requirements for an endorsement to teach in English as a second language classroom.

EDUC-C&I 5548 English As A Second Language In Content Areas Credits: 3

Theoretical perspectives of teaching, learning and researching literacy development. The focus of this course will be on content based English as a second language instruction. The course is one of the requirements for an endorsement to teach in an English as a second language classroom.

EDUC-C&I 5549 Practicum In English As A Second Language Credits: 3

A four-week practicum for teachers and researchers in the field of second language learning and teaching. Students will have the opportunity to develop their own teaching plan of action according to the curriculum guidelines of the program in which they participate. Students will develop a portfolio and reflection piece about their own learning in the practicum.

EDUC-C&I 5551 Science Curriculum In The Middle And High School Credits: 3

Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examination of program objectives, teaching methods and instructional materials in Natural Sciences.

Prerequisites: valid regular teaching certificate, undergraduate special methods or equivalent, teaching experience.

EDUC-C&I 5553 Curriculum And Instruction In Science Credits: 3

Advanced study of contemporary programs and practices in science education at all instructional levels. Examination of program objectives and teaching methods and development of instructional materials for classroom use.

Prerequisites: A science teaching methods course and teaching experience.

EDUC-C&I 5554 Assessment In Science Education Credits: 3

Advanced study of science education assessment with option for elementary or secondary emphasis.

EDUC-C&I 5560 Teaching And Learning In The Urban Classroom Credits: 3

Emphasis will be placed on examining cultural beliefs, assumptions, values and their influence on the processes of teaching, perception of the urban learner, understanding the characteristics of the urban learner, and transforming pedagogical practices.

Prerequisites: EDUC-UL 5525 MA Multic Ed Students Only with 15 Prog Credit hours

EDUC-C&I 5561 Teaching Diverse Populations In Today's Classrooms Credits: 3

This course focuses on culturally responsive pedagogies for meeting the academic needs and learning styles of culturally diverse students. Emphasis will be placed on critical investigation of the role of socio-cultural dynamics on learning and teaching, and design of curriculum, materials, and pedagogical and disciplinary practices that affirm student's culture. The ultimate goal of the course is to examine ways in which a culture-based curricular perspective provides powerful scaffolding for enabling and empowering educational experiences for diverse students.

Prerequisites: EDUC-UL 5525, EDUC-UL 5526, EDUC-UL 5527, or EDUC-UL 5528.

EDUC-C&I 5562 Teaching For Equity And Social Justice Credits: 3

This course examines a systems approach to the design, development, assessment, and implementation of school practices that support equity and social justice for all students. It investigates issues of educational inequities and educational empowerment. Practitioners will develop the knowledge, skills and dispositions needed for empowering self and students. Emphasis will be placed on social action learning, empowerment and agency.

Prerequisites: EDUC-UL 5525, EDUC-UL 5526, or EDUC-UL 5528 and EDUC-C&I 5560 or EDUC-C&I 5561 or EDUC-C&I 5562.

EDUC-C&I 5563 Multicultural Perspectives In Education Credits: 3

This course provides an opportunity for students to engage in a critical and in-depth study of multicultural education. Students will examine current theoretical, conceptual, ideological, and political positions that help frame the multicultural education debate. The ultimate goal of the course is to help students develop critical and multiple perspectives about education in a democratic society with the aim of transforming curricular and pedagogical practice.

Prerequisites: EDUC-UL 5525, EDUC-UL 5526, EDUC-UL 5527 or EDUC-UL 5528 and EDUC-C&I 5560 or EDUC-C&I 5561.

EDUC-C&I 5565 Social Studies Curriculum Elementary Education Credits: 3

Trends and new curricular developments in elementary school social studies. Focus on integration of social science concepts, the development of critical thinking skills, and analysis of values.

EDUC-C&I 5566 Social Studies Curriculum In The Middle And High School Credits: 3

Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examinations of program objectives, teaching methods, and instructional materials in Social Studies.

Prerequisites: valid regular teaching certificate, undergraduate special methods or equivalent, teaching experience.

EDUC-C&I 5570 Curriculum And Instruction In Technology Credits: 3

Study of contemporary programs and practices of technology usage in education at all instructional levels. Examination and application of technologically enhanced teaching methods, assessment, and curriculum development for classroom use.

EDUC-C&I 5571 Cognition & Technology Credits: 3

The purpose of this course is to respond to current research in the field of cognition and educational technology and design an evaluative research response to a local technology program. The educators will define the concepts concerning implementation of new technologies into learning environments and the mediational effects on the types and quality of learning that result from that process.

EDUC-C&I 5572 Assessing The Role Of Technology In Education Credits: 3

The purpose of the course is to develop an understanding of changing role of technology in education by reviewing current and historical articles on the topic. This includes a historical analysis of trends and expectations within educational settings and outside educational settings and defining the educator's understandings of the role of technology in educational settings, past, present and future.

EDUC-C&I 5573 Development Learning Tech Progs:Traditional & Non-Trad Settings Credits: 3

The purpose of this course is to develop understandings of currently implemented educational technologies including both software and hardware configurations. The educators will review current use of a variety of current technologies integrated into traditional settings and non-traditional settings and evaluate their effectiveness in developing standards-based learning outcomes and constructivist-based learning outcomes.

EDUC-C&I 5575 Internship - Early Childhood Credits: 3-16

Applied experiences in a planned, supervised curriculum program. Seminar accompanies internship experiences.

EDUC-C&I 5576 Administration Of Early Childhood Programs Credits: 3

This course is designed to examine the administrative functions and decisions involved in effectively directing an Early Childhood Program. Students may plan their own Early Childhood Program incorporating philosophical values and beliefs.

EDUC-C&I 5577 Early Childhood Special Education Methods Credits: 3

EDUC-C&I 5577 provides an overview of the field of early childhood special education, with an emphasis on inclusive education for young children ages birth-third grade. This emphasis includes methods and practices for providing services for young children with special needs and their families and the adaptation of developmentally appropriate curriculum and the classroom environment. Historical, political, and theoretical contexts are provided as framework for the course.

EDUC-C&I 5578 Play In Early Childhood Education Credits: 3

The purpose of this course is to study the various play theories and developmental levels of play. Students plan play activities and participate in Early Childhood programs.

EDUC-C&I 5579 History, Theories, And Issues In Early Childhood Education Credits: 3

This course is designed to explore the historical and theoretical principles in early childhood education. Current issues in the field will be examined and discussed.

EDUC-C&I 5580 Curriculum In Early Childhood Education Credits: 3

The content of this course will include an exploration of appropriate curriculum and instruction of early childhood classrooms. Students will recognize, understand and analyze the differences and similarities between early childhood curriculum and instruction methods and elementary education instruction.

EDUC-C&I 5581 Infant-Toddler Programs: Research Theory And Practice Credits: 3

This course is designed to investigate the research relevant to infant and toddler programs, learn about the appropriate curriculum and teaching methods, and visit infant and toddler programs.

EDUC-C&I 5582 Program Models In Early Childhood Education Credits: 3

This course is designed to explore and analyze program models in early childhood education in terms of their theoretical and/or philosophical bases and their transformation into practice. During this process, students are encouraged to evaluate their own personal views and values concerning teaching/learning issues in early childhood education.

EDUC-C&I 5583 Supervision In Early Childhood Education Credits: 3

The purpose of this course is to study the process of effective supervision of staff in the diverse contexts of early childhood education. This course is designed to prepare students to supervise teachers, staff, paraeducators, or volunteers in early childhood education programs. Students will explore theories of adult development, the supervision process, professional development, and the evaluation process.

EDUC-C&I 5584 Early Childhood Culminating Project Credits: 1-6

This seminar is designed for graduate students to explore current issues and topics pertaining to the field of early childhood education. An in-depth investigation of ways to work with community agencies will be included.

EDUC-C&I 5585 Teaching and Learning with Technology Credits: 3

This is an introductory course that covers the fundamental of standard educational computer applications in addition to providing the basic concepts regarding classroom hardware and software integration. This course familiarizes students with the National Educational Technology Standards For Teachers and Students. Because of the computer's increasing importance in all phases of education, hands-on experiences are required throughout the course.

EDUC-C&I 5586 Multimedia in Education Credits: 3

This course will introduce students to a variety of methods for creating instructional multimedia materials for K-16 classroom use, with a particular emphasis on free and web-based digital editing and conversion programs.

Prerequisites: EDUC-C&I 5585 (or TCH-ED 385).

EDUC-C&I 5587 Facilitating Technology Implementation Credits: 3

This course will prepare students to facilitate the integration of educational technology in PK-12 settings. Skills taught will include planning and implementing educational technology professional development to classroom teachers and integration strategies that increase the potential for meaningful learning.

Prerequisites: EDUC-C&I 5585 (or TCH-ED 385).

EDUC-C&I 5589 Special Topics In Education Credits: 1-6

A course designed to deal with a curriculum topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-C&I 5589AD Special Topics in Education Credits: 1-6

A course designed to deal with a curriculum topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-C&I 5589AM Special Topics In Education Credits: 1-6

EDUC-C&I 5589CD Special Topics In Education Credits: 1-6

EDUC-C&I 5589EG Special Topics In Education Credits: 1-6

EDUC-C&I 5589ES Special Topics Credits: 3

EDUC-C&I 5589GR Special Topics Credits: 3

EDUC-C&I 5589HR Special Topics In Education Credits: 1-6

EDUC-C&I 5589IC Special Topics In Education Credits: 1-6

EDUC-C&I 5589ME Special Topics In Education Credits: 1-6

EDUC-C&I 5589SC Special Methods Science Credits: 5

EDUC-C&I 5589SE Special Methods English Credits: 5

EDUC-C&I 5589SM Special Methods Math Credits: 5

EDUC-C&I 5589SS Special Methods Social Studies Credits: 5

EDUC-C&I 5589TL Special Topics In Education Credits: 1-6

Special Topics In Education

EDUC-C&I 5589TM Special Topics In Education Credits: 1-6

A course designed to deal with a curriculum topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-C&I 5589UC Sepcial Topics in Education Credits: 1-6

EDUC-C&I 5590 Seminar Credits: 3

Discussion and evaluation of literature in curriculum.

Prerequisites: EDUC-C&I 5505.

EDUC-C&I 5591 Curriculum & Instruction For The 21St Century Credits: 3

A seminar including critical examination of current issues affecting schools such as education for democracy and global interdependence in a diversified society, curriculum and instruction in a technological, post-industrial society; the changing demographics of the U.S. and the implications for curriculum and instruction; and the roles of teachers and administrators in the school of the future. Students will be actively involved in "research-in-action" study of both theory and practice.

EDUC-C&I 5595 Action Research For Practitioners Credits: 3

This course comprises a guided graduate research paper experience. Course participants will work together to plan individual action research studies related to diverse, urban schooling. This course is designed to enable practitioners to engage in systematic inquiry on some aspect of their practice in order to find out more about that practice and eventually improve it. Participants in the course are expected to put their assumptions, ideas and practices to the test by gathering, analyzing and drawing conclusions from evidence. This course is to be taken during the last year of degree study. Course enrollment requires faculty advisor approval and a minimum 3.0 GPA. Participation in this course entails a field placement for research purposes. If a placement in a school is required, students will need to complete a TB test and submit fingerprints for the standard Background Check process by the start of the semester. Any costs associated with these tests are the responsibility of the student. All course participants are further required to obtain a LiveText subscription.

EDUC-C&I 5596 Classroom Assessment Credits: 3

This course is designed to help practitioners develop an understanding of the various roles of classroom assessment, strengthen their own assessment strategies be able to better use data in the development of curriculum that is appropriate for all learners. Students will develop a more clear understanding of the relationship of curriculum, instruction assessment ways in which good assessments can help diverse learners.

EDUC-C&I 5598 Individual Studies Credits: 1-6

Review of the research and trends relative to curriculum in education.

EDUC-C&I 5618 Survey Of Research In Curriculum Credits: 3

Review and analysis of research in curriculum theory and methods.

EDUC-C&I 5619 Systemic Curriculum Evaluation and Review Credits: 3

This course focuses on current practices in systemic curriculum review at the grade, school, district or state level in order to better serve the needs of diverse learners. Emphasis will be placed on the processes of curriculum review, curriculum change, implementation, evaluation of changes, and on-going long-range curriculum planning and review.

EDUC-C&I 5620 Seminars In Theories Related To Curriculum Credits: 3

Study of major historical developments in curriculum and their influence on contemporary models and practices.

Prerequisites: EDUC-C&I 5504 or EDUC-C&I 5505.

EDUC-C&I 5626 Seminar in Multicultural Perspectives In Education Credits: 3

This seminar provides an opportunity for student engagement in critical and in-depth study of multicultural perspectives in education. Students will examine current demographic and achievement realities and the theoretical, conceptual, ideological, and political positions that frame multicultural education. The ultimate goal is to help students develop multicultural competence, critical and multiple perspectives about education for a democratic society, and comprehensive knowledge base, skills, and dispositions for transformative intellectualism and change agency.

Prerequisites: Interdisciplinary Ph.D. Student Status.

EDUC-C&I 5640 Curriculum and Teaching for the College Classroom Credits: 3

This course provides a foundation for preparing for and engaging in instruction at the college level. The emphasis is on curriculum planning, assessment, feedback, classroom interactions, and student motivation across a wide variety of discipline areas. This course may also be counted toward course credit allocation for the Preparing Future Faculty online graduate certificate program.

EDUC-C&I 5641 Apprenticeship and Conference in College Training Credits: 2-6

This course provides a foundation for preparing for and engaging in instruction at the college level. The emphasis is on apprenticeship experience in preparing, conducting, and evaluating college teaching under direction of and in conference with supervising professors.

EDUC-C&I 5690 Special Problems Credits: 1-6

Individual studies: thesis exploration, special reading.

EDUC-C&I 5697 Dissertation Curriculum And Instruction Credits: 1-16

Dissertation Curriculum And Instruction

Decision Science and Operations Management (DSOM)

Courses

DSOM 5508 Statistical Analysis In Business Credits: 3

Data analysis and statistical inference in the context of business management. Communication of analysis and conclusions using text, numbers, and graphics is emphasized. Understanding the conceptual framework of probability and statistics as it relates to statistical tests and procedures is emphasized more than computational methods. Most of the work will be done using a computer spreadsheet. The course includes the topics of estimation, tests of hypotheses, analysis of variance, and multiple regression.

DSOM 5509 Business Analytics for Strategic Decision Making Credits: 3

Business analytics has become a key component in accomplishing strategic and operational goals. Students will become familiar with the concepts and principles of analytics. Utilizing real world cases, students will apply current analytical concepts to help solve managerial problems and support decision processes.

Prerequisites: Admission to Executive MBA Program.

DSOM 5511 Global Supply Chain and Operations Management Credits: 3

Global Supply Chain and Operations Management (SCOM) provides a holistic investigation of how businesses produce goods and offer services. Strategic approaches to planning, scheduling, and controlling cost, time, and quality are discussed. Students are exposed to the full circle of supply chain management, including demand planning, sourcing and procurement, production decisions, inventory and handling, MRP and ERP systems, Lean/JIT, quality management, CSR and sustainability. Spreadsheet models for managing operations, analyzing performance, and forecasting expectations are examined.

Prerequisites: MIS 5507

DSOM 5540 Service Operations Management Credits: 3

This course focuses on the increasing importance and role of service in our economy. Topics studied are: the role of services in an economy, the nature of services, service strategy, the service delivery system, service facility location, the service encounter, service quality, productivity and quality improvement. Methods of process analysis in service organizations, methods improvement procedures, and work measurement techniques are developed to provide the basis for analyses of processes, layouts, and job design in a service organization.

Prerequisites: DSOM 5507 or DSOM 5511.

DSOM 5543 Project Management Credits: 3

Planning and control of projects, to include network models, risk analysis, time reduction, resource scheduling, leadership, and evaluation.

DSOM 5544 Global Supply Chain and Logistics Management Credits: 3

A study of integrated global supply chain management and logistics. Topics include integrating global ERP and forecasting systems, inventory management, distribution requirements planning, supply chain management, purchasing and supplier/vendor networks, logistics, transportation networks, and E-operations. ERP systems and network optimization are studied relative to both production and service operations.

Prerequisites: DSOM 5507 or DSOM 5511.

DSOM 5545 Strategic Sourcing & Supplier Relationship Management Credits: 3

This course explores the roles of procurement and strategic sourcing as components of an overall supply chain strategy, and the impact this strategy has on the competitive success and profitability of organizations. The course will be structured into three segments: before you source, how to source, and after sourcing. Topics will include spend analysis, supplier research, market analysis, supplier evaluation, global sourcing considerations, negotiating, and supplier relationship management. The students will also gain an appreciation of the ethical, contractual, risk management, sustainability, and legal issues faced by purchasing professionals.

DSOM 5566 Supply Chain and Operations Management Credits: 3

An examination of the basic principles and strategies used to manage the production and distribution of goods and services. This course positions operations management (OM) as an important tool for achieving strategic leadership through competitive advantage, and illustrates how the managerial integration of OM functions with corporate strategy improves business processes.

Prerequisites: DSOM 5509 or equivalent; Admission to the Executive MBA program.

DSOM 5587 Special Topics Credits: 3

Special topics in decision science and operations management.

DSOM 5595 Internship Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

DSOM 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

DSOM 5899 Required Graduate Enrollment Credit: 1

Dental Hygiene (DENT-HYG)

Courses

DENT-HYG 5500 Introduction to Educational Methodology Credits: 3

This course is designed to introduce the student to basic educational methodologies and to provide participants with a better understanding of the teaching/learning process. The course includes units on instructor/student relationships, educational approaches, educational ethics and professionalism, the scholarship of teaching and learning and curriculum theory.

DENT-HYG 5502 Foundations of Teaching Credits: 2

This course provides an introduction to the evidence-based best practices in course design for students who are preparing for a career in teaching and for those who simply wish to learn more about classroom instruction. Students will explore outcomes centered course design. Content application activities include syllabus development, writing objectives, constructing lesson plans, preparing presentations, developing course management sites, and test development.

Prerequisites: Must be a student enrolled in the MSDHE program.

DENT-HYG 5510 Student Teaching and Conference I Credits: 2-4

Student teaching experience in classroom areas as selected by the student under the direction of a supervising professor. The student develops behavioral course objectives, test and examination items, classroom presentations, and prepares student evaluations in the selected classroom teaching areas. The student may select teaching assignments in one of the developed externship student teaching programs. Conferences will be held in conjunction with the course.

Prerequisites: DENT-HYG 4040, DENT-HYG 5500.

DENT-HYG 5512 Student Teaching and Conference II Credits: 2-4

This course is designed to provide the graduate dental hygiene student with additional experience in classroom teaching. Student teaching experiences will be selected by the student under the direction of and in conference with a supervising professor.

DENT-HYG 5516 Special Issues in Higher Education for Health Professional Credits: 3

This course is designed to introduce the student to matters encountered in higher education - specific to dental hygiene education. Weekly readings, assignments, and sessions will familiarize the student in topics such as: writing resumes and CVs, motivational interviewing, accreditation, promotion and tenure, and social media.

DENT-HYG 5530 Clinical Instruction and Conference I Credits: 2-4

Students will actively participate in clinical instruction under the supervision of a dental hygiene faculty member. Topics relative to clinical teaching will be discussed in weekly seminars. Students will be encouraged to apply knowledge gained in DENT-HYG 4620 and DENT-HYG 5500 during clinical instructional experiences. Additionally the student must participate in at least 1 day of clinic per week to equal another credit hour of course work.

DENT-HYG 5532 Clinical Instruction and Conference II Credits: 2-4

This course is a continuation of DENT-HYG 5530. Under the supervision of the dental hygiene faculty, the student will continue to develop skills as a dental hygiene clinical instructor.

Prerequisites: DENT-HYG 5530.

DENT-HYG 5553 Evidence Based Decision Making in the Clinical Practice of Dental Hygiene Credits: 2-4

This course is designed for the graduate and degree completion dental hygiene student and will expand on the student's basic knowledge of the dental hygiene process of care. Utilization of evidence based decision making skills will be explored in an effort to incorporate current scientific literature, personal clinical experience and patient preferences as it relates to the delivery of comprehensive patient care. Skills taught in this course will enhance background knowledge related to the dental hygiene process of care and help to foster an attitude of critical analysis and life-long learning.

DENT-HYG 5560 Practicum in Clinical Supervision and Management Credits: 2-4

Practical experience in functioning as a Clinic Supervisor. Clinical managerial projects will be assigned according to students' interests and goals by agreement between student and instructor.

DENT-HYG 5565 Advanced Special Patient Care Practicum I Credits: 1-4

This course is designed to familiarize the student with general principles of cancer therapy and the role of the dental team in the multidisciplinary care of patients undergoing oncology treatments. Special emphasis will be placed on the treatment of the patient with head and neck cancer, and preventive and palliative dental interventions for control of the oral complications associated with all cancer therapies. Cancer prevention issues and the psychosocial and economic impact of cancer diagnosis will also be discussed.

DENT-HYG 5566 Advanced Special Patient Care Practicum II Credits: 1-4

This course will provide the graduate dental hygiene student with the opportunity to explore the relationship of an oncology dental program to medical health care facilities.

DENT-HYG 5570 Administrative Practicum Credits: 1-4

Practical experience in administration. The student selects areas of responsibility based on their goals and interests in administration. Possible areas of involvement are: recruitment, admissions, curriculum and course development, course scheduling, grant and report writing and student advising.

DENT-HYG 5575 Practicing in the Dental Hygiene Public Safety Net Credits: 3

This course is designed to increase the knowledge base of practicing dental hygienists in the area of public health dentistry, including health promotion, disease prevention, current legislation, evidence based treatment, school based portable dentistry, coalitions, treating the geriatric and disabled populations, as well as how to write and secure grant monies. In addition, the course will expose dental hygienists to a variety of public health settings in which they can practice with an Extended Care Permit (in KS) or the Dental Hygiene Designation (in MO). Information on how to apply for the permits will also be shared.

DENT-HYG 5576 Extended Care Permit (ECP) III Training Course Credits: 2

The Extended Care Permit (ECP) III Training Course is designed to prepare a registered dental hygienist to apply for the Kansas Extended Care Permit III. Hygienists with the ECP III certificate can practice under the sponsorship of a dentist in a variety of public health settings including schools and long term care facilities in Kansas.

Prerequisites: Must be a student enrolled in the MSDHE program.

DENT-HYG 5585 Portfolio Capstone Course Credit: 1

This capstone course serves as the culminating experience for students in the MS in Dental Hygiene Education (MS in DHE). During the Capstone course, students will create a coherent and cohesive body of work reflective of attainment of the competencies for their respective programs - in the form of an e-Portfolio. This course should be taken in the semester of anticipated completion/graduation of the MS In DHE program.

DENT-HYG 5590 Independent Study Credits: 1-4

Independent study of a particular topic or area of interest to the student in dental hygiene/dentistry and/or higher education.

DENT-HYG 5595 Writing in Science Credits: 1-2

This seminar course is designed to provide advanced education students in the health professions the skills necessary to write and communicate in science. Course activities and topics include: critical analysis of the literature, literature summary tables, structure and organization of documents, style and usage, drafting, revising and finishing. Participants will practice the craft of scientific writing not only as the writer but also as the reader providing correction and reorganization where appropriate. While this course examines many writing tasks, exercise culminate with the development of a research protocol or scientific article.

DENT-HYG 5599 Research And Thesis Credits: 1-6

This course is designed to support the research process from protocol development through data collection and report of results. Research committee chairperson typically serves as the course director.

Dentistry Professional (DENT)

Courses

DENT 6305 Operative Dentistry I Lecture Credit: 1

An introduction to the prevention and principles of the restorative treatment of dental caries.

DENT 6305L Operative Dentistry I Laboratory Credits: 2

Restorative procedures discussed in DENT 6305 are performed on laboratory manikins.

DENT 6306 Transitions: An Introduction to the Profession and Practice of Dentistry Credits: 0.5

This course is the first in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the knowledge, skills and values of ethics, professionalism and practice management. The courses use self-assessment and strategic planning as foundations and lead the students through identification of personal and professional aspirations, and culminate in building each student's competence in dental practice management.

DENT 6307 Transitions: Introduction to the Profession & Practice of Dentistry II Credits: 0.5

This course is the second in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course builds on strategic planning foundation to gain an understanding of personal financial management in the context of personal and professional goals in the field of dentistry.

DENT 6310C Patient Care I Credits: 3

This course introduces the dental student to the foundation knowledge and skills and values for the provision of oral health care. This includes infection control, cubicle set-up and breakdown, dental assisting, patient/operator positioning, patient vital signs, radiographic techniques, patient communication and basic concepts of oral health and disease. Students will assist third and fourth year students in various clinical areas after appropriate preparation, and will provide oral hygiene instruction for elementary age students.

DENT 6312 Dental Behavioral Science Credits: 1-2

An introduction to the basic principles of behavioral science as they relate to oral self-care and professional practice. Topics include basic principles of human behavior, adherence, motivational interviewing, dental fears, chronic orofacial pain, and conflict management. Students will complete an in-depth motivational case report and a communication competency exam with selected patients.

DENT 6313 Applied Biochemistry Credits: 4

This is a course geared to the biomedical foundation knowledge of dental students. The course is composed of six sections focused on clinically important topic areas each cumulating with a clinical presentation. Course content will intentionally emphasize new knowledge areas in cancer, inflammation, genetic diseases, metabolic diseases, mineralized tissues in health and disease, oral health, hormone action, and blood coagulation/wound healing.

Prerequisites: an Undergraduate Biochemistry course.

DENT 6314C Patient Care II Credits: 2

This course builds on the skills introduced in DENT 6310C with a review and the continuation of the clinical rotations. In addition, students will learn the steps of a basic oral diagnosis, and will demonstrate their understanding with graded peer exams and by performing selected portions of a diagnosis on two clinic patients with the assistance of a 3rd or 4th year dental student.

DENT 6315C Patient Care III Credits: 3

This course introduces preventive theory necessary to provide patient care. Students are introduced to fundamental clinical procedures including dental deposits, gingival assessment, identification and classification of periodontal diseases, and periodontal probing. The information learned in this course continues in fall, second year (Patient Care IV) where student are introduced to basic periodontal instrumentation skills to assess and treat simple patients.

DENT 6316 Dental Morphology Credits: 3

This lecture/laboratory course introduces the student to the anatomy of the oral cavity and structures of the stomatognathic system. A thorough review of dental anatomy and dental terminology of the primary and permanent dentition will be presented. The students' knowledge of dental morphology will be reinforced by constructing wax models of permanent dentition.

DENT 6317 Fundamentals of Occlusion and Fixed Prosthodontics Credits: 3

This lecture laboratory course will review the fundamental principles of dental occlusion, the anatomy and function of the stomatognathic system, and foundational knowledge of fixed prosthodontics.

DENT 6319 Ethics and Professionalism Credit: 1

An introduction to basic concepts of ethics and professionalism. Systems of ethical decision making are introduced and applied in the context of oral health care and interprofessional practice. Students will explore their own ethical values and apply this knowledge to issues in professional education.

DENT 6328 Clinical Decision Making in Dentistry Credits: 1-2

An experiential course that uses current controversies in to facilitate development of skills needed for making valid decision in clinical dentistry. Students will apply basic principles of database searching, research design and methodology to the critical analysis of contemporary dental literature. This one-hour course will: 1) Provide you with sufficient information to perform week on the portions of the national boards that deal with research design and methodology; and , 2) give you skills sufficient to search for, locate, and evaluate valid information related to clinical questions in contemporary dentistry.

DENT 6350 Introduction To The Histopathology Of Oral Tissues Credits: 2

A comparison of the microscopic anatomy of healthy and diseased oral tissues.

DENT 6352 Patient Care IV Credits: 1-3

This course is a continuation of DENT 6310C, DENT 6314C, and DENT 6315C which introduces preventive theory and the instrumentation skills necessary to provide patient care. Students are introduced to fundamental clinical procedures including plaque control, gingival assessment, and periodontal probing. Review of radiology, radiographic technique and interpretation, assisting skills, diagnosis and periodontal instrumentation will be implemented in this course.

DENT 6390 Dental Research Experience Credit: 1

This independent study course focuses upon experience gained in both an area of dental research as well as the process of research in working with an established dental researcher.

DENT 6402 Transitions: Introduction to the Profession and Practice of Dentistry III Credits: 0.5

This course is the third in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course builds on strategic planning foundation established in year one to gain an understanding planning for development of a dental practice.

DENT 6403 Transitions: Introduction to the Profession & Practice of Dentistry IV Credits: 0.5

This course is the fourth in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course continues the strategic planning framework as the dental practice business plan is developed. The focus for this course is on managing the finances of a dental practice.

DENT 6410 Operative Dentistry II Lecture Credit: 1

A continuation of DENT 6305. Principles of cavity preparation, materials and techniques are stressed.

DENT 6410L Operative Dentistry II Laboratory Credits: 2

A continuation of DENT 6305L. Restorative procedures are performed on laboratory manikins and extracted teeth.

DENT 6411 Operative Dentistry III Lecture Credit: 1

A continuation of DENT 6410.

DENT 6412 Introduction to Oral Surgery & Pain Management I Credit: 1

This course introduces students to foundational concepts of oral surgery and pain management. The course consists of lectures, demonstration and pre-clinical practice and simulation in the safe and effective use of local anesthetics in dentistry and basic intraoral surgical procedures. This course includes patient assessment for intraoral procedures, and instrumentation and techniques required to anesthetize a patient and extract teeth. Students will participate in practical experiences to begin to build skills in the necessary techniques to manage patient's pain and perform basic surgical procedures.

DENT 6414 Pathology I Lecture Credits: 4

The general etiology of disease; circulatory and metabolic disorders; degenerative processes; inflammation; infection and immunity; tumors; and organ system pathology.

DENT 6415 Pathology II Credits: 2

A study of developmental defects, inflammatory diseases, and neoplasia of the oral region.

DENT 6416 Complete Removable Prosthodontics Credit: 1

This course will introduce the dental student to concepts and procedures involved in the rehabilitation of the completely edentulous patient. Information presented will include proper clinical examination techniques, an evaluation of the findings and their impact on treatment and treatment options. The student will become familiar with the clinical steps involved in the fabrication of complete dentures and the rationale supporting these procedures. Laboratory steps as they relate to clinical treatment procedures will also be discussed. There will be additional information presented regarding single complete dentures, immediate dentures, overdentures, implant-retained complete dentures, and rebasing and relining techniques.

DENT 6416L Complete Removable Prosthodontics I Laboratory Credits: 2

This course will introduce the student to the clinical and laboratory steps involved in the fabrication of complete dentures. Students will learn how to manipulate the materials involved as well as indications for their usage. The course will be structured to closely resemble the clinical experience in concept and techniques where feasible. The goal is to teach the skills necessary to manage edentulous patients and also to teach in detail the entire process of complete denture fabrication. This will enhance overall dental skills and provide a knowledge base with which to critically evaluate laboratory procedures and results. This laboratory course provides the student the opportunity to acquire the foundational skills, which must be mastered before clinical competency, can be attained. A goal of the course is to provide the opportunity for the student to acquire the hand/eye skills, which are necessary to treat the edentulous patient in a clinical setting.

DENT 6417 Removable Partial Prosthodontics Credit: 1

The study of the terminology, design, theory, and basic procedures in removable partial denture construction in addition to diagnosis and treatment planning will be stressed through the lectures.

DENT 6417L Removable Partial Prosthodontics Laboratory Credits: 2

In the laboratory the students will learn to plan, design, and prepare the mouth for a prosthesis. They will demonstrate understanding of concepts and methods by applying them to the solution of problems. The student will: develop critical thinking and problem solving related to diagnosis, planning and treatment; make decisions based on current empirical and published evidence; make custom trays for final impression, and record bases and wax rims for recording jaw relationship.

DENT 6420 Periodontics I Credits: 2

It is the scope of this course to introduce the basic disease mechanisms involved in the evolution of the inflammatory periodontal lesion; i.e., the interaction of the host tissues with the oral microbial flora. The course will cover the entire range of possible periodontal diseases, ranging from simple marginal gingivitis to AIDS related necrotizing ulcerative periodontitis. Further, the course will continually reinforce the science of periodontology and its overwhelming relationship to the clinical practice of periodontics.

DENT 6422 Fixed Prosthodontics I Lecture Credit: 1

This course is designed to provide the foundation knowledge needed by the novice to formulate clinical judgments in the areas of treatment planning, tooth preparation, and the selection and use of dental biomaterials for the restoration of single teeth with fixed prosthodontic restorations. The topics covered also include provisional restorations, impressions materials and technique, dental cements, and laboratory aspects involved in the fabrication of cast gold crowns.

DENT 6422L Fixed Prosthodontics I Laboratory Credits: 2

The second course in the fixed prosthodontic curriculum is designed to provide foundation knowledge needed by the novice to formulate clinical judgments in the areas of treatment planning, tooth preparation, and the selection and use of dental biomaterials for the restoration of missing teeth with fixed partial dentures and implants.

DENT 6423 Fixed Prosthodontics II Lecture Credit: 1

The second course in the fixed prosthodontic curriculum is designed to provide foundation knowledge needed by the novice to formulate clinical judgments in the areas of treatment planning, tooth preparation, and the selection and use of dental biomaterials for the restoration of missing teeth with fixed partial dentures and implants.

DENT 6423L Fixed Prosthodontics II Laboratory Credits: 2

The second laboratory course in fixed prosthodontics is focused on the replacement of missing teeth with fixed partial dentures and implant restoration. Projects build the skills to begin development of clinical competence in fixed partial dentures and implant restorations.

DENT 6424 Dental Management of the Medically Complex Patient Credits: 2

This course focuses on the understanding of medical conditions and compromised states that patients present with, enabling the clinician to develop dental treatment plans that are safe and compatible with their medical status.

DENT 6426 Oral Radiology Lecture Credits: 2

Radiation physics, radiation biology, quality assurance, imaging principles, radiation hygiene, radiographic interpretation and techniques of intra-oral survey are presented.

DENT 6431 Pediatric Dentistry I Lecture Credit: 1

The overall goal of this didactic course is to provide the student with the fundamental knowledge necessary to provide comprehensive dental care to pediatric patients. In addition, this course strives to develop an attitude towards learning such that the student will seek opportunities to further his/her knowledge and skills in pediatric dentistry subsequent to graduation. Finally, this course is intended to sensitize students to their responsibility as health care providers for the children in their community.

DENT 6435 Endodontics I Lecture Credit: 1

An introductory course in endodontics emphasizing pulp and periapical biology and pathology. Extra emphasis will be placed on endodontic diagnosis of non-odontogenic facial pain, problems with anesthesia in endodontics and treatment planning.

DENT 6436 Orthodontics: Growth And Development Credit: 1

Certain malocclusions and dental deformities can occur due variations in growth and normal developmental process. In order to treat and understand these problems, an in-depth and thorough understanding of craniofacial growth and development is necessary. Understanding how and when the face and head is actively growing will enable the clinician to redirect facial growth to reduce the severity of forming skeletal/ dental malocclusions. Since orthodontic treatment may involve the modification and/or manipulation of skeletal growth, it is important not only to understand dental development but also physical, physiologic and psychosocial development. This course is designed to address these needs.

DENT 6439 Medical Emergencies in the Dental Office Credit: 1

The purpose of this course is to comprehensively review the management of common medical emergency situations that a dentist is likely to encounter in the dental office. In this course, the students will gain a thorough understanding of the preventive measures and appropriate response to medical emergencies including the appropriate use of the Emergency Medical System. Moreover, pertinent information regarding the patho-physiology associated with common medical emergencies will be discussed.

DENT 6440 Introduction to Oral Surgery & Pain Management II Credit: 1

This course builds on the fundamental concepts in oral surgery and pain management presented in Dent 6412 to prepare students for patient care in oral surgery and management of pain for provision of dental care. The lectures will focus on treatment needs of the medically compromised surgical patient, ability to safely and adequately deliver local anesthesia, non-pharmacological management of pain as well as OTC and prescription medications for pain management. The course will also focus on appropriate case selection for a general dentist. In the pre-clinical lab portion of the course, students will participate in exodontia simulation and local anesthesia administration.

DENT 6442 Endodontics II Lecture Credit: 1

A continuation of the study of endodontics emphasizing non-surgical endodontics, surgical endodontics and post-endodontic treatment.

DENT 6442L Endodontics Laboratory Credits: 2

The preparation and filling of root canals of extracted teeth in the laboratory setting.

DENT 6460C Review of Pre-Clinical Dentistry Credits: 0.5

A combination of online lectures, selected readings and independent study designed to reinforce and integrate concepts contained in the pre-clinical dental curriculum.

DENT 6501C Intro to Comprehensive Patient Care Credits: 1-10

The purpose of this course is to introduce the student to the clinical environment and to familiarize him/her with comprehensive patient care. In addition, it allows the student to develop and interpret basic diagnostic aids that enable him/her to arrive at a diagnosis and treatment outline, the beginning steps of comprehensive care. Patient care is provided following the outlined treatment plan. The student will apply the principles/concepts of patient care. Students begin treatment of a "family" of patients under faculty supervision.

DENT 6502 Grand Rounds I Credits: 0.5

Students prepare to develop and present oral reports typically given at professional meetings such as case presentations, table clinics, research reports or presentations of new techniques (such as in Table Clinic requirements or Senior Grand Rounds). This course will expand on the student's basic knowledge of critical review of scientific literature and information literacy. Cases and problems in dentistry and oral health will be the context for identification and application of current valid scientific literature. This course seeks to foster an attitude of critical analysis and commitment to life-long learning.

DENT 6503 Clinical Decision Making II Credits: 0.5

Students will learn to critically appraise scientific literature associated with current issues in dentistry to develop critical thinking skills that result in evidence-based decision making.

DENT 6509C Comprehensive Patient Care I Credits: 1-10

Third and fourth year dental students will spend the majority of their curriculum time mastering the competencies required of a general dentist. This includes the ability to complete a dental diagnosis and treatment plan, present the case to the patient, implement and evaluate the dental care delivered. Comprehensive patient care courses foster development of skills through daily evaluation in technique, patient management, and diagnostic ability, supplemented by periodic mentor and team faculty evaluation. Semester evaluation will also take into account clinical productivity using a time unit system.

DENT 6510C Comprehensive Patient Care II Credits: 1-10

Third and fourth year dental students will spend the majority of their curriculum time mastering the competencies required of a general dentist. This includes the ability to complete a dental diagnosis and treatment plan, present the case to the patient, implement and evaluate the dental care delivered. Comprehensive patient care courses foster development of skills through daily evaluation in technique, patient management, and diagnostic ability, supplemented by periodic mentor and team faculty evaluation. Semester evaluation will also take into account clinical productivity using a time unit system.

DENT 6514 Pathology III Lecture Credit: 1

Continued study of pathological conditions of the oral region with emphasis on clinical signs and symptoms.

DENT 6515 Periodontics II Credit: 1

The overall goal of this course is to help the pre-doctoral students to recognize periodontal disease and treatment plan the needed periodontal therapy. Specific goals are to enhance the student's knowledge of the surgical aspects of periodontal therapy, and the relationship of periodontal disease and its treatment to the overall dental treatment plan.

DENT 6518 Transitions: Introduction to the Profession & Practice of Dentistry V Credit: 1

This course is the fifth course in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course continues the strategic planning framework and focuses on practice building strategies.

DENT 6520 Transitions: Introduction to the Profession & Practice of Dentistry VI Credit: 1

This course is the sixth course in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course continues with the strategic planning framework and focuses on the skills, knowledge and attitudes necessary for the day to day leadership of a dental practice.

DENT 6521 Oral Surgery III Credit: 1

This course is a continuation of the principles and techniques in Oral Surgery Pain Management II, but now relates to more advanced forms of oral surgical patient care. The areas to be covered are the diagnosis, treatment planning and management of impacted teeth, surgical complications, pre-prosthetic surgery, maxillary sinus in disease/dentoalveolar surgery, odontogenic infections, odontogenic cysts and odontogenic tumors afflicting the maxillofacial structures.

DENT 6521C Periodontics Clinical I Credits: 1-2

Clinical application of those principles taught in preceding terms.

DENT 6522 Oral Surgery IV Credit: 1

This course is a continuation of DENT 6521 Oral Surgery III. This course is structured to help the student acquire a basic understanding of the advanced aspects of the specialty of Oral and Maxillofacial Surgery. This includes the process of diagnosis, surgical and adjunctive management of diseases, deformities and malformations of the oral cavity, jaws and associated structures. Moreover, this course also covered principles and techniques of sedation used in oral and maxillofacial surgery.

DENT 6524 Principles of Oral Medicine and Diagnosis Credit: 1

This course expands upon the student doctor's knowledge of oral medicine, diagnosis, and pathology, and its interrelationship at times with systemic disease. Dental management, treatment and the appropriate use of consultations and referrals are emphasized.

DENT 6526 Orthodontics I Credit: 1

Orthodontics I is a course designed to introduce the student to the field of orthodontics. The lecture will introduce the student to basic orthodontic terminology, description, diagnosis, and mechanotherapy. This course will prepare the student for the clinical treatment of patients needing limited tooth movement.

DENT 6526L Orthodontics I Laboratory Credits: 2

This is a course designed to introduce the student to the field of orthodontics. The laboratory enables the student to master the materials of orthodontics in order to complete diagnostic records, to construct fixed and removable appliances, and to be familiar with tooth movement mechanics. This course will prepare the student for clinical treatment of patients needing limited tooth movement.

DENT 6527 Pharmacology and Therapeutics I Credits: 2

An introduction into the mechanisms of action, pharmacodynamics and relevant pharmacokinetics for drugs prescribed and used by patients seen by the dentist. The course is administered through the Blackboard Course Management System and will involve live and/or recorded lectures directed at "mastery learning" of introductory pharmacology where students receive objectives, attend class, and complete reading assignments expected to assist in achieving a high level of mastery.

DENT 6531C Oral Diagnosis Clinical I Credits: 1-2

Clinical application of diagnostic principles. Students will complete a diagnostic competency examination on a selected patient.

DENT 6534 Advanced Prosthodontics Credit: 1

This course reviews advanced principals in Fixed and Removable Prosthodontics. Using evidenced based concepts, information will be presented to aid the student clinician make well informed clinical choices which will help prepare them for the use of prosthodontic techniques in the practice of general dentistry. A variety of materials, devices, and concepts will be presented. Making intelligent choices in the selection and use of these restorative materials and concepts will be a focus.

DENT 6537 Oral Oncology Credits: 0.5

A lecture course on oral oncology will deal with the biologic aspects of cancer; the detection of oral cancer and the different modalities of treatment of cancer; the dental aspects both from surgical reconstruction and prosthetic reconstruction following cancer surgery; and management of the patient prior to, during, and following radiation therapy to the head and neck and during chemotherapy for systemic cancer.

DENT 6538 Orthodontics II Credit: 1

This course will present a variety of topics related to orthodontics, such as: normal development, abnormal occlusal deviations during the developing permanent dentition, diagnosis and treatment planning of orthodontic problems, biomechanical principles in orthodontics, adolescent vs. adult orthodontics, periodontal health during orthodontic treatment, complications associated with orthodontic treatment and controversial aspect of orthodontics. You should also be able to recognize which kind of cases exceed the scope of limited treatment and may require intervention by a specialist.

DENT 6542C Operative Dentistry Clinical I Credits: 1-2

Clinical application of those principles taught in preceding terms.

DENT 6551CR Oral Surgery Clinical Credit: 1

This is a course for application of principles taught in didactic courses and the Oral Surgery Rotations. Oral Surgery Clinical is designed to prepare the dental student with the necessary didactic and clinical skills to properly evaluate patients and provide Oral Surgery care in a safe effective and caring manner and to evaluate competency in two areas: managing medical emergencies and oral surgical skills expected of a general dentist.

DENT 6556 Radiographic Interpretation Credit: 1

This is a comprehensive multidisciplinary course in radiologic interpretation of normal anatomy, anomalies, dental caries, periodontal disease, periapical pathology and infections of the maxilla and mandible.

DENT 6558C Treatment Planning I Credit: 1**DENT 6559 Diagnosis and Management of Orofacial Pain Credit: 1**

Essential conceptual, clinical and technical information and skills necessary in the diagnosis and treatment of Orofacial Pain States. Diagnostic protocols and radiographic procedures and their integration as it relates to painful head and neck conditions are presented in depth. Differential diagnosis and special diagnostic techniques are also addressed. Behavioral factors associated with the development of chronic pain and complicating the management of pain states are identified and discussed.

DENT 6561C Removable Prosthodontics Clinical I Credit: 1

This course requires the clinical application of removable prosthodontics principles. By treating multiple and varied patients needing complete and removable partial dentures, the student should become competent to diagnose and treat the routine and uncomplicated edentulous and partially edentulous patients with removable prostheses.

DENT 6562C Removable Prosthodontics Clinical II Credit: 1

This course reflects the clinical aspects of Removable Prosthodontics. The application of didactic learning and foundational skills is practiced and evaluated. By treating multiple and varied patients needing complete dentures and those needing removable partial dentures, the student should become competent to diagnose and treat the routine and uncomplicated edentulous and partially edentulous patient with removable prostheses.

DENT 6564 Pharmacology and Therapeutics II Credits: 2

This course will provide the background necessary for the dentist to become knowledgeable about the drugs their patients may be taking and their related medical conditions. Lecture topics include the diseases and medical conditions commonly seen in dental patients on an outpatient basis. The course presents the effects, mechanisms of action, dosage forms, and relevant pharmacokinetics for the drugs used in the management of these diseases. The course will cover the important side-effects of precautions of drugs that are pertinent to the dental patient for their safe management.

DENT 6566 Bridge Course Credits: 2

This course is designed as a lecture and clinical course to provide a transition into the clinical phase of the dental curriculum for the third year dental student.

DENT 6591C Professional Development I Credits: 1-2

Clinical application of those principles taught in preceding terms.

DENT 6592C Professional Development II Credits: 1-2

Clinical application of those principles taught in preceding terms.

DENT 6593C Professional Development III Credits: 1-2

Clinical application of those principles taught in preceding terms.

DENT 6595 Introduction To Implant Dentistry Credit: 1

To provide the undergraduate student with a solid background into the role of implant dentistry in their profession. Advances in technique and materials which are responsible for improved predictability will be presented. Emphasis will be on patient selection, treatment planning and basic restorative techniques. The student will be able to initiate uncomplicated dental implant procedures with this information and will be prepared to enter into more advanced continuing education and graduate programs in this subject.

DENT 6600 Review Of Clinical Dentistry Credits: 1-2

A summative review of the basic areas of clinical dentistry.

DENT 6601C Endodontics Clinical Credits: 1-2

Clinical application of principles taught in preceding terms.

DENT 6602 Grand Rounds II Credit: 1

This course is a continuation of Grand Rounds I and its aim is similar to Grand Rounds I: expand on the dental student's basic knowledge of critical review of scientific literature and information literacy. Students will present a Table Clinic at Midwest Dental Conference and prepare a proposal for their senior Grand Rounds presentation.

DENT 6603 Grand Rounds III Credit: 1

The fourth year Grand Round course is an independent study courses designed to develop the evidence-based research skills required to keep abreast of current concepts in dentistry; develop case documentation skills necessary for continued professional development, and develop professional public speaking skills.

DENT 6604 Grand Rounds IV Credit: 1

The fourth year Grand Round course is an independent study courses designed to develop the evidence-based research skills required to keep abreast of current concepts in dentistry; develop case documentation skills necessary for continued professional development, and develop professional public speaking skills.

DENT 6605 Review Of Clinical Dentistry II Credits: 0.5

A review of foundation knowledge for clinical dentistry.

DENT 6606C Pediatric Dentistry Clinical I Credits: 1-2

Clinical application of those principles taught in preceding terms.

DENT 6607C Pediatric Dentistry Clinical II Credits: 1-2

Clinical application of those principles taught in preceding terms.

DENT 6608C Pediatric Dentistry Clinical III Credits: 1-2

Clinical application of those principles taught in preceding terms.

DENT 6609C Comprehensive Patient Care III Credits: 1-10

Third and fourth year dental students will spend the majority of their curriculum time mastering the competencies required of a general dentist. This includes the ability to complete a dental diagnosis and treatment plan, present the case to the patient, implement and evaluate the dental care delivered. Comprehensive patient care courses foster development of skills through daily evaluation in technique, patient management, and diagnostic ability, supplemented by periodic mentor and team faculty evaluation. Semester evaluation will also take into account clinical productivity using a time unit system.

DENT 6610C Comprehensive Patient Care Iv Credits: 1-10

Third and fourth year dental students will spend the majority of their curriculum time mastering the competencies required of a general dentist. This includes the ability to complete a dental diagnosis and treatment plan, present the case to the patient, implement and evaluate the dental care delivered. Comprehensive patient care courses foster development of skill through daily evaluation in technique, patient management, and diagnostic ability, supplemented by periodic mentor and team faculty evaluation. Semester evaluation will also take into account clinical productivity using a time unit system.

DENT 6611C Fixed Prosthodontics Clinical I Credits: 1-2
Clinical application of principles taught in preceding terms.

DENT 6613 Periodontal Treatment Planning Credit: 1
A case-based learning seminar designed to review concepts in Periodontics with emphasis on clinical application.

DENT 6614 Dentistry For The Special Patient Credits: 1-2
The purpose of this course is to acquaint the student with the dental treatment of three populations of patients who you may encounter in your dental career (and often have trouble finding adequate care). They include patients who are developmentally disabled, the elderly, and the medically-compromised. The course will present management techniques for in-office treatment and appropriate referral of those patients best treated in another setting. This course builds upon the skills and knowledge gained in previous courses in many disciplines, to provide an interdisciplinary experience with special patient populations. A required rotation at the Regional Center for the Developmentally Disabled gives practical experience to topics covered in lecture.

DENT 6614C Comprehensive Patient Care V Credits: 1-10
Third and fourth year dental students will spend the majority of their curriculum time mastering the competencies required of a general dentist. This includes the ability to complete a dental diagnosis and treatment plan, present the case to the patient, implement and evaluate the dental care delivered. Comprehensive patient care courses foster development of skill through daily evaluation in technique, patient management, and diagnostic ability, supplemented by periodic mentor and team faculty evaluation. Semester evaluation will also take into account clinical productivity using a time unit system.

DENT 6615 Transitions: Introduction to the Profession & Practice of Dentistry VII Credit: 1
This is the seventh course in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course continues with the strategic planning framework and focuses on the development of a dental practice business plan.

DENT 6616 Transitions: Introduction to the Profession and Practice of Dentistry VIII Credits: 0.5
This course is a continuation of a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course allows fourth year dental students to apply concepts and principles presented in the previous practice management courses in the Innovation Center and in small group seminars. A series of small group seminars will allow for in-depth discussion of professional issues.

DENT 6617 Pediatric Dentistry Seminar Credits: 0.5
This course is designed to allow fourth year students to build on the concepts presented in DENT 6431. Using a seminar format, students will review pediatric dentistry concepts with emphasis on clinical application.

DENT 6620 Civic Engagement Credits: 0.25
Service learning experiences expose students with different opportunities to engage the community. Students can choose from approved experiences and participate based on their interest and skill level. Students will research, participate, and reflect on their experiences.

DENT 6621C Periodontics Clinical II Credits: 1-2
Clinical application of those principles taught in preceding terms.

DENT 6625 Oral Surgery Clinical II Credit: 1
Oral Surgery II is a continuation of Oral Surgery I and is designed to certify students' competency in oral surgery, including managing patient pain and anxiety, i.e. nitrous oxide-oxygen sedation

DENT 6626 Clinical Treatment Planning Credit: 1
This course builds on the didactic courses and clinical experiences in treatment planning. Each student will demonstrate competency in comprehensive treatment planning to earn credit in the course.

DENT 6633 Introduction To Dental Public Health Credit: 1
Discussion of contemporary issues in community health and community oral health with emphasis on preparing students for their roles as professional members of their communities.

DENT 6635 Community-Based Dental Education Credits: 3
Externship rotations expose students to alternative methods of dental care delivery and to populations at high risk for dental disease. Students are placed in an existing network of community health centers and Federally-Qualified Health Centers. Students serve on multi-disciplinary teams that meet primary health care needs of large segments of underserved populations

DENT 6636C Oral Radiology Clinical Credit: 1
Clinical application of those principles taught in preceding terms with emphasis on use of a variety of film holding devices. Radiographic quality assurance and darkroom maintenance will be reviewed during this course.

DENT 6642C Operative Dentistry Clinical II Credits: 1-2
Clinical application of those principles taught in preceding terms.

DENT 6650 Applied Ethics Credits: 0.5
Four or five case studies will be used during seminars. Basic ethical principles from DENT 6306 will be applied to the case studies. Two of the cases will involve ethical issues, and one of the cases will add community dentistry issues. Other cases will be used as generated or suggested by each seminar group.

DENT 6656C Orthodontic Clinical I Credit: 1

The purpose of this course is to allow each student to develop the skills, knowledge and values to diagnose potential or actual malocclusions and manage patient who need orthodontic intervention.

DENT 6690 Independent Study in Dentistry Credits: 1-6

This course provides students the opportunity to undertake independent study projects in specific areas of dentistry. Course may be repeated.

DENT 6691C Professional Development IV Credits: 1-3

Clinical application of those principles taught in preceding terms.

DENT 6692C Professional Development V Credits: 1-2

Clinical application of those principles taught in preceding terms.

Economics (ECON)

Courses

ECON 5501 Advanced Macroeconomic Analysis Credits: 3

Basic theoretical concepts of national income and statistical tools utilized in its measurement. Aggregate demand and supply as problems of economic dynamics. The course includes examination of the primary competing theoretical approaches: neoclassical, Keynesian, new classical, real business cycle, new Keynesian supply side, Austrian, and Post Keynesian. Topics covered include growth, money, labor markets consumption, investment, expectations formation, role of time and uncertainty, equilibrium and disequilibrium analysis, exchanges rates, international trade. and optimal currency areas. Policy implications of the various macroeconomic theories are explored.

Prerequisites: ECON 301 and ECON 302.

ECON 5502 Advanced Microeconomic Analysis Credits: 3

The course first provides a critical survey of neoclassical microeconomic theory, including methodology, demand theory, production and cost theory, theory of competitive and non-competitive markets, distribution, welfare, and general equilibrium. It then introduces heterodox microeconomic theory, covering its historical origins, methodology, structural organization of economic activity, in-put-output models, flow of funds, agency and institutions, and the business enterprise.

Prerequisites: ECON 302, ECON 5521.

ECON 5503 Advanced Heterodox Economics Credits: 3

The course examines various theoretical approaches and topics, both historically and currently, that constitute heterodox economics. In particular the course deals in depth with the mathematical and economic properties of heterodox production and price models. After reviewing the mathematics of linear production-price models, the module will examine Leontief, Sraffian, and other heterodox price and production models.

Prerequisites: ECON 301, ECON 302, and MATH 210.

ECON 5504R American Economic History Since 1865 Credits: 3

The course deals with the emergence of Industrial America since 1865. It will cover the rise to dominance of the large modern corporation, with the problem of economic and social instability and stability, with the rise of trade associations, cartels, and government regulation in an unstable economy, and with the evolution of American economic policy and national economic planning.

ECON 5504RR American Labor History Credits: 3

This course examines the history of work and the working class in the U.S. from 1750 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.

Prerequisites: Graduate standing.

ECON 5505 Advanced Comparative Economic Systems Credits: 3

Contents vary depending upon the instructor's design for the course.

Prerequisites: ECON 301, ECON 302.

ECON 5506 Advanced History Of Economic Thought Credits: 3

This seminar uses issues raised in the reading of two 'classic' primary texts, Adam Smith's *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776) and John Maynard Keynes's *The General Theory of Employment, Interest and Money* (1936), as points of departure for the examination of a series of topics in the history and development of economics and alternative paradigms in the discipline. These investigations will lead us to the study of a number of other seminal articles, representing alternative approaches in the field. Topics include competition, accumulation, path dependence and endogenous technical change, cumulative causation, the laws of return, money and credit, capital theory, and more.

Prerequisites: ECON 301, ECON 302.

ECON 5508 Controversial Issues In Recent Economic Literature Credits: 3

This course will focus on theoretical and policy-oriented controversies that have occurred in economic in the 20th century. The type of controversies covered include, but are not restricted to, money, unemployment, business cycles and economic growth, pricing and administered prices, capital controversy, labor theory of value controversy, and free trade vs. protectionism. While the course concentrates on recent debates, it identifies the origins of the modern disputes in earlier controversies. For each controversy, its real world importance and policy implications are discussed.

ECON 5511 Geographic Information Systems (GIS) for Urban Economic Development Credits: 3

An advanced quantitative methods course featuring the application of Geographic Information Systems (GIS) to the problems of urban economic development. Surveys federal, state, and local geospatial and attribute data resources, including Census Bureau TIGER files, and provides training in geodatabase construction and management. Geospatial processing, editing, and address geocoding are also covered. Formal analytical methods (cartographic aesthetics and visualization, spatial analysis, exploratory data analysis, network analysis, crime analysis, etc.) are all applied in the context of the problematics of urban and regional economic development.

Prerequisites: GEOG 203 or UPD 203.

ECON 5512 Advanced Economic Development Credits: 3

Contents vary depending upon the instructor's design.

Prerequisites: ECON 301, ECON 302.

ECON 5513 Economic Cycles And Growth Credits: 3

A critical review and evaluation of economic analysis and the forces of economic fluctuation and growth; and analysis of statics, dynamics, monopolistic competition, the role of the interrelationships of the market structure and other institutional forces as they relate to fluctuations and growth. An emphasis will be made on the critical evaluation of recent literature in the field of economic analysis related to fluctuations, growth, statics, dynamics, market structure and the reinterpretation of economic fluctuations, growth, forecasting and overall economic behavior. An analysis of the technological, monetary, and fiscal policy implied by economic trends and growth will also be discussed.

Prerequisites: ECON 5501.

ECON 5516L Law And Economics Credits: 3

This course will examine the use of economic principles in the analysis and applications of public and private law. Emphasis will be given to the efficiencies of laws in meeting social objectives, how laws can be modified to become more economically efficient, and the uses of economics in the actual practice of the law. Issues covered will include proofs of liability in antitrust, contracts and employment law using statistical and economic analysis, and the calculation of economic damages in commercial, employment and personal injury/death litigation.. Graduate students will be assigned a specific research paper.

Prerequisites: ECON 302.

ECON 5521 Mathematical Economics Credits: 3

An introduction to mathematical methods as applied to the questions addressed by economists. The principal methods to be applied are matrix algebra and differential calculus in the context of optimization. Other topics may include integral calculus, differential equations, difference equations or linear and nonlinear programming.

Prerequisites: ECON 301, ECON 302 and MATH 110.

ECON 5525 Econometric Methods Credits: 3

Continuation of ECON 425. The major problems encountered in building and testing economic models are treated and alternative solutions to these problems are discussed. Major topics include corrections for heteroscedasticity and autocorrelation, maximum likelihood and BLUE estimation, simultaneous equations methods, probit and logit analysis and distributed lags. Other topics may include ARIMA or other series analytic methods, three stage least squares and dynamic multipliers or simulation. Work with econometric software is stressed. No programming experience necessary.

Prerequisites: ECON 425 and ECON 5521.

ECON 5529 Readings In Quantitative Economics Credits: 3

Readings from the economic literature which stress advanced mathematical or econometric tools. A general subject matter is selected by the student with the consent of the instructor.

Prerequisites: ECON 5521, ECON 5525.

ECON 5531 Monetary Theory And Policy Credits: 3

A study of the nature and functions of money and the financial system, with emphasis on monetary theory and its application to current banking and financial problems; recent contributions to monetary theory and current literature.

Prerequisites: ECON 301.

ECON 5535 Theory Of Public Finance Credits: 3

An inquiry into the scope and nature of economics with emphasis on the nature of the public sector including a brief study of welfare criteria along with the study of ability to pay, benefit theory of taxation, and expenditure theories.

ECON 5537 State And Local Government Finance Credits: 3

This course investigates the role, problems and relative importance of municipal governments in the United States. Such areas as the demand for public services, tax and expenditure policies, and intergovernmental fiscal relations will be explored in detail. Case studies of state and local governments will be introduced to emphasize the problems and proposed solutions arising in modern municipal governments.

Prerequisites: ECON 302.

ECON 5538 Economic Policy Credits: 3

Analysis of the confluence of political and economic behavior, the economics of collective action.

Prerequisites: ECON 301 and ECON 302.

ECON 5540 Advanced International Trade Credits: 3

This course emphasizes the global allocation of resources and distribution of income under various commodity market conditions and government trade policies. Major topics include: comparative advantage; terms of trade; the distribution of gains and losses from trade; perfect vs. imperfect competition; tariffs, quotas and other barriers to trade; exchange rates and the balance of payments; preferential trading arrangements; international factor movements and multinational corporations.

Prerequisites: ECON 302; graduate standing.

ECON 5542 Advanced International Finance Credits: 3

This course emphasizes the global activity and balance of payments implications of government taxation, expenditure and monetary policies under various capital market conditions. Major topics include: exchange rates and the balance of payments; national income determination in an open economy; integrated and non-integrated capital markets; economic growth, stabilization policies and the quest for global economic stability.

ECON 5548 Advanced Socialist Economic Systems Credits: 3

The course will deal with the theoretical analysis of socialist economic theory, Marxian and non-Marxian, and/or of socialist economics systems such as those of Eastern Europe, the Chinese mainland and elsewhere. The emphasis of the course will vary depending upon the instructor's design for the course.

Prerequisites: ECON 301 and ECON 302.

ECON 5550 Regional Economics Credits: 3

The economics of spatial relations, emphasizing basic location and land utilization theory and the role of transport will be considered at the micro-level. Keynesian and neoclassical growth theories and contemporary policy approaches to regional growth and decline are analyzed.

Prerequisites: ECON 302.

ECON 5551 Advanced Institutional Theory Credits: 3

Evolution, organization and allocation functions of the modern industrial economy. Contributions and limitations of conventional economic concepts. Philosophical and theoretical interpretations of the economy in light of modern developments in philosophy and social science.

Prerequisites: ECON 451.

ECON 5558 Advanced Urban Economics Credits: 3

The study of the city as a dynamic system of interrelated and interdependent markets. Significant markets in cities include land, housing, labor, transportation and public services.

ECON 5560 Industrial Organization Credits: 3

The structure, conduct and performance of American industry. Historical evolution of American industry; alternative industrial systems, antitrust policies and their alternatives. Technological change and industrial performance.

Prerequisites: ECON 301, ECON 302.

ECON 5575 Labor Economics, Institutions and Policies Credits: 3

This course focuses on the economic analysis of labor market phenomena in the context of historical-institutional development and on labor market policies. This course is offered winter semester only.

Prerequisites: ECON 201 and ECON 202.

ECON 5583 Racial Inequality & Public Policy Credits: 3

This course will provoke open debate and discourse about public policy responses to racial inequality. The emphasis is on stimulating participants to think about and to analyze critically the range of strategies offered for reducing racism and racial economic inequality.

ECON 5587 Human Resource Economics Credits: 3

An analysis of the factors determining the productivity of human resource: education, nutrition, job training and work environment. An analysis of work patterns, wage patterns, and the impact of automation. Graduate students will be assigned a specific research paper on a topic to be decided with the instructor.

Prerequisites: ECON 302.

ECON 5588 Advanced Political Economy Credits: 3

This course gives students a comprehensive introduction to the history and modern practice of political economy, with particular emphasis on Marxian and Classical political economy. Topics include: value theory, class theory, economic reproduction, economic crisis, the theory of history, and methodology.

ECON 5589 Graduate Seminar In Labor Economics Credits: 3

Content of seminar will vary from semester to semester depending upon the instructor's design for the course.

ECON 5590 Special Topics Credits: 1-3

Selected topics in theoretical and applied economics.

ECON 5590A Special Topics Credits: 1-3

ECON 5590B Special Topics Credits: 1-3

ECON 5590C Special Topics Credits: 1-3

ECON 5591 Research And Planning Seminar Credits: 3

The objective of this research seminar is to apply the quantitative techniques and theoretical constructs of economics to an urban-regional problem. Students are required to formulate and evaluate present economic models, and then complete a research project.

Prerequisites: ECON 5502 and ECON 5521.

ECON 5599 Research And Thesis Credits: 1-6

Directed specialized research.

ECON 5601 Colloquium In Advanced Macroeconomics Credits: 3

The course will deal with analyses of topics in Macroeconomic analysis and Macroeconomic policies and investigation of current literature in divers areas of Macroeconomic analysis. A written report(s) will be made upon the selected assignment(s).

Prerequisites: ECON 5501.

ECON 5602 Colloquium In Advanced Microeconomics Credits: 3

As a continuation of Economics 502, this course deals with the business enterprises-including production, costs, pricing, and investment-markets, market demand, market governance, general price-quantity models of the economy, microfoundations of the heterodox macroeconomics, and social welfare.

Prerequisites: ECON 5502.

ECON 5606 Colloquium on Advanced History of Economic Thought Credits: 3

The course examines advanced topics in history of economic thought.

Prerequisites: ECON 5506.

ECON 5608 Topics In Economic Theory Credits: 3

This course deals with advanced topics in Institutionalism, Post Keynesian, and other heterodox economic theory. May be repeated with different topic.

ECON 5616 History Of Economics In The 20th Century Credits: 3

The history of 20th century economics is concerned with a number of interdependent issues, including the institutional organization of economics at universities; the historical development of the structures and social networks that make-up the economic paradigms of neoclassical economics, Marxian economics, Post Keynesian economics, and other heterodox economics; and the role of institutional and state power to maintain the dominance of the neoclassical paradigm. The aim of the course is to introduce students to this institutional/organizational history.

ECON 5625 Colloquium In Econometrics Credits: 3

This course treats advanced topics in econometrics such as non-linear estimation techniques, model development, simultaneous equation estimation techniques, and simulation. Topics are developed from theoretical and application perspectives. Familiarity with personal computer is necessary.

Prerequisites: ECON 5501, ECON 5502, ECON 5521, ECON 5525, or equivalents.

ECON 5631 Colloquium on Monetary Theory and Policy Credits: 3

This course explores advanced monetary theory and policy, examining recent debates and current research practices, as well as classic articles on monetary theory and policy.

Prerequisites: ECON 5601 or ECON 5501 and ECON 5531.

ECON 5645 Financial Macroeconomics Credits: 3

This course will introduce the student to the central role of financial analysis in macroeconomic analysis and to theories of macroeconomics instability based on the integration of finance and macroeconomics. It will examine modern finance theory and modern approaches to financial analysis, paying particular attention to the contributions made by Fisher and Keynes.

ECON 5660 Evolution Of American Industrial Society Credits: 3

Drawing on economic and organizational theory, the course will concentrate on the evolution of American industrial technology, the American business enterprise, and the organization of American industries and markets since 1870.

ECON 5665 Colloquium In Advanced Health Economics Credits: 3

This course is designed as a seminar with a special emphasis on analysis of econometric methods to assess issues in health care. The topics are developed from a theoretical and applied perspective. Familiarity with personal computers is necessary. Special emphasis will be given in the selection of course topics to the interests and backgrounds of participants.

Prerequisites: ECON 5521, ECON 5525, ECON 5565.

ECON 5680 Teaching Methods And Course Design Credits: 3

This course is designed to prepare students for the challenge of teaching economics. Students will be taught how to write a syllabus; how to prepare for class; how to plan learning activities; how to become skillful in leading discussion; how to present an effective lecture; how to test and assess student learning; how to develop effective group projects; how to motivate their students for lifelong learning. Students will be required to design a course to be taught at the 200-, 300 or 400-level. The student will prepare a complete set of course materials, including a lecture outline, a list of require readings, useful handouts, course materials, including a lecture outline, a list of require readings, useful handouts, course assignments, exams, etc. The course should incorporate an interdisciplinary approach and should emphasize an "active learning" component, designed to promote a "rich learning experience." The student will work closely with an appropriate member of the faculty.

Prerequisites: Must have completed/passed Comprehensive Exams.

ECON 5688 Colloquium On Political Economy Credits: 3

This course is designed as a seminar and will take into account theory and policy analysis from alternative perspectives. The topics covered will include philosophical foundations of contemporary theory and policy, the organization of production information and finance, resource and environment, wealth and income distribution, public and private policy and planning. Stress is placed on contemporary research and students are expected to become involved in research projects.

ECON 5690 Special Doctoral Readings In Economics Credits: 1-3

Special research topics in Economics at the Doctoral level.

ECON 5699 Doctoral Dissertation Credits: 1-12

Directed selected research for Economics in the interdisciplinary doctoral program.

ECON 5899 Required Graduate Enrollment Credit: 1

Education (EDUC)

Courses

EDUC 5428 Cultural Diversity And American Education Credits: 3

An examination of educational needs and strategies in a culturally diverse society based on a study of several major ethnic and nationality groups in America from historical, anthropological and sociological perspectives. This course may be team-taught.

EDUC 54896CI Special Topics Credits: 1-6

Special Topics

EDUC 5489AR Special Topics Credits: 1-6

Special Topics

EDUC 5489CA Special Topics Credits: 1-3

Special Topics

EDUC 5489LI Special Topics Credits: 1-6

Special Topics

EDUC 5489LM Special Topics Credits: 1-6

Special Topics

EDUC 5489LT Special Topics Credits: 1-6

Special Topics

EDUC 5489MS Special Topics Credits: 1-6

Special Topics

EDUC 5552 Advanced Diagnostic And Treatment Procedures In Reading Credits: 3

Significant aspects of reading disability; diagnostic testing; case report writing; interpretation of test data; implications of test data for recommendations.

Prerequisites: EDRD 5510.

Co-requisites: EDRD 5520.

EDUC 5589AA Special Topics in Education Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC 5589AQ Special Topics In Education Credits: 1-6**EDUC 5589B Special Topics In Education Credits: 1-6****EDUC 5589EP Special Topics In Education Credits: 1-6**

Special Topics In Education

EDUC 5589ES Special Topics in Education Credits: 1-6

EDUC 5589IT Special Topics in Education Credits: 1-6

EDUC 5589LR Special Topics in Education Credits: 1-6

EDUC 5589MS Special Topics in Education Credits: 1-6

EDUC 5589MT Special Topics in Education Credits: 1-6

EDUC 5589Q Special Topics In Education Credits: 1-6

EDUC 5589R Special Topics in Education Credits: 1-6

EDUC 5589RD Special Topics in Education Credits: 1-6

EDUC 5589RH Special Topics In Education Credits: 1-6

EDUC 5589TL Special Topics in Education Credits: 1-6

EDUC 5589WP Special Topics in Education Credits: 1-6

EDUC 5598 Individual Studies Credits: 1-6

Review of the research trends relative to selected problems in education. By prior arrangement with instructor.

EDUC 5598A Individual Studies In Administration Credits: 1-6

EDUC 5598B Individual Studies In Mathematics Credits: 1-6

EDUC 5598C Individual Studies Curriculum Credits: 1-6

EDUC 5598H Individual Studies Higher Education Credits: 1-6

EDUC 5598J Individual Studies Philosophy Of Education Credits: 1-6

EDUC 5598P Individual Studies Educational Psychology Credits: 1-6

EDUC 5598Q Individual Studies Early Childhood Education Credits: 1-6

EDUC 5598R Individual Studies Education Reading Credits: 1-6

EDUC 5598S Individual Studies Research Credits: 1-6

EDUC 5598SA Individual Studies Research Credits: 1-6

EDUC 5598U Individual Studies History Of Education Credits: 1-6

EDUC 5598X Individual Studies Sociological Foundations Credits: 1-6

EDUC 5599 Research And Thesis Credits: 1-9

Research and Thesis.

EDUC 5621 Practicum In Curriculum And Instruction Credits: 3-6

A field experience which provides an opportunity for the application of current research in the area of curriculum and instruction to an educational setting.

EDUC 5640 Apprenticeship And Conference In College Training Credits: 2-5

Apprenticeship experience in preparing, conducting, and evaluating college teaching under the direction of and in conference with supervising professors. Some attention to student personnel and administration in higher education.

EDUC 5690 Special Problems Credits: 1-6

Individual studies; thesis exploration, special reading.

EDUC 5695 Doctoral Dissertation: Reading Education Credits: 1-16

Doctoral Dissertation: Reading Education

EDUC 5696 Dissertation Administration And Community Leadership Credits: 1-16

Dissertation Administration And Community Leadership

EDUC 5697 Dissertation Curriculum And Instruction Credits: 1-16

Dissertation Curriculum And Instruction

EDUC 5698 Dissertation General Education Credits: 1-16

Dissertation General Education

EDUC 5899 Required Graduate Enrollment Credit: 1

Electrical and Computer Engineering (E&C-ENGR)

Courses

E&C-ENGR 5316 Artificial Neural and Adaptive Systems Credits: 3

This graduate course is a hands-on introduction to theory and applications of neurocomputing, including: classification, function approximation, supervised and unsupervised learning, time series analysis, and adaptive filtering using different feed-forward and recurrent artificial neural networks.

Prerequisites: E&C-ENGR 341R (or COMP-SCI 5590CI).

E&C-ENGR 5318 Dynamical Systems and Complex Networks Credits: 3

An overview of classical dynamical systems, and its application in different fields such as Electrical Engineering (nonlinear circuits), Network Sciences, Epidemiology, and Ecology will be discussed. Phenomena such as chaos, bifurcation, and limit cycles will be examined. This course will also introduce and develop the mathematical theory of Complex Networks with applications to network-driven phenomena in the Internet, search engines, social networks, the World Wide Web, information and biological networks; spectral graph theory; models of networks including random graphs, preferential attachment models, and the small-world models.

E&C-ENGR 5501AP Special Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 5501NN Special Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 5512 Microwave Remote Sensing Credits: 3

Basic principles of remote sensing including scattering, absorption, transmission, and reflection of microwave energy. Basic radiative transfer theory. Microwave remote sensing systems including altimeters, scatterometers, radiometers, synthetic-aperture systems. Principle applications of remote sensing systems including imaging, atmospheric sounding, oceanographic monitoring, ice-sheet dynamics, etc.

Prerequisites: E&C-ENGR 414.

E&C-ENGR 5513 Advanced Principles of RF/Microwave Engineering Credits: 3

General aspects of TE, TM and TEM mode propagation in waveguides; circular waveguides; optical waveguides; wave propagation on dielectric backed conductors; wire antennas equivalence principle and aperture antennas; antenna impedance and mutual coupling in arrays; array beamforming; scattering matrix representations; impedance matching; resonators; filters, couplers and power-dividers; microstriplines and striplines; r.f. propagation in wireless and radar systems; conformal mapping techniques and applications (optional). Recommended preparation: Knowledge in Engineering Computation, Technical Writing Skills.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380, E&C-ENGR 381.

E&C-ENGR 5516 Computer Networks Credits: 3

Concepts and goals of computer networking, structure of computer networks, OSI model and layers, network control, analysis, design and management, data communication techniques including fiber optics, WAN, MAN and LAN architecture and protocols, internetworking, case studies and hand-on studying the performance by analytic modeling and computer simulation.

E&C-ENGR 5518 Advanced Radar Systems & Techniques Credits: 3

Radar equation; MTI, Pulsed Doppler and Tracking Radars; Detection of and information from Radar Signals; Radar Antennas, Transmitters and Receivers; Radar Propagation and clutter.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380.

E&C-ENGR 5528 Advanced Embedded Systems Credits: 3

This course examines the hardware/software aspects associated with developing microcontroller-based computer systems. The students learn about the architecture and assembly language for popular microcontrollers and how to take advantage of a variety of input/output options that include binary ports, A/D and D/A converters, communication ports, and interfacing techniques for various applications. Graduate students are required to do Embedded Systems lab experiments.

Prerequisites: E&C-ENGR 426, E&C-ENGR 427.

E&C-ENGR 5530 Digital Electronics Credits: 3

Electronic hardware aspects of digital systems. Includes state-of-the-art information on integrated-circuit logic devices and their applications.

E&C-ENGR 5532 Biomedical Instrumentation Credits: 3

Biomedical objectives, physical and engineering principles; optimal equipment design and actual performance of biomedical instrumentation; considers practical instrumentation problem solutions and unsolved problems.

Prerequisites: E&C-ENGR 330.

E&C-ENGR 5533 Analog Integrated Circuit Design Credits: 3

This course will cover the analysis and design of analog and mixed signal integrated circuits, with an emphasis on design principles for realizing state-of-the-art analog circuits. The course will provide the critical concepts by giving physical and intuitive explanations in addition to the quantitative analysis of important analog building block circuits. First-order hand calculations and extensive computer simulations are utilized for performance evaluation and circuit design. Students will be required to complete a final project which will involve the design at the layout level of an analog circuit. Successful designs will be fabricated through the MOSIS Educational Service.

Prerequisites: E&C-ENGR 276, E&C-ENGR 330.

E&C-ENGR 5534 Computer Arithmetic Credits: 3

Computer arithmetic is a sub field of digital computer organization. It deals with the hardware realization of arithmetic functions to support various computer architectures as well as with arithmetic algorithms for firmware/software implementation. A major thrust of digital computer arithmetic is the design of hardware algorithms and circuits to enhance the speed of various numeric operations. Verilog HDL is used as tool to simulate the algorithms and circuits.

Prerequisites: E&C-ENGR 226, E&C-ENGR 5535.

E&C-ENGR 5535 Hdl-Based Digital Systems Design Credits: 3

This course covers hardware design techniques using a Hardware Description Language (HDL). It also discusses several digital system design methodologies, including structural specifications of hardware, HDL-based simulations and testbenches. Courses focus on the synthesis methodologies for use-defined primitives (UPD), data types, operators, Verilog constructs multiplexed datapaths, buses, bus drivers, FSMs, assignments, case, functions, tasks, named events and rapid prototyping techniques with Verilog HDL, ASICs and FPGAs.

Prerequisites: E&C-ENGR 226.

E&C-ENGR 5536 Power Electronics II Credits: 3

Circuit concepts and analysis techniques for transistor switching regulators, thyristor choppers, transistor inverters, self-commutated thyristor inverters and cycloconverters.

Prerequisites: E&C-ENGR 436.

E&C-ENGR 5537 Mixed-Signal Integrated Circuit Design Credits: 3

Modern integrated circuit design often requires the integration of analog and digital circuits on the same chip. This integration provides numerous advantages over purely analog or digital approaches. This course will cover the analysis and design of mixed-signal integrated circuits and will address the challenges of having both analog and digital circuits on the same substrate. Important mixed-signal circuits such as data converters and filters will be studied in detail.

Prerequisites: E&C-ENGR 5533.

E&C-ENGR 5542 Introduction to VLSI Design Credits: 3

With a focus on CMOS Digital technology this course covers the basic concepts of integrated circuits, various methods of designing VLSI circuits, and techniques to analyze performance metrics (speed, area, power and noise). Clocking, interconnect and scaling issues of integrated circuit will also be discussed. It will cover device, interconnect and circuit level implementation issues of both logic and memory circuits. To familiarize students with the realities of design complexities and layout environment they will get exposure to VLSI CAD tools in the following levels - schematic, layout, extraction and circuit simulation through the labs and projects.

E&C-ENGR 5556 Advanced Instrumentation and Control Credits: 3

The instrumentation and control of industrial processes and systems. Introduction to Programmable Logic Controllers. Simulation modeling of various systems.

Prerequisites: E&C-ENGR 358 (or MEC-ENGR 415).

E&C-ENGR 5557 Fundamentals of Solar Photovoltaic Cells Credits: 3

The science and engineering of solar cell/solar photovoltaic (PV) spans several disciplines namely physics, chemistry, electronic and electrical engineering. Even though solar cell related researches are carried out in those traditional disciplines but it is not widely taught as a comprehensive course. This course highlights the fundamental science and engineering of solar PV devices, solar energy conversion as well as solar cell manufacturing issues. It covers from basic to modern solar PV devices, including typical solar cell materials, basic device physics, ideal and non-ideal models, device parameters and design, and device fabrication.

E&C-ENGR 5558 Automatic Control System Design Credits: 3

Techniques for feedback system design and analysis; computational aids, compensator design and examples, state variable methods, non-linear systems, and sampled-data control systems.

Prerequisites: E&C-ENGR 226, E&C-ENGR 358.

E&C-ENGR 5559 Introduction to Photovoltaic Systems Credits: 3

The course presents an updated background of world energy production and consumption, a summary of the solar spectrum, how to locate the sun and how to optimize the capture of its energy, as well as the various components that are used in PV systems. Some section of the course has also been added to explain why certain photovoltaic (PV) designs are done in certain ways, as well as how the design process is implemented. Economic and environmental issues as PV design criteria are discussed along with the most recently available technology and design and installation practice.

E&C-ENGR 5560 Electric Power Distribution Systems Credits: 3

Operation and design of utility and industrial distribution systems including distribution system planning; load characteristics; application of distribution transformers; design of subtransmission lines, distribution substations, primary systems, secondary systems, Smart Grid; application of capacitors; voltage regulation and reliability.

Prerequisites: E&C-ENGR 466.

E&C-ENGR 5563 Sustainable Energy System Engineering Credits: 3

This course focuses on understanding the theory and application of emerging energy technologies, including solar, wind, biomass, oceanic, geothermal, hydropower, fuel cell (hydrogen), nuclear, and other more exotic energy sources. A premise of the course is that a sustainable energy technology must both be technically feasible and economically viable. We consequently investigate the above energy technologies and the technological promise, progress, and application of each energy source, as well as its economic opportunities and challenges. Renewable energy sources will be highlighted with a focus on projections for a sustainable energy future.

E&C-ENGR 5565 Auxiliary Electric System Design Credits: 3

This course provides design, operation, contingency analysis and black start requirements of an Auxiliary Electric System (AES) for a coal fired power plant using industry standards (IEEE-666, NEMA MG-1, ANSI C57 and C37 as well as relevant IEC).

Prerequisites: E&C-ENGR 466 or Department Approval.

E&C-ENGR 5567 Power Systems II Credits: 3

This course covers power system matrices, power flow analysis, Gauss-Seidel and Newton-Raphson techniques, fast-decoupled load flow, economic dispatch, transient stability and operation, and power system control.

Prerequisites: E&C-ENGR 358, E&C-ENGR 466.

E&C-ENGR 5568 Economics of Power Systems Credits: 3

Transmission loss formula coefficients, incremental costs and losses, economic scheduling of generation, and applications.

Prerequisites: E&C-ENGR 466, E&C-ENGR 467.

E&C-ENGR 5569 Reliability of Electric Power Systems Credits: 3

Development and use of mathematical models for the calculation and estimation of various measures of reliability in electric power systems, Reliability restoration times and cost assessment of generation, transmission, distribution and composite systems are analyzed.

Prerequisites: COMP-SCI 394R.

E&C-ENGR 5570 Principles of Digital Communication Systems Credits: 3

Principles of random processes, information sources and source coding, modulation and demodulation, block and convolutional error control coding, and equalization.

Prerequisites: COMP-SCI 394R, E&C-ENGR 380.

E&C-ENGR 5572 Antennas & Propagation For Wireless Systems Credits: 3

This course introduces the mathematical aspects of the basic antenna parameters such as vector potential, gain, directivity, impedance, radiation patterns, and develops a comprehensive theory of antenna arrays including the effects of mutual coupling. In-depth modeling studies for wire, aperture and microstrip antennas, is presented; diffraction of plane electromagnetic (TE and TM) waves by perfectly conducting half-planes and wedges- applications to site-specific propagation path modeling in wireless systems.

Prerequisites: E&C-ENGR 341R, E&C-ENGR 412.

E&C-ENGR 5573 Advanced Electric Power Lab Credits: 3

Advanced applications of concepts experienced in Generating Plants, Substations and Power Plants of fundamentals and concepts of power systems to practical power plan and industrial applications. Operational limitations of all components of power system equipment. Single and Three Phase Circuits, Generators/Alternators, Transformers, Motors, and specialty items (Coronal mass Ejection, Ferroresonance, System Protection).

Prerequisites: E&C-ENGR 466 and Consent of the Department.

E&C-ENGR 5577 Wireless Communications Credits: 3

Principles of the design and analysis of wireless communications, Study of propagation mechanisms, statistical characterization of wireless channels, diversity and MIMO, spread spectrum and CDMA, Orthogonal Frequency Division Multiplexing (OFDM).

Prerequisites: COMP-SCI 394R.

E&C-ENGR 5578 Multimedia Communication Credits: 3

Visual communication is dominating the Internet and mobile networks. This class covers topics on video signal processing, modeling, compression, and communication. Includes information theory foundations on source coding, lossless coding schemes, video coding framework, as well as the current status of video coding standards and multimedia communication systems.

E&C-ENGR 5579 Digital Signal Processing in Telecommunications Credits: 3

Applications of digital signal processing in telecommunications systems; oversampling and quantization, Delta-Sigma modulation, linear predictive speech coding, adaptive filtering, echo canceller, adaptive receivers and equalizers for wireless communication, digital cellular, CDMA.

Prerequisites: E&C-ENGR 474, E&C-ENGR 480.

E&C-ENGR 5580 Digital Signal Processing Credits: 3

Analysis and representation of discrete-time signals and systems including a discussion of discrete-time convolution, difference equations, the z-transform and the discrete Fourier transform. Similarities with and distinctions between discrete-time and continuous-time signals and systems. Digital network structures for implementation of both recursive (infinite impulse response) and nonrecursive (finite impulse response) digital filters. FFT (Fast Fourier Transform) algorithm for computation of the discrete Fourier transform. Graduate students will be expected to successfully complete a number of additional projects as compared with E&C-ENGR 480.

Prerequisites: E&C-ENGR 380.

E&C-ENGR 5582 Computer Vision Credits: 3

The image is an essential form of information representation and communication in modern society. This course focuses on topics of computer vision, teaching computer how to understand images. Topics include image formation, color and texture features, key points detection, aggregation, subspace methods in image modeling, and deep learning image classification, with many applications in photography, media and entertainment, education, defense and medicine.

E&C-ENGR 5584 Advanced Digital Image Processing Credits: 3

Fundamentals of applied grayscale digital image processing, image sensing and acquisition and quantization, basic set and discrete convolution operations with images, intensity transformations and spatial domain filtering via convolutional masks (smoothing, Laplacian and gradient masks), frequency domain filtering via the two-dimensional discrete transform, two-dimensional sampling and Nyquist theory, frequency domain filtering using lowpass/highpass, rectangular, round, Gaussian and Butterworth filters, image restoration using noise filtering via mean order-statistic and adaptive filters, bandpass, band reject and notch filters, Weiner filters, image deblurring filters, computed aided tomography (i.e. CAT scans), morphological image processing and image segmentation.

Prerequisites: E&C-ENGR 380 and prior experience with MATLAB.

E&C-ENGR 5586 Pattern Recognition Credits: 3

Decision functions, distance measures, minimum distance classifiers, hard clustering methods, fuzzy clustering methods, statistical pattern recognition methods, Bayesian classifiers, error probabilities, estimation of density functions, perceptrons, least-mean-square algorithms, feature selection, dimensionality reduction and syntactic pattern recognition.

Prerequisites: COMP-SCI 394R (or STAT 436), a course in high-level programming language.

E&C-ENGR 5588 Communication Theory I Credits: 3

Generalized communication systems, signal processing, signals as random processes, optimum receivers.

Prerequisites: COMP-SCI 394R, a statistics course.

E&C-ENGR 5590 Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590AC Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590AD Special Topics in Electrical and Computer Engineering Credits: 1-4
Special Topics in Electrical and Computer Engineering

E&C-ENGR 5590AE Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590AN Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590AR Special Topics in Electrical and Computer Engineering Credits: 1-4
Special Topics in Electrical and Computer Engineering

E&C-ENGR 5590PD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PG Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PL Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PL2 Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PL3 Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PQ Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PR Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PS Special Topics in Electrical and Computer Engineering Credits: 1-4

Special Topics in Electrical and Computer Engineering.

E&C-ENGR 5590PV Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590RD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590RE Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590RF Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590SC Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590SD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590SI Special Topics In Electrical And Computer Engineering Credits: 1-4

Special Topics In Electrical And Computer Engineering

E&C-ENGR 5590SL Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590SP Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590T Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590TC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590VL Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590WC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590WW Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590WX Special Topics Credits: 1-3

E&C-ENGR 5590XX Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5597 Directed Readings Credits: 1-3

Readings in an electrical and computer engineering areas selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5598 Research Seminar Credits: 1-3

Graduate research and/or readings in an electrical and computer engineering area selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5599 Research Credits: 1-6

Independent investigation in field of electrical engineering to be presented in the form of a thesis.

E&C-ENGR 5600 Problems Credits: 2-5

Supervised investigation in electrical engineering to be presented in form of report.

E&C-ENGR 5606 Electromagnetic Scattering and Antenna Theory Credits: 3

Dyadic analysis; integral equations and Green's functions; field theorems-uniqueness, induction equivalence, reciprocity; image and Babinet's Principles; applications to antennas; method of stationary phase and applications to aperture antennas; array antennas and mutual coupling analysis; method of moments; asymptotic techniques and applications to EM scattering from wedges, cylinders, and spheres; RF propagation path loss modeling and conformal antennas.

Prerequisites: E&C-ENGR 412.

E&C-ENGR 5616 Parallel and Distributed Processing Credits: 3

Covers the fundamental issues involved in designing and writing programs for simultaneous execution. Semaphores and monitor constructs are covered to provide a basis for critical section programming. Expansion of these concepts provide a basis for the analysis and design of control systems for multiprocessor devices and computer networks.

Prerequisites: A systems programming course.

E&C-ENGR 5617 Neural Network Based Computing System Credits: 3

The course will consider computing systems based on neural networks and learning models, along with implementations and applications of such systems.

E&C-ENGR 5618 Artificial Intelligence Credits: 3

Concepts, theories, and models pertaining to neural nets, pattern recognition, learning systems, and programmed problem solving.

E&C-ENGR 5619 Theory of Automata Credits: 3

Sequential machines: Turing machines; deterministic and stochastic automata; applications of automata.

E&C-ENGR 5624 Digital Software Systems Design Credits: 3

Characteristics and parameters of various software subsystem including assemblers, compilers, utility programs, special programming packages, interpreters, and operating systems; and principles of organization into efficient systems.

E&C-ENGR 5633 Nanoelectronics II: Nanoscale Integration & Manufacturing Credits: 3

This course is continuation of Nanoscale Devices and circuits course offered in Fall 2016. In this course students will learn theory about semiconductor processing, and their applications. Limitations of existing process techniques will be discussed, and advances in both physical implementation and circuit/integration techniques will be introduced. Some example of topics that will be covered are: optical lithography, EUV lithography, nanoimprint, implantation, manufacturing aware circuit design, etc. The laboratory work will include modeling and simulation with state-of-the-art semiconductor processing and device simulation tools such as: SRIM, Sentaurus TCAD Process, Sentaurus TCAD Device, etc. Research intensive course.

Co-requisites: E&C-ENGR 5542.

E&C-ENGR 5635 Vlsi Systems Design Credits: 3

Course discuss design of the MOSFETs (nFETs and pFETs), and high speed CMOS cascades in VLSI. It also covers the design of various arithmetic circuits, different fast adders, memories, and chip-level physical designs requirements in the VLSI subsystems are also the focus of this course. It uses Verilog HDL/VHDL as a tool to design VLSI systems.

Prerequisites: E&C-ENGR 5535 (or knowledge of VHDL).

E&C-ENGR 5642 Advanced VLSI Design Credits: 3

Course focuses on the issues and challenges of high performance VLSI circuits and systems. The course will be based on papers published in accredited journals and conference proceedings. The goals of this course: (1) Familiarize students with the current and emerging trends, issues and design alternatives of deep submicron and nanoscale IC technologies; (2) Help students acquire the knowledge and skills required for graduate study and research, and professional careers in IC industry; and (3) Teach students how to collect and survey technical materials, develop new research ideas, write research papers, and present technical contents in front of an audience.

E&C-ENGR 5644 Liapunov and Related Nonlinear Methods in Automatic Control Credits: 3

A study of nonlinear methods in automatic control including phase plane analysis, describing function techniques, basic definitions and theorems of Liapunov, methods of generating Liapunov functions, applications of Liapunov's methods, and Popov's methods.

E&C-ENGR 5645 Optimal Control Theory Credits: 3

Analysis and design of dynamic systems using optimal control theory parameter optimization, dynamic optimization, computational methods, differential games.

E&C-ENGR 5646 Stochastic Optimal Estimation and Control Credits: 3

Surveys random process theory; stochastic control and optimization; estimation and filtering based on Kalman-Bucy techniques; stochastic stability; adaptive and learning control systems.

E&C-ENGR 5647 Emerging Interdisciplinary Research in Nanotechnology Credits: 3

This cross-disciplinary course will focus on nanoscale materials, devices and circuit technologies, and its applications in the next generation computing, communication, electronics, biomedical, energy and environment sectors. The course will familiarize students with recent technological progresses and potential socio-economic impacts in the broader fields of nanotechnology. This will be a high level graduate course for students from diverse academic backgrounds. Instructor's prior approval is recommended.

E&C-ENGR 5660 Power-Systems Stability Credits: 3

Performance of synchronous machines under transient conditions, power system stability, system fault computations using symmetrical components; computer solutions of power system problems.

E&C-ENGR 5661 Solid State Energy Conversion Credits: 3

Solid state direct energy conversion; and design of thermoelectric generators and heat pumps.

E&C-ENGR 5662 Power Electronic Drives Credits: 3

Advanced study of dc and ac motor drives controlled by power electronic methods, including phase controlled rectifier de chopper, cycloconverter, variable frequency inverters.

Prerequisites: E&C-ENGR 5536.

E&C-ENGR 5664 Lightning and Switching Surges in Power Systems Credits: 3

Overvoltage, switching surge and lightning effects of a power system. Use of grounding and lightning arresters. Effects of surges off and on machines.

Prerequisites: E&C-ENGR 466 (or equivalent), E&C-ENGR 467 (or equivalent).

E&C-ENGR 5668 Advanced Computer Methods in Power System Analysis Credits: 3

Power system matrices. Sparse matrix methods. Advanced load flow analysis techniques and concepts. Contingency analysis. State estimation.

Prerequisites: E&C-ENGR 466, strong background in FORTRAN or C.

E&C-ENGR 5670 Direct Current Power Systems Credits: 3

Characteristic and performance analysis of DC transmission lines and associated conversion systems.

E&C-ENGR 5672 Power Systems Relaying Credits: 3

Theory of relaying systems for power system protection, improvement of power system stability. Relay coordination; performance of relays during transient swings and out-of-step conditions.

Prerequisites: E&C-ENGR 466.

E&C-ENGR 5674 Machine Intelligence Credits: 3

Formal languages in relation to natural language processing; formal languages, graphs, and image processing; formal logic and automated theorem proving; natural language processing; aspects of problem solving and heuristic programming.

E&C-ENGR 5675 Introduction to the Modeling and Management of Uncertainty Credits: 3

Theoretical and practical issues in the modeling and management of uncertainty. Topics include probabilistic uncertainty, belief theory and fuzzy set theory. Applications to computer vision, pattern recognition and expert systems.

E&C-ENGR 5676 Advanced Electric Circuit Analysis Credits: 3

Specialized study of mathematical analysis as applied to solutions of circuit networks with fixed and variable parameters.

E&C-ENGR 5677 Network Synthesis Credits: 3

Surveys linear active and nonreciprocal circuit elements, reliability conditions, methods for synthesizing active networks, and practical applications.

Prerequisites: E&C-ENGR 5676.

E&C-ENGR 5680 Digital and Sample-Data Systems Credits: 3

Introduces sampling and quantization, design of digital and sample-data systems, digital filters, adaptive sampling and quantization.

Prerequisites: E&C-ENGR 480.

E&C-ENGR 5681 Applications Of Transforms Credits: 3

Applications of Laplace and other transform methods of solution of circuit and field problems.

E&C-ENGR 5682 Coding Theory II Credits: 3

Further study of error-correcting codes; ring and cyclic codes, linear switching circuits, burst error codes, codes for arithmetic units, etc.

Prerequisites: E&C-ENGR 5579.

E&C-ENGR 5688 Communication Theory II Credits: 3

Probability theory of analog and digital communication in the presence of random process noise. Encoding systems, detection systems, optimum receivers.

E&C-ENGR 5690 Advanced Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5690EM Advanced Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5690ET Advanced Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5690ND Special Topics in Electrical and Computer Engineering Credits: 1-3

E&C-ENGR 5697 Advanced Directed Readings Credits: 1-5

Advanced readings in an electrical and computer engineering area selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5698 Advanced Research Seminar Credits: 1-5

Advanced Graduate research and/or readings in an electrical and computer engineering area selected by the doctoral student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5699 Dissertation Research Credits: 1-9

Doctoral Dissertation

Endodontics (ENDO)

Courses

ENDO 5701 Endodontology 1 Credits: 1-6

This course is designed to introduce the first year endodontic postgraduate student to the field of advanced endodontics. It will provide introductory information and guidance which will serve as a basis for follow on course work in ENDO 5702 through ENDO 5706.

ENDO 5702 Endodontology 2 Credits: 1-6

This course is designed to continue the transition of the general dentist into a first year endodontic postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.

ENDO 5703 Endodontology 3 Credits: 1-6

This course is designed to complete the transition of the general dentist into a first year endodontic postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.

Prerequisites: ENDO 5701, ENDO 5702.

ENDO 5704 Endodontology 4 Credits: 1-6

This course is designed to transition the first year into a second year postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.

Prerequisites: ENDO 5701, ENDO 5702, ENDO 5703.

ENDO 5705 Endodontology 5 Credits: 1-6

This course is designed to continue the transition of the general dentist into a more proficient second year postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.

Prerequisites: ENDO 5701, ENDO 5702, ENDO 5703, ENDO 5704.

ENDO 5706 Endodontology 6 Credits: 1-6

This course is designed to complete the transition of the general dentist into a fully independently practicing endodontist. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.

Prerequisites: ENDO 5701, ENDO 5702, ENDO 5703, ENDO 5704, ENDO 5705.

English Language & Literature (ENGLISH)

Courses

ENGLISH 5447EM Early Modern Studies Credits: 3

Advanced study in Early Modern literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5477CS Classical Studies Credits: 3

Advanced study in Classical literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5477DH Studies in Digital Humanities Credits: 3

Advanced study in Digital Humanities. Subject varies and will be visible when students enroll.

ENGLISH 5477EM Early Modern Studies Credits: 3

Advanced study in Early Modern literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5477ES 18th-Century Studies Credits: 3

Advanced study in eighteenth-century British or American literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5477MS Medieval Studies Credits: 3

Advanced study in Medieval literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5477NS 19th-Century Studies Credits: 3

Advanced study in nineteenth-century British or American literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5477RC Studies in Rhetoric and Composition Credits: 3

Advanced study in rhetoric and composition. Subject varies and will be visible when students enroll.

ENGLISH 5477SA Studies in Authorship Credits: 3

Advanced study of individual authors or groups of authors in a variety of periods or literary and cultural movements. Subject varies and will be visible when students enroll.

ENGLISH 5477SG Studies in Genre Credits: 3

Advanced study in a single genre such as the novel, the short story, poetry, drama, or non-fiction. Subject varies and will be visible when students enroll.

ENGLISH 5477TS 20th- and 21st-Century Studies Credits: 3

Advanced study in twentieth- and twenty-first-century British or American literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5487FI Fiction Workshop Credits: 3

Advanced creative writing workshop in fiction. Subject varies and will be visible when students enroll.

ENGLISH 5487MG Multigenre Workshop Credits: 3

Advanced creative writing workshop in multiple genres. Subject varies and will be visible when students enroll.

ENGLISH 5487NF Nonfiction Workshop Credits: 3

Advanced creative writing workshop in nonfiction. Subject varies and will be visible when students enroll.

ENGLISH 5487PO Poetry Workshop Credits: 3

Advanced creative writing workshop in poetry. Subject varies and will be visible when students enroll.

ENGLISH 5500 Graduate Study In English Credits: 3

An introduction to methods of research and scholarship related to English studies. The course uses a wide spectrum of print and digital materials, library facilities (including archives and Special Collections), databases, and other resources to explore English studies as an academic discipline and profession.

ENGLISH 5500P Special Topics Credits: 3**ENGLISH 5501 Magazine Editing Credits: 3**

A course combining academic study of editorial management, publishing operations, and language skills, with "hands on" experience in article evaluation, editing, magazine production, and legal matters such as copy right and libel. Class work concentrates on authentic and effective language use, with attention given to copy editing, grammar, typography, printing processes, financing and distribution for commercial and small-press publications.

ENGLISH 5502 Magazine Nonfiction Credits: 3

This course emphasizes the origination and execution of nonfiction magazine articles for a variety of publications. Special attention is given to successful queries and the various writing techniques required for different kinds of articles. Students learn re-structuring and revision and the legalities affecting writers. Students are expected to complete three publishable articles.

ENGLISH 5503 Old English Credits: 3

This course is a study of Old English, its grammar, its poetic style, and its literature, both poetry and prose.

ENGLISH 5508 Harlem Renaissance Credits: 3

This course examines the period from 1920 to 1940, known as the Harlem Renaissance, a time of unprecedented literary and cultural creativity by Black artists. This course explores a variety of cultural productions, not only traditional forms of literature such as novels, short stories, plays and poetry, but also nonliterary objects of study such as painting, sculpture, and music.

ENGLISH 5510 Black Women Writers Credits: 3

This course explores the writings of African American Women Writers. The course examines how these writers have interacted with and often revised stereotypical representations of African American womanhood typically found within canonical and African American male literatures. The course will examine literature (which might include fiction, poetry, autobiography, and drama) of the 19th and 20th centuries; the majority of the works will be by modern and contemporary authors such as Nella Larsen, Zora Neale Hurston, Toni Morrison, and Terry McMillan. By placing the works in this sort of cultural and historical context, it will be possible to examine the unique tradition of African American women's writings as well as individual texts.

ENGLISH 5512 Chaucer Credits: 3

Readings from Chaucer's most important works, especially "The Canterbury Tales" and "Troilus and Criseyde" with emphasis on them as types of medieval genres and on the Middle English language. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5513 Renaissance Literature I Credits: 3

English literature from the time of Wyatt and Surrey to the beginning of the 17th century, including the works of Spenser, Marlowe, Sidney, Shakespeare and others. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5514 Milton Credits: 3

A study of Milton's prose and poetry, with special attention to "Paradise Lost". Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5515 Restoration And Early 18th-Century British Literature Credits: 3

British literature from the late 17th century to the mid-18th century. Selected writers may include Addison and Steele, Behn, Congreve, Defoe, Dryden, Finch, Pope, Rochester, Swift, and Wortley Montagu.

ENGLISH 5516 The Romantic Period Credits: 3

An extensive study of selected writers (such as Austen, Barbauld, Byron, Coleridge, Hazlitt, Hemans, Keats, Gilpin, the Shelleys, Wollstonecraft, and Wordsworth) organized around literary themes and/or cultural issues important to the Romantic period.

Prerequisites: ENGLISH 327.

ENGLISH 5517 Modern Poetry Credits: 3

Study of works by modernist poets such as Hopkins, Yeats, Frost, Stevens, Williams, Moore, Pound, H.D., Eliot, Millay, Hughes. Students will make in class presentations and submit papers requiring research and bibliographic work.

ENGLISH 5518 19th-Century American Literature Credits: 3

An intensive study of either selected major American writers in the 19th century or of 19th-century literary movements. Students will make in class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5519 Teaching Writing: Theories, Histories, Contexts, Practices Credits: 3

This course focuses on issues related to the teaching of English at the high school and college levels, with an emphasis on the teaching of writing. Issues addressed may include assignment design, teaching invention and revision, response to and evaluation of writing, collaborative learning, relationships between reading and writing, classroom uses of electronic media, and institutional contexts within which teachers work. The course is required of Graduate Teaching Assistants in the UMKC Composition Program, to be taken either prior to or concurrently with their first semester of teaching. Secondary English teachers and others interested in English teaching are also welcome.

ENGLISH 5520 Greater Kansas City Writing Project Credits: 3

Studies in methods and objectives for the teaching of English with special attention to secondary school teaching. This course is repeatable for credit with advisor approval.

ENGLISH 5520A Greater Kansas City Writing Project Credits: 3**ENGLISH 5520B Greater Kansas City Writing Project Credits: 3****ENGLISH 5520D Greater Kansas City Writing Project Credits: 3****ENGLISH 5522 Medieval Literature Credits: 3**

Western religious and secular verse and prose to the 15th century. Late Middle English works are read in the original; all other selections in translation. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5523 Renaissance Literature II Credits: 3

English literature from 1600 to the beginning of the Restoration, including the works of Donne, Jonson, Milton, and other contemporaries. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5526 The Victorian Period Credits: 3

An intensive study of selected writers (such as Arnold, Braddon, the Brontës, the Brownings, Dickens, Darwin, Eliot, Gaskell, Hardy, Ruskin, and the Rossetts) organized around literary themes and/or cultural issues important to the Victorian period.

Prerequisites: ENGLISH 327.

ENGLISH 5527 Contemporary Poetry Credits: 3

Study of works by contemporary poets (post- World War II), such as Auden, Bishop, Hayden, Berryman, Rukeyser, Larkin, Rich, Plath, Heaney, Boland, and Komunyakaa. Students will make in class presentations and submit papers requiring research and bibliographic work.

ENGLISH 5528 20th Century American Literature Credits: 3

Major American writers or literary movements of the 20th century. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5529 Graduate Seminar: Screenwriting Credits: 3

A seminar on advanced theory in narrative screenwriting, script analysis and constructive story editing. Students draft, revise and workshop a short film script or a feature screen play, and deliver a pitch, treatment, draft and revision of the first act and detailed outline of the whole script. Students workshop feature screenplays in small groups.

Prerequisites: ENGLISH 429B or COMM-ST 454.

ENGLISH 5531 Late 18th-Century British Literature Credits: 3

British literature from the mid to late 18th century. Selected writers may include Blake, Burney, Collins, Equiano, Fielding, Gray, Johnson, Sheridan, and Wollstonecraft.

ENGLISH 5532 Advanced Creative Writing: Fiction Credits: 3

A course for advanced students of fiction writing. The class will proceed through analysis of models, discussion of general principles, and critique of student work. Students will simultaneously be encouraged to experiment and to refine the form and subjects best suited to their talents. Emphasis will remain on the short story, though there may be units in other forms—novella, film script, the non-fiction essay. May be repeated once for credit.

Prerequisites: Graduate Standing.

ENGLISH 5533 Histories Of Writing, Reading, And Publishing Credits: 3

A study of selected topics concerning the material practices of writing, reading, and publishing within specific cultural and historical contexts. Issues examined may include authorship, education, information technologies, libraries, literacy, periodicals, popular literature, publishers, and communities of readers.

ENGLISH 5534 Postcolonial Literature Credits: 3

An exploration of postcolonialism through the study of literary and theoretical texts created by or representing peoples whose historical experience has been decisively shaped by the experience or legacies of colonialism. Texts will be drawn from a variety of genres and from several countries. The course will consider several definitions of postcolonialism and related terms such as cosmopolitanism, hybridity, diaspora, and nationalism.

ENGLISH 5535 Advanced Creative Writing: Poetry Credits: 3

An advanced poetry workshop that includes intensive reading of contemporary poetry and aims at each student creating a portfolio of publishable poems. The focus of the course will vary to address a variety of topics such as metaphor and closure; imitation and the line; form and voice. May be repeated once for credit.

Prerequisites: Graduate Standing.

ENGLISH 5536 Poetic Forms Credits: 3

An advanced creative writing course that focuses on intensive study of and practice in metrics and traditional and nonce forms. May be repeated once for credit.

Prerequisites: ENGLISH 315.

ENGLISH 5537 Prose Forms Credits: 3

This course covers techniques for planning and drafting major prose forms. Students will learn how to use content as a guide to inventing new forms (i.e. novella, novel, linked-story collection, episodic novel, essay novel, and creative nonfiction book).

Prerequisites: ENGLISH 432WI, ENGLISH 435WI.

ENGLISH 5538 Women's Literature in Africa and the African Diaspora Credits: 3

This course is a comparative examination of the variety of literary works produced by women of African descent in the United States, the Caribbean and Africa. Students will explore the cross-cultural implications of texts in light of the intersections of gender, race and class.

ENGLISH 5540 American Culture Credits: 3

Texts that offer perspectives on key historical themes of American culture. Texts may be grouped around any culturally significant principle (e.g. region, race, gender, class, ethnicity, religion) or theme (e.g. the mythology of the frontier, marriage and domesticity, the American Dream). Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5541 Girls And Print Culture Credits: 3

This course deals with girls' relationships to the continually evolving print culture. Students will examine various literary representations of girlhood by adult writers, explore texts directed at girls (e.g., conduct books, periodicals, textbooks), and study the writing and reading practices of girls themselves.

ENGLISH 5545 History And Principles Of Rhetoric Credits: 3

A study of selected writings of ancient and modern rhetoricians illustrating key issues in the development of Western discourse theory and practice. Issues examined include the relationships between rhetoric and knowledge, orality and literacy, and rhetoric and poetics. Attention will also be given to the implications of rhetorical theory for modern language instruction. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5546 From Field Shout to Hip Hop: African American Poetic Traditions Credits: 3

This course examines the development of African American poetry from its early forms as field shouts, ballads, and blues to present forms including spoken word and hip hop. Includes authors such as Phillis Wheatley, Paul Lawrence Dunbar, Langston Hughes, Gwendolyn Brooks, Tupac Shakur, and Jessica Care Moore.

ENGLISH 5547 Theory and Criticism in English Studies Credits: 3

A survey of major schools and methods of literary theory and criticism. Authors and texts to be determined by the instructor of the course.

ENGLISH 5548 External Internship Credits: 1-3

Students may complete an external internship involving writing and editing with a publishing company, trade magazine, literary or academic journal, other print or electronic media organization, or with advertising, public relations, or non-profit firms. Internships are granted on a competitive basis. Students will compile a portfolio of their work under the direction of the internship supervisor to be submitted for evaluation to the department's internship coordinator.

ENGLISH 5549A Publication Practicum Credits: 1-3

This course provides practical experience with New Letters magazine, New Letters on the Air, and BkMk Press in business analysis/reporting, copy-editing, manuscript evaluation, promotion/grant development, library research, market research, and other skills. The practicum is limited to three students per semester, to be chosen on the basis of demonstrated writing and organizational skills. References are required. May be taken for no more than three credit hours over a maximum of two semesters. Permission of the instructors required.

ENGLISH 5549B Publication Practicum Credits: 1-3

This course covers the basics of producing an issue of an academic journal. Students acquire hands-on experience at all stages of production.

ENGLISH 5549C Publication Practicum Credits: 1-3

This course allows students to work with a faculty member on an ad hoc project for publication such as a special journal issue or festschrift, book manuscript, a new scholarly edition of a primary text, or a digital edition. Course may be repeated once for continued work on the same project.

ENGLISH 5550 Graduate Seminar Credits: 3

Authors, works and intellectual currents which form the basis of these seminars may vary from semester to semester, depending upon the instructor's design for the course. May be repeated for credit. Continued in ENGLISH 5555.

ENGLISH 5550A Graduate Seminar Medieval Literature I Credits: 3

ENGLISH 5550B Graduate Seminar Renaissance Literature I Credits: 3

ENGLISH 5550C Graduate Seminar Neo-Classical Literature I Credits: 3

ENGLISH 5550D Graduate Seminar 19th Century Literature I Credits: 3

ENGLISH 5550E Graduate Seminar American Literature I Credits: 3

ENGLISH 5550F Graduate Seminar Modern Literature I Credits: 3

ENGLISH 5550G Graduate Seminar Literary Criticism Credits: 3

ENGLISH 5550H Graduate Seminar Studies In Fiction I Credits: 3

ENGLISH 5550I Graduate Seminar In Dramatic Literature I Credits: 3

ENGLISH 5550J Graduate Seminar: History Of The English Language Credits: 3

ENGLISH 5550K Graduate Seminar: Creative Writing Prose Credits: 3

ENGLISH 5550M Graduate Seminar In Rhetoric And Composition Credits: 3

ENGLISH 5550MA Greater Kansas City Writing Project: Invitational Credits: 3

ENGLISH 5550MC Greater K.C. Writing Project:Writing & The Teaching Of Literature Credits: 3

ENGLISH 5550MD Greater Kc Writing Project:Critical Thinking & Process Writing Credits: 3

ENGLISH 5550ME Greater K.C. Wrtg Project:Researching The Theories Of Tchng Wrtng Credits: 3

ENGLISH 5550N Graduate Seminar: Criticism Credits: 3

ENGLISH 5550P Graduate Seminar: Sociolinguistics And Dialectology Credits: 3

Seminar focusing on the role of social factors in language use, and on the origin and development of regional and urban dialects in English. Special attention will be paid to sociolinguistic motivations for change, variation and merger in dialects and languages in contact, and Black English.

ENGLISH 5551 Shakespeare Comedies And Histories Credits: 3

A study of Shakespeare's major comedies and history plays with special emphasis on his dramatic works before 1600. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5552 Early English Drama Credits: 3

English religious and secular drama prior to Shakespeare. Mystery and morality plays are studied with emphasis on their literary and social backgrounds. Close readings of such works as "Everyman," "The Wakefield Second Shepherd's Play," and "The Spanish Tragedy." Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5553 Modern Drama 1880-1945 Credits: 3

A study of modern drama: Continental, British, and American, including history and development, critical theory, and literary evaluation. This course will focus on the earlier modern playwrights from Ibsen to Shaw, with special attention to naturalism. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5554 The Civil Rights Movement in African American Literature Credits: 3

This course examines how African American literature shaped ideas about freedom, rights, citizenship and race in the civil rights movement. It draws on a variety of literary forms-speeches, essays, autobiographies, fiction, drama, poetry and film-to explore the movement's impact on communities and cultures as well as its various debates and competing visions.

ENGLISH 5555 Graduate Seminar Credits: 3

Graduate Seminar - second half.

Prerequisites: ENGLISH 5550.

ENGLISH 5555A Graduate Seminar Medieval Literature II Credits: 3

ENGLISH 5555B Graduate Seminar Renaissance Literature II Credits: 3

ENGLISH 5555C Graduate Seminar Neo-Classical Literature I Credits: 3

ENGLISH 5555D Graduate Seminar In 19th-Century Literature II Credits: 3

ENGLISH 5555E Graduate Seminar American Literature II Credits: 3

ENGLISH 5555F Graduate Seminar In Modern Literature II Credits: 3

ENGLISH 5555G Graduate Seminar Literary Criticism Credits: 3

ENGLISH 5555H Graduate Seminar Studies In Fiction II Credits: 3

ENGLISH 5555I Graduate Seminar In Dramatic Literature II Credits: 3

ENGLISH 5555J Graduate Seminar English Language Credits: 3

ENGLISH 5555K Graduate Seminar In Creative Writing:Poetry Credits: 3

ENGLISH 5555M Graduate Seminar: Composition Credits: 3

ENGLISH 5555N Graduate Seminar: Prose Fiction Credits: 3

ENGLISH 5556 Studies In The Novel 1740-1900 Credits: 3

An intensive study of no more than three major novelists of the eighteenth or nineteenth century. The content of the course will change, depending on the instructor. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5557 Stages toward Freedom: African American Dramatic Traditions Credits: 3

This course explores the development of African American dramatic traditions from the eighteenth century through the Harlem Renaissance, Black Arts Movement, to current postmodernism. Includes authors such as W.W. Brown, Zora N. Hurston, Amiri Baraka, Sonia Sanchez, August Wilson, Suzan-Lori Parks.

ENGLISH 5558 Slave Narratives: Race, Gender and Writing Freedom Credits: 3

A truly American, home grown genre and powerful force in the development of American political and social realities, the African American Slave Narrative is an established, recognized influence in the development of African American and American literary history. In this course you will have the opportunity to explore the historical trajectory of the Slave Narrative, looking at early formulations of its structure, purpose and conventions—especially in terms of gender and race, subsequent various permutations, and the eventual development of the Neo-slave Narrative as its resurrection, which adds to the complexity and theoretical impact of the literary autobiography from black perspectives.

ENGLISH 5559 African American Migrations in Literature Credits: 3

The course examines representations of two different trajectories of migration in African American literature: African American journeys from the south to northern and mid-western regions of America, and concurrent migrations of Caribbean people to the US in the early twentieth century.

ENGLISH 5560 Special Topics Credits: 1-4

The professor who gives this course determines what its content shall be. All aspects of English studies are within its possible range.

ENGLISH 5561 Shakespeare:Tragedies And Romances Credits: 3

A study of Shakespeare's major tragedies and late romances with special emphasis on his dramatic literature after 1600. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5562 Restoration And 18th- Century Drama Credits: 3

The drama after the restoration of the monarchy and the reopening of the theatres through the 18th century. Special emphasis is placed on the comedy of manners and the heroic drama in the Restoration and the sentimental comedy in the 18th-century. Includes such playwrights as Dryden, Congreve, Etherege, Wycherley, Steele, Lillo, Cumberland, Sheridan, and Goldsmith. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5563 Contemporary Drama Credits: 3

A study of contemporary drama: Continental, British, and American, including history and development, critical theory and literary evaluation. This course will focus on the more recent writers, including the absurdists, with special attention to experimental drama. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5564 Medieval Methods & Paleography Credits: 3

This course examines the methodology and historiography of Medieval Studies. Through an introduction to paleography, the study of medieval handwritings, it prepares students for advanced work in Medieval and Renaissance studies. Using an interdisciplinary approach, this course will examine the historical and cultural settings for medieval texts, their physical form and production, as well as the tradition of textual transmission in the medieval world. In addition to gaining familiarity with the many different types of primary sources, such as literary, artistic, legal, and notarial sources, students will be exposed to methods for practical archival work in various European nations.

Prerequisites: First Year Latin.

ENGLISH 5565 Studies In Modern Novel Credits: 3

An intensive study of no more than three major 20th- century novelists. The content of the course will change depending on the instructor. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5566CA Cluster Course: Images Of The Human Body In The Renaissance Credits: 3

Focusing on Renaissance conceptions of the human body, this cluster treats the following topics as they are reflected in Renaissance literature, art, astrology, astronomy, biology, anatomy, medicine, and politics: A) The dignity of the human body B) Microcosm and macrocosm. C) The human body and the heavens D) Stranger manifestations: freaks and beasts E) The humors F) Disorders of the human body G) The body politic H) The human body as an object of study.

ENGLISH 5566CF Courts And Culture In The Middle Ages Credits: 3

This cluster course offers an interdisciplinary approach to the study of the Middle Ages, focusing on medieval cultures in Europe. Arranged around a series of themes, the cluster will read a variety of documentary and literary texts to investigate not only the "high culture" of the courts but also the interactions of people from various social backgrounds in Western Europe.

ENGLISH 5575 Advanced Creative Writing: Creative Nonfiction Credits: 3

This course is devoted to the study and crafting of the personal essay. Students will explore - and - practice many different varieties of this diverse form. Whether in the guise of aesthetic appreciation, cultural critique, personal history, political reportage, or travelogue, our course readings are first and foremost PERSONAL narratives, both troubled and enriched by their subjectivity (the essay's 'I'). Students will study the many challenges particular to this form (most of which concern notions of truth, and its rendering) and strive to overcome them as they create vivid personal narratives of their own.

ENGLISH 5582 European Literature: 18th Century Credits: 3

The 18th-century course will focus on a representative sampling from authors such as Corneille, Racine, Moliere, Voltaire, Prevost, La Bruyere, La Rochefoucauld, Montesquieu, Diderot, Rousseau, Schiller, Goethe, and Grimmelshausen. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5591 Research In Selected Fields Credits: 1-3

Individual study under the direction of a senior member of the department, leading to the writing of a formal or scholarly paper. May be repeated for credit.

ENGLISH 5598A MFA Thesis Credits: 3-6

Under the guidance of a graduate MFA faculty member, students completing the MFA must complete and orally defend a publishable or producible manuscript. May be repeated for a maximum of six hours credit.

ENGLISH 5599 Research And Thesis Credits: 1-9

A student, with permission of the graduate committee, may write a thesis for 3 hours credit.

ENGLISH 5600 Introduction To Doctoral Study In English Credits: 3

Introduction to research skills necessary for doctoral work, particularly for writing the thesis; attention will be paid both to traditional skills such as bibliography and to computer skills.

ENGLISH 5601 Culminating Experience in Literature Credit: 1

Under the guidance of a graduate faculty member in English, students following the program of study in Literature must revise and orally defend a 20-30 page paper in Literature on a pass/no pass basis.

ENGLISH 5602 Culminating Experience in Language & Literature Credit: 1

Under the Guidance of a graduate faculty member in English, Students following the program of study in Language Literature must revise and orally defend a 20-30 page paper in Language Literature on a pass/no pass basis.

ENGLISH 5603 Culminating Experience in Manuscript, Print Culture, & Editing. Credit: 1

Under the guidance of a graduate faculty member in English, students following the program of Study in Manuscript, Print Culture, and Editing must revise and orally defend a 20-30 page paper in Manuscript, Print Culture, and Editing on a pass/no pass basis.

ENGLISH 5650 Doctoral Seminar Credits: 3**ENGLISH 5691 Doctoral Research In Selected Fields Credits: 3**

Individual study under the direction of a senior member of the department leading to the writing of a formal or scholarly paper. May be repeated for credit.

ENGLISH 5699 Research And Dissertation Credits: 1-15

Research and preparation for the doctoral dissertation.

ENGLISH 5899 Required Graduate Enrollment Credit: 1

Entrepreneurship (ENT)

Courses

ENT 5508 Corporate Entrepreneurship and Innovation: Meeting the Management Challenge Credits: 3

This course seeks to equip students with the skills required to develop new ideas and create viable new businesses within the context of an established organization. The course will address the development of an internal culture of innovation, processes for reviewing ideas and for developing business concepts, strategic analysis, and positioning for competitive advantage.

Prerequisites: Enrolled in a Bloch School graduate program.

ENT 5525 Entrepreneurship: Managing Creativity And Innovation Credits: 3

The course examines the nature of creativity and innovation and how entrepreneurship involves the ability to identify market opportunity based on new ideas. Detailed attention is given to the entrepreneurial process: the concepts, skills, know-how and know-who, information, attitudes, alternatives and resources that entrepreneurs need to manage creativity in the process of creating something with tangible economic value.

ENT 5529 Entrepreneurship Scholars Credits: 3

In this course, students will acquire the skills required to manage and grow a successful new venture through hands-on, real-world work on their own venture. Students will work with the instructor and at least one mentor to identify specific deliverables and a long term venture plan. Students will manage their enterprise, attend a series of workshops, and work with their peers, instructional coaches and mentors to further their venture.

ENT 5531 New Product Development Credits: 3

A systematic overview of the management issues that arise during the process of new product development (NPD). Students learn integration across the traditional management functions and the tools and concepts for linking development to strategy and for managing the development process for speed, efficiency, and market impact. Students will develop a physical prototype of a product that meets and exceeds real customer needs.

ENT 5533 Technology Management Credits: 3

This course introduces the student to formal frameworks for considering ethical, management, and commercial opportunities and challenges of new technologies. The student will consider the business model, business process, and commercial impact of cutting-edge technologies in a survey-style format. Technologies will be considered both from the perspective of an established organization seeking to innovate, as well as from the perspective of a new startup.

ENT 5535 Small Business Management And Entrepreneurship Credits: 3

This course focuses on the nature of the entrepreneurial organization; its volatility and flux, where standard operating procedures are lacking and organizational structure, culture and leadership style are created anew each day. Successful small business management requires that a series of developmental challenges be identified and addressed if the venture is to succeed.

ENT 5545 Entrepreneurship And New Venture Creation Credits: 3

The objectives of this course are: (1) to build personal appreciation for the challenges and rewards of entrepreneurship in an independent mode by examining/simulating its environment; (2) to present and examine, through the use of complex case studies and high level guest/lectures, economic, legal and managerial mechanisms proven useful in creating new wealth; and (3) to foster continued development of venture ideas, suitable as career entry options or for investments, using a tutorial approach to business plan development, presentation and evaluation.

ENT 5552 Entrepreneurial Marketing Credits: 3

This course exposes students to the objectives, challenges, and requirements for effective, results-oriented marketing activities and sales efforts for the entrepreneur/new venture. Key topics include the selection, design, and budgeting of entrepreneurial marketing and advertising programs, along with effective selling, customer acquisition, and service/retention efforts.

ENT 5561 Product and Service Innovation Credits: 2

Product and Service Innovation provides students with experience in new venture creation and product innovation management. Each learning team will be challenged to uncover opportunities in industry. In the process, students will explore customer preferences and translating preferences into the development process.

Prerequisites: Admission to the Executive MBA program.

ENT 5563 Social Entrepreneurship Credits: 3

This course introduces students to social entrepreneurship through lectures and discussions, key readings, guest speakers such as social entrepreneurs, case studies, videos, service-learning activities, and group assignments. Students will develop an understanding of the social entrepreneurship process, the differences between social entrepreneurship and business entrepreneurship, social enterprise, and different revenue streams including the importance of sustainability. In this course, students will develop a social entrepreneurship project proposal on a social problem in collaboration with a non-profit organization in the Kansas City area.

ENT 5567 Strategy and New Venture Creation Credits: 3

Strategy and New Venture Creation provides a capstone experience for Executive MBA students. Students are exposed to and experience entrepreneurship topics relevant to high-growth potential new ventures including the various stages, processes, and issues involved with creation through to venture harvest / exit. Through completion of the course students will understand and undergo the process for new venture creation, developing specific skills of benefit in both entrepreneurial and corporate environments.

Prerequisites: Admission to the Executive MBA program.

ENT 5576 Real Estate Property Management Credits: 3

This course explores the complexities and integration of property and portfolio management which are critical to the creation, control and capture of real estate value. Students learn how to approach real estate in a more holistic manner by integrating management functions that range from individual property types to portfolios of properties. Students learn how to incorporate marketplace factors in their decisions and apply modern portfolio theory and other tools to construct and manage properties and portfolios in a socially responsible manner. Using experiential methods students learn to apply critical thinking to solve complex property and portfolio management problems.

Prerequisites: ENT 5571.

ENT 5585 Entrepreneurial Finance and Venture Capital Investment Credits: 3

This course exposes students to the process of financing and investing in a new venture. The primary objective of this course is for students to develop a good understanding of the objectives, strategies, and challenges in financing and valuation of entrepreneurial firms through analyzing unique financial issues these firms and their investors face. Students will develop skills for assessing new venture financial viability, cash needs, funding sources, valuation, and funding structure.

ENT 5587 Special Topics Credits: 3

Special topics in entrepreneurship.

ENT 5591 Small Business Management Practicum Credits: 3

An integrated management course designed to examine the principles of business management applicable to solving the problems of small and medium size businesses and assisting in their development.

ENT 5595 Internship Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

ENT 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

ENT 5681 Multivariate Statistical Methods-II Credits: 3

Theoretical and research applications of MANOVA, canonical correlation, multiple discriminant analysis, factor analysis, and introduction to structural equation modeling using appropriate software. Students are expected to undertake a major research project during this class and to apply appropriate multivariate statistical analyses to their chosen academic research topic.

ENT 5682 Structural Equation Modeling Credits: 3

This course presents structural equation modeling. It includes a review of regression, as well as the study of path analysis, including model specification, methods of estimation, recursive and non-recursive models; direct, indirect, and total effects methods of estimation; single and multi-group analyses; moderators; mediators; structural equation model specification; identification, methods of estimation, second-order factor analysis, and the assessment of casual structure. Students are expected to continue a research project started in ENT 5681.

ENT 5683 Mathematical Models For Entrepreneurship Credits: 3

The purpose of this course is to provide an introduction to mathematical models in entrepreneurship and related disciplines. Classes will focus on the use of mathematical models to characterize the nature of various entrepreneurship-related decisions in complex environments. For each topic considered (e.g., RD investment decisions in new product entry, diffusion, and marketing mix variables), students will examine select examples of scholarly articles. Presentations and discussions are designed to help students understand and critique existing models and stimulate the development of new theoretical viewpoints.

ENT 5691 Doctoral Seminar In Theoretical Foundations Of Entrepreneurship I Credits: 3

ENT 5691 is designed as a broad survey of major topics in the field of entrepreneurship. Its objective is to familiarize students with some of the primary theoretical underpinnings of the field as well as some of the common and/or promising methodological approaches to the study of entrepreneurial phenomena. Topics covered in the course include a theoretical overview, entrepreneurs, environment and organizational founding.

Prerequisites: Doctoral standing.

ENT 5692 Foundations Entrepreneurship Credits: 3

ENT 5692 is designed as a continuation of ENT 5691, providing a broad survey of major topics in the field of entrepreneurship. Its objective is to familiarize the student with some of the primary theoretical underpinnings of the field as well as some of the common and/or promising methodological approaches to the study of entrepreneurial phenomena. Topics covered in the course include: entrepreneurship's links with other disciplines, venture capital and venture capitalists, new venture strategy, new venture performance, growth processes and challenges, and entrepreneurial networks and alliances.

ENT 5693 Technology, Innovation, And Entrepreneurship Credits: 3

This seminar will explore academic literature of technology, innovation, and entrepreneurship. Specific topics include emerging technologies, evolutionary theory, building capabilities based on networks, organizational learning, technological innovation, institutional economics, network externalities, knowledge transfer, technological trajectories and path dependencies.

Prerequisites: Doctoral standing.

ENT 5694 Doctoral Seminar In Theories Of The Firm And Strategy Credits: 3

In this course, students will become familiar with and develop an in-depth understanding of the concepts, models, and paradigms that collectively form the foundation for strategic thinking. Students will develop the ability to critically integrate findings from strategic research programs. Employing an appreciation for the interdisciplinary nature of strategic marketing and management, the purpose is to develop a keen awareness of major gaps that exist in the strategic literature. Students will strengthen the skills needed to conduct original strategic marketing research that can be published in the leading academic journals.

Prerequisites: Doctoral Standing.

ENT 5699 Dissertation and Research in Entrepreneurship and Innovation Credits: 1-12

Dissertation research and writing in Entrepreneurship and Innovation Discipline.

ENT 5899 Required Graduate Enrollment Credit: 1

Environmental Sciences (ENV-SCI)

Courses

ENV-SCI 5550 Ecotoxicology Credits: 3

This course addresses the fundamentals of ecotoxicology, integrating the sciences of ecology and toxicology. Students will learn the biological basis for pollutant effects on individuals and populations of plants and animals, how pollutant intensity varies as a function of bioavailability, the basics of risk assessment, and how pollutant effects are modified by ecological interactions within communities and ecosystems. The ultimate goal of ecotoxicology is to predict the effects of pollution within an ecological context.

Prerequisites: BIOLOGY 108, CHEM 211, CHEM 212R.

Euphonium (EUPHNM)

Courses

EUPHNM 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

EUPHNM 5500A Graduate Euphonium-Secondary Credits: 2

EUPHNM 5500B Special Applied Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

EUPHNM 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

EUPHNM 5501 Graduate Euphonium - Master's Performance Credits: 4

EUPHNM 5601 Graduate Euphonium - Doctoral Performance Credits: 4

Finance (FIN)

Courses

FIN 5501 Economics For Administration Credits: 3

This course is designed for graduate students in the School of Business and Public Administration. Topics include the theory and determination of national income, fiscal policy, monetary theory and policy, production and cost theory, and market structure.

FIN 5502 Corporate Financial Management I Credit: 1.5

This course provides a rigorous distillation of time value of money analysis techniques, methods which form the basic quantitative approach used in corporation finance. The three main topic areas covered during the course are the principles of time value of money analysis itself, its application to the valuation of corporate bond and equity securities, and the quantitative decision making rules utilized in corporate capital budgeting analysis.

Prerequisites: ACCTNG 5501.

FIN 5509 Financial Management Credits: 3

An introduction to the role of financial management through the development of a conceptual framework appropriate for financial decision making. Generally, financial management is charged with the responsibility for obtaining and effectively utilizing the funds necessary for the operation of an enterprise. As such, the conceptual framework includes elements of financial planning (financial analysis, cash budgeting and profit planning), capital budgeting (rate of return and cost of capital), and basic considerations of alternative sources of funds.

Prerequisites: Student must be enrolled in a Bloch School graduate program.

FIN 5515 Managerial Economics Credits: 2

This course studies the relationships between the economic theory and system as a whole and the ways in which their functioning is affected by the behavior of the interdependent sectors of which they are composed. Students will explore the major factors and determinants of economic prospects relevant to profit-maximizing production and pricing decisions for the firm.

Prerequisites: admission to executive MBA program.

FIN 5532 Financial Management Credits: 3

An introduction to the role of financial management through the development of a conceptual framework appropriate for financial decision making. Generally, financial management is charged with the responsibility for obtaining and effectively utilizing the funds necessary for the operation of an enterprise. As such, the conceptual framework includes elements of financial planning (financial analysis, cash budgeting and profit planning), capital budgeting (rate of return and cost of capital), and basic considerations of alternative sources of funds.

Prerequisites: ACCTNG 5517, DSOM 5508, and FIN 5501.

FIN 5537 Enterprise Risk Management Credits: 3

Students conduct a comprehensive assessment of the physical, reputation, emotional, financial, and facilities risks associated with an organization and its events. They must also assess each risk based on its probability of occurrence and severity of consequences and make decisions about accepting, modifying, transferring, and/or eliminating risks based on those assessments.

Prerequisites: FIN 5532.

FIN 5550 Advanced Financial Management Theory And Policies Credits: 3

Advanced financial management covering topics such as working capital, financial structure, cost of capital, dividend policy and valuation. Discussions include both financial theory as well as financial policy. Includes exposure to literature central to the development of finance theory. Recommended preparation: FIN 235 or FIN 5509.

FIN 5551 International Financial Management Credits: 3

This course analyzes present and future international financial market conditions and extends the decision-making tasks of financial management into the context of problems of the international and foreign financial systems. The financial constraints of the international business environment and their effect on standard concepts of financial management are studied along with international currency flows, capital structure problems, working capital management, foreign investment, and international banking practices. Recommended preparation: FIN 235 or FIN 5509.

FIN 5552 Financial Markets and Institutions Credits: 3

This course introduces students to U.S. financial markets and institutions, explaining how they operate, how they promote economic growth and well-being, and how they malfunction in financial crises. Among the financial markets examined are those for short-term debt, mortgages, government and corporate bonds, and equity. Financial institutions studied include investment banks, commercial banks and savings institutions, pension plans, mutual funds, hedge funds, and private equity funds. The course also examines the role of the Federal Reserve in the financial system and the nature and purpose of financial regulation. Recommended preparation: FIN 325 or FIN 5509.

FIN 5553 Investment Analysis Credits: 3

Development of a theoretical framework applicable to the solution of problems related to creation and management of the investment portfolio. Consideration is given to the analysis of risk, functions of security markets, sources of information, evaluation of securities, and measurement of investment return. Recommended preparation: FIN 235 or FIN 5509.

FIN 5556 Management Of Financial Intermediaries Credits: 3

This course addresses the management operations of selected financial intermediaries including commercial banks and thrift institutions. Attention is given to asset-liability structure, the development and delivery of financial services, institutional structure, legal and regulatory factors, and the dynamics of the competitive environment. Recommended preparation: FIN 325 or FIN 5509.

FIN 5557 Derivative Securities Credits: 3

This course is designed to introduce students to the basic principles of financial risk management. The student should develop a working knowledge of issues regarding both the theoretical valuation and application of derivative securities. Applications will focus on techniques designed to manage financial risks in the corporate environment. Specifically, the course will focus on using futures, options, and swaps to hedge financial risks. Valuation issues will be explored to identify theoretical pricing fundamentals that can be applied toward valuing newly developed securities. Recommended preparation: FIN 235 or FIN 5509.

FIN 5560 Financial Modeling Credits: 3

The primary objective of this course is to introduce students to some of the fundamental quantitative methods used in investment analysis. The student should develop a working knowledge of measuring risk and return, probability theory, sampling and estimation, hypothesis testing, correlation analysis, regression and time series analysis. The course will emphasize experimental learning by applying these concepts to real data in a spreadsheet environment. Recommended preparation: FIN 235 or FIN 5509.

FIN 5561 Financial Statement Analysis Credits: 3

Students will take an in-depth look at the external financial statements that are prepared by corporations, including the tools needed to organize, summarize, and understand corporate financial data for use in decision making. Ratio analysis, trend analysis, earnings forecasting, bankruptcy predictors statistical methods important to finance, and financial data bases are among the topics that will be covered. Recommended preparation: FIN 235 or FIN 5509.

FIN 5562 Fixed Income Analysis Credits: 3

The primary objective of this course is to provide an overall view of the role of debt markets in the modern economy. The course will cover the characteristics of instruments traded in money and capital markets; determinants of and the relationships between different security prices; and international aspects of financial markets. Topics include: valuing fixed income securities, managing interest rate risk, interest rate theory, the organization of bond markets and the structure and pricing theory underlying the mortgage-related fixed income market. Recommended preparation: FIN 235 or FIN 5509.

FIN 5563 Valuation/Mergers and Acquisitions Credits: 3

The primary objective of this course is to introduce students to techniques used to value both exchange-traded and private firms. Students should apply these techniques to cases involving mergers and acquisitions, initial public offerings private firm valuation and the valuation of a publicly traded stock. Recommended preparation: FIN 235 or FIN 5509.

FIN 5564 Portfolio Management Credits: 3

The primary objective of this course is to introduce students to some of the fundamental portfolio management tools used by practicing investment professionals. The student should develop a working knowledge of issues regarding portfolio construction, asset allocation, mean-variance optimization, performance measurement, and client relationship management. Recommended preparation: FIN 235 or FIN 5509.

FIN 5565 Alternative Investments Credits: 3

The primary objective of this course is to introduce students to investing in alternative assets. The student should develop a working knowledge of various types of alternative investments and how they impact the risk-return profile of a portfolio. The course will cover investments in hedge funds, private equity, real estate, commodities, real assets, energy, and infrastructure. Recommended preparation: FIN 235 or FIN 5509.

FIN 5566 Financial Plan Development Credits: 3

Personal financial planning differs for each of us for a variety of reasons including age, family, wealth, needs, income, and personalities to name a few. Nonetheless the tax, financial, and risk environments which inspire us to set goals are similar for all of us. Financial planners must take all of these financial and nonfinancial factors into consideration as they devise a plan for their clients. Our objectives, therefore, are to study the personal financial planning process and environment, examine the questions of financial planning, learn financial planning techniques, and develop the ability to prepare integrated financial plans for our clients.

FIN 5567 Payment Systems Credits: 3

Payment systems are central to modern economies, underpinning nearly all economic exchange among consumers, businesses, and government entities. Payment systems in the U.S. have undergone fundamental changes recently. Yet, these systems are among the least studied and least understood components of our economy. The purpose of this course is to provide an in-depth knowledge of U.S. payment systems and an analytical framework for evaluating and responding to ongoing changes in the payments landscape.

FIN 5568 Organizational Finance Credits: 2

Organizational Finance covers the fundamentals of finance with an emphasis on learning how to critically think as a business leader with a financial mindset.

Prerequisites: Admission to the Executive MBA program.

FIN 5576 Fundamentals of Fintech Credits: 3

This course will introduce students to Fintech and provide an overview of the main areas in which it is disrupting finance. These areas include lending and equity investment (algorithmic lending, P2P lending and crowdfunding platforms); financial market infrastructure (cryptocurrencies, blockchain technology, smart contracts); portfolio management and financial advice (robo-investment); and financial trading (algorithmic trading, digital trading platforms). Students will learn how the new financial technologies work, how incumbents and new entrants might profit from the technologies, and how the technologies could affect the efficiency, accessibility, fairness, and security of the financial system.

Prerequisites: FIN 5532.

FIN 5580 Organizational Valuation & Financial Modeling I Credits: 2

This course will cover the concept of risk and reward and that to eliminate risk is to eliminate reward. We will delve into how management considers the entity's risk appetite in evaluating strategic alternatives, setting related objectives and developing mechanisms to manage related risks.

Prerequisites: Admission to Executive MBA program.

FIN 5582 Seminar In Finance Credits: 3

Advanced work in financial management, investment analysis, and financial markets and institutions will form the basis for the Seminar. Each topic selected will provide the opportunity for an investigative study on the part of the student. Major problems, hypotheses, and cases, together with the literature addressing the specific topic, will serve as the springboard for classroom activity. Both written and oral reports are required.

FIN 5587 Special Topics Credits: 3

Special topics in finance.

FIN 5595 Internship Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

FIN 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

FIN 5899 Required Graduate Enrollment Credit: 1

Flute (FLUTE)

Courses

FLUTE 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

FLUTE 5500A Graduate Flute-Secondary Credits: 2**FLUTE 5500B Special Applied Studies Credits: 2**

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

FLUTE 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

FLUTE 5500JC Applied Jazz Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied jazz study in an area other than, and in addition to, their primary performance study.

Prerequisites: Graduate status.

FLUTE 5501 Graduate Flute - Masters Performance Credits: 4

FLUTE 5601 Graduate Flute - Doctoral Performance Credits: 4

Foreign Language (FRN-LNG)

Courses

FRN-LNG 5899 Required Graduate Enrollment Credit: 1

French (FRENCH)

Courses

FRENCH 5500CF Courts and Culture in the Middle Ages Credits: 3

This cluster course offers an interdisciplinary approach to the study of the Middle Ages, focusing on medieval cultures in Europe. Arranged around a series of themes, the cluster will read a variety of documentary and literary texts to investigate not only the "high culture" of the courts but also the interaction of people from various social backgrounds in Western Europe.

Prerequisites: admission to the graduate program in Romance Languages.

FRENCH 5512 17th-century French Literature Credits: 3

Selected readings in the literature of the 17th century, with an emphasis on non-dramatic works.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5513 18th-century French Literature Credits: 3

Emphasis on philosophical and social significance. Authors may include Marivaux, Beaumarchais, LeSage, L'Abbe Prevost, Montesquieu, Rousseau, Diderot.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5514 Medieval Literature Credits: 3

Selected readings in various genres including epic, romance, theater and lyric. Emphasis will be placed on the intertextual relations and the cultural and historical context surrounding text production in the Middle Ages.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5517 16th-century French Literature Credits: 3

Selected readings in prose and poetry from Marot through Astree. Authors may include Rabelais, Ronsard, du Bellay, Montaigne, Marguerite de Navarre.

FRENCH 5520 Non-Dramatic 17th-century French Literature Credits: 3

Evaluation and reading of the works of Malherbe and contemporaries, of Descartes and Pascal and contemporaries, and of the great authors at the height of the classical period.

FRENCH 5524 19th-century French Literature Credits: 3

Selected readings in various genres from Romanticism through symbolism.

FRENCH 5540 Medieval Romance Credits: 3

The various movements of French medieval romance from the 12th through 15th centuries with an emphasis on the 12th and 13th centuries. Analysis of literary technique and socio-historical context will be stressed. No knowledge of Old French is assumed.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5543 Early French Theater Credits: 3

An examination of the development of French theater from Late Antiquity through the Renaissance, including religious and secular drama. The focus is on literary analysis of the dramatic texts, with some consideration of theater history and dramaturgy.

Prerequisites: Admission to the MA in Romance Languages Literature program.

FRENCH 5544 Renaissance Poetry Credits: 3

French Poetry from the Grand Rhetoriqueurs through the Pleiade. Study of poetic forms, major poets and schools, and different approaches to analyzing poetry.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5545 Epistolarity and the Novel Credits: 3

Explorations of the genre through the analysis of 17th- and 18th- century French novels. Introduced by a theoretical review.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5546 17th-century French Drama Credits: 3

The classical period: Emphasis on Corneille, Racine and Moliere.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5547 19th-century French Poetry Credits: 3

The study of the poetry and dominant poetic movements of the 19th century, with special attention given to different approaches to its analysis.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5548 20th century French Theater Credits: 3

Analysis of major currents of French theater of the 20th Century, with emphasis upon the postwar period and its movements.

FRENCH 5552 Medieval Poetry Credits: 3

A study of medieval poetry including religious and secular poetry, Provençal and Old French lyric, the influence of poetry in other genres such as romance and theater, later medieval poetry of the 14th and 15th centuries, as well as a discussion of the origins of the lyric.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5553 Lyon, Crossroads of France and Europe Credits: 3

Lyon, Crossroads of France and Europe

FRENCH 5554 The Intellectual Origins of the French Revolution Credits: 3

Study of philosophical and political texts by Montesquieu, Rousseau, Voltaire, Diderot, etc. on government, society, language, freedom and equality. Critical study of the Enlightenment.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5555 Fin-De-Siecle and Belle Epoque Credits: 3

Study of the literary, cultural and historical context of this time period in French history, for example: Symbolism, Decadence, and the years 1900-1914.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5556 20th-century French Poetry Credits: 3

The study of 20th-century poetry with special consideration given to different approaches to its analysis.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5561 20th century French Narrative Credits: 3

The analysis of major currents in French 20th-century narrative, especially fiction and film. Courses will be organized around narrative themes or historical events and will include social and cultural components.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5563 19th-century French Fiction Credits: 3

Studies in the birth, development, and variation of French Romanticism. Readings include de Stael, Senancour, Constant, Hugo, Stendhal and Merimee. The advent of realism and naturalism in France. Readings include Balzac, Flaubert, Daudet, De Maupassant, and Zola.

FRENCH 5570 Studies in Critical Thought Credits: 3

Various currents of 20th-century literary criticism and their political and historical contexts.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5571 Autobiography Credits: 3

Analysis of autobiographies and autobiographical texts such as diaries and memoirs together with theoretical texts on the genre. The concentration of different periods or issues may change from semester to semester, i.e. the art of autobiography as practiced by 20th-century writers, especially women.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5572 Francophone Studies Credits: 3

Study of different national Francophone literatures. Reading may include writers from Quebec, Haiti, Africa, Louisiana, Vietnam, the French Indies, etc.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5580 Special Topics Credits: 1-3

Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

FRENCH 5589 Survey of French Theater Credits: 3

A survey of the major French playwrights and their plays from the 17th through the 21st centuries. Historical and cultural influences will be covered as well as the specificities of the genre from the perspective of how the plays are performed and how we read them.

FRENCH 5590 Directed Studies in French Literature Credits: 1-3

Intensive readings in a field or literary figure to be selected by the student in consultation with the instructor. Available only when student cannot take regularly scheduled courses.

General Practice (G-PRAC)

Courses

G-PRAC 5721 General Practice Clinic I Credits: 1-10

G-PRAC 5722 General Practice Clinic II Credits: 1-10

G-PRAC 5723 General Practice Clinic III Credits: 1-10

G-PRAC 5728 Dental Implantology Credit: 1

The course is designed to include the following topics: history of implantology, implant materials and designs, fibrous and osseous integration theories, bioinert and bioactive retention, indication and case selection, technique methodology, anatomical considerations and reasons for failure, prosthetic considerations using several systems and necessary radiographic aids, surgical stent and laboratory with simulated insertion of an implant.

Geography (GEOG)

Courses

GEOG 5502 Environmental Remote Sensing and Digital Image Analysis Credits: 4

This course will provide students with innovative techniques for landscape-level environmental analysis, geographic and geological studies, earth science research, and environmental resources management using remotely sensed data including satellite images. Students will be taught basic remote sensing concepts and technical skills, including energy radiative transfer processes, in remote sensing, sensors and resolutions, computer-based image processing and classification, and remote sensing/GIS integration.

Prerequisites: GEOG 203.

GEOG 5503WI History and Philosophy of Geoscience Credits: 3

A survey of geoscientific thought since antiquity. The substance of geography will be sought primarily in scholarly treatises, formal analytical systems, and cartography, but the course also addresses geographical principles emerging from the history of such matters as government, law economy, religion, and material culture. Readings, lectures, discussions, research, writing.

GEOG 5504 Biogeography and Landscape Ecology Credits: 3

Principles and applications of biogeography and landscape ecology, emphasizing distribution of major ecosystems and related plants and animal species on earth, biodiversity, landscape patterns and processes, and physical, biological, and human interactions. The course explores ecosystem and landscape analyses using advanced GIS, remote sensing, and spatial modeling methods for real problem solving in environmental and biological research, ecosystem conservation, and urban planning and studies.

Prerequisites: GEOG 203, GEOG 402 (or GEOG 5502).

GEOG 5506 Global Environmental Change Credits: 3

This course will examine the current rates of global environmental change and potential causes in the context of Earth's natural climate variability. The course will follow a seminar format. Students will read and discuss published articles on current and emerging theories of forcing mechanisms in the Earth's systems. Additional in-depth research and written evaluation are required for graduate credit.

GEOG 5507 Advanced Geographic Information Science Credits: 4

Prerequisites: GEOG 203.

GEOG 5509 Urban Geography Credits: 3

Historical development, morphology and functions of urban places, including intercity relationships and the relationship between cities and their hinterlands; emphasis on American cities. Students will complete a series of reports and a term paper.

GEOG 5510 Landscape, Language, Literature, and Law Credits: 3

An examination of the geographic underpinnings and implications of languages, literatures, and jurisprudence. The course explores languages' historic rootedness in the interactions between human beings and their surroundings; the varying geographic expressiveness and discrimination of languages; the effect and significance of literary evocations of landscapes; and the cultural and environmental geographic content of the language of law. Readings, lectures, discussions, writing.

GEOG 5512 Global Tourism Credits: 3

This course is a regional survey of world tourism. Topics include the uniqueness of place, the marketing of tourist destinations, and the cultural, economic, and environmental impacts on host societies.

Prerequisites: GEOG 105 (or GEOG 200, or GEOG 202).

GEOG 5526 Paleocology: Microfossils and Climate Change Credits: 3

Paleocology will focus on questions addressing past environments and past climates based on the ecology of microfossils. Micro-organisms are very sensitive to a wide variety of environmental conditions including temperature, precipitation, hydrology, water chemistry, salinity, habitat, and pollution. The fossil remains of these organisms are used as proxy indicators for reconstructing past environmental conditions, climate change, vegetation dynamics, and human impacts. Students will have the opportunity to process microfossils and make interpretations based on analysis of data.

GEOG 5530 Location Theory Credits: 3

An analysis and evaluation of the basic theories that have been developed to account for the spatial arrangements of economic activity. Emphasis on urban areas as nodes of economic interaction. Three hours lecture and discussion per week.

Prerequisites: GEOG 311, six hours in economics or urban studies.

GEOG 5537 Population Geography Credits: 3

An analysis of human population: how they grow, their changing compositions, and how and why people migrate from one place to another. Basic demographic processes-mortality, fertility, and migrate- and theory and techniques for their study are discussed. The relationships between population growth and population planning, immigration, urbanization and cities, and the environment.

GEOG 5544 Advanced Spatial Data Analysis Credits: 4

This course will focus on advanced computation methods for the analysis and modeling of complex and often non-deterministic processes in the spatial and environmental sciences. Students will be introduced to innovative techniques for analyzing large datasets with attribute spaces of very high dimensionality, including hyper-spectral remote sensing data. Three hours lecture and one hour computer lab per week.

Prerequisites: GEOG 444, elementary statistics, or permission of instructor.

GEOG 5546 Global Water and Sustainability Credits: 3

This course examines the physical characteristics of water and its role in Earth systems. The challenges facing societies in an era of rapidly changing climate are explored.

GEOG 5548 Satellite Climatology Credits: 4

Use of satellite observations to study the climate system. Discussions consider the development of satellite climatology, sensors, platforms and methodologies use to estimate climate variables from radiance measurements. Aspects of climate that are emphasized include cloud climatologies, cloud systems, atmospheric moisture, radiation budget, and land-surface conditions. Three hours of lecture and one hour of lab per week.

GEOG 5597 Graduate Seminar in Geosciences Credits: 3

This graduate seminar examines emerging and current issues in Environmental and Urban Geosciences. Most environmental issues and their solutions are inherently multidisciplinary and are characterized by significant interactions between oceans, atmosphere, land, and society. In addition to examining these issues, this seminar engages students in the process of critically evaluating Earth and human systems studies. The course provides students with a fundamental background of today's important environmental challenges and experience doing the craft of science through critically reading, thinking, writing, and speaking.

GEOG 5598 Special Topics in Geography Credits: 1-3

Advanced independent research in Cultural or Physical Geography.

Prerequisites: Baccalaureate degree.

GEOG 5598A Special Topics in Cultural Geography Credits: 1-3

Advanced independent research in Cultural Geography.

Prerequisites: Baccalaureate degree.

GEOG 5598B Special Topics in Physical Geography Credits: 1-3

Advanced independent research in Physical Geography.

Prerequisites: Baccalaureate degree.

GEOG 5598D Special Topics in Advanced GIS and Remote Sensing Credits: 1-3

Advanced independent research in geographic information science (GIS) and remote sensing.

GEOG 5598F Special Topics: Geostatistics and Modeling Credits: 1-3

Advanced independent research in geostatistics and modeling techniques.

GEOG 5599 Research and Thesis Geography Credits: 1-9

Students will conduct research and writing in support of a thesis topic, which will have been approved in advance by the appropriate graduate advisory committee. Credit load will also be approved in advance by the student's graduate advisor.

Prerequisites: Baccalaureate degree.

GEOG 5690 Special Research Topics Credits: 1-3

Student will produce a major research paper suitable for publication under the direction of their instructor.

GEOG 5699R Research And Dissertation Credits: 1-10

Research for dissertation in partial fulfillment of the Geosciences requirements for the Ph.D. degree.

Geology (GEOLOGY)

Courses

GEOLOGY 5507 Archeological Resources Management Credits: 3

This class examines contemporary issues managing archaeological resources. This class is intended for students seeking work in Cultural Resources Management (CRM); those already working CRM, or student anthropology, environmental studies, geology, geography, public administration and other fields likely to deal with archaeological and historical research or employment setting. This class does not require a background in archaeology.

GEOLOGY 5508 Archaeological Field Survey Methods Credits: 3

this class offers instruction in the basic skills required to conduct field surveys in archaeology and other geosciences disciplines. In the classroom, students learn about the development of archaeology as a scientific discipline and how to recognize some of the basic field data sought by archaeologists. Students learn about mapping and land navigation techniques. The field phase of instruction includes visits to archaeological sites in the region.

GEOLOGY 5509 Field Study in Archaeology Credits: 1-5

This class offers students an opportunity to attend a field school in archaeology. Students will be taught how to: design archaeological research, set-up excavation, keep a wide range of excavation records, make maps and drawings, take photographs related to excavation problems, identify and recover a broad spectrum of artifact and faunal remains, collect samples for specialized analyses and use a wide range of excavation tools. This course will also introduce students to recording and analyzing excavated materials in the archaeological laboratory.

GEOLOGY 5512 Geology and Hazardous Waste Management Credits: 3

Nature, sources and characterization of hazardous waste; collection, transportation and disposal of hazardous wastes. Fundamentals of toxicology and risk assessment. Application of geologic principles and methods in the assessments and remediation of abandoned hazardous waste sites and contaminated aquifers. Review of selected case histories. Experts from government and private organizations will be invited to deliver guest lectures. An out-of-town field trip to a hazardous waste site is required. A term paper based on library research or an approved experimental project is required for graduate credit.

Prerequisites: GEOLOGY 325, GEOLOGY 342, GEOLOGY 350.

GEOLOGY 5513 Advanced Mineral Deposits Credits: 3

Distribution, origin and environmental implications of extractable resources including non-metallic deposits, ores, and selected energy resources.

Prerequisites: GEOLOGY 312, GEOLOGY 325, graduate standing.

GEOLOGY 5516 Understanding and Living with Volcanoes Credits: 3

This course will examine the distribution, tectonic setting, and morphology of a range of volcano types on Earth and a few examples from other planets. Students will study volcanic processes including explosive and passive processes and how we investigate them. This will involve discussion of volcanic hazards and hazard assessment, risk communication, and the challenges of volcanic crises response. The course will also cover how volcanoes impact the local and global economy and Earth's climate.

GEOLOGY 5521 Advanced Methods for Earth and Environmental Science Credits: 3

This course will provide students with an inquiry-based learning experience that focuses on the application of field methods for understanding surface and subsurface earth processes and environmental issues. Students will collect field data at off campus site, conduct periodic monitoring, and analyze samples using departmental instrumentation.

Prerequisites: GEOLOGY 220 (or ENV-SCI 110R), GEOLOGY 220L (or ENV-SCI 110L).

GEOLOGY 5525 Quaternary Geology Credits: 3

The study of Quaternary processes, surficial deposits, and land forms. Course content will cover both the glaciated and nonglaciated portions of the United States as well as the interrelations between Quaternary geology and urbanization. Three hour lecture. Field trips.

Prerequisites: GEOLOGY 314, baccalaureate degree in geology.

GEOLOGY 5531 X-Ray Diffraction and Fluorescence Methods: X-Ray Mthds Geol/Anly Credits: 2

Theory and practical application of x-ray diffraction and fluorescence methods in characterizing geologic materials. Two hours lecture and one 2-hour lab per week for 8 weeks.

GEOLOGY 5532 Icpms Applications in Geology Credits: 2

Theory and practical application of Inductively-Coupled Plasma Mass Spectrometry in the geosciences and environmental sciences. Two hours lecture and discussion, and one 2-hour lab per week for 8 weeks.

GEOLOGY 5534 Hazardous Waste Operation Management Credits: 2

Overview of federal regulations dealing with hazardous waste management, toxicology, hazard communication, site management, air monitoring, operating procedures, and health and safety. The course includes hands-on training on spill control, equipment use and emergency use and emergency response. Practical training involves physical stress and participants must be in good physical health. This course satisfies OSHA's 40 hour training requirement for hazardous waste personnel.

GEOLOGY 5535 Aqueous Geochemistry Credits: 3

This course is directed to two objectives. First it will equip the students with a basic understanding of the geochemical principles and calculations which are directly related to environmental problems and second, it will provide the student with a basic understanding of specific problem areas in environmental geochemistry.

Prerequisites: CHEM 211, CHEM 212R, Baccalaureate degree in geology.

GEOLOGY 5536 Introduction to Scanning Electron Microscopy Methods Credits: 2

Practical introduction to the use of the scanning electron microscope and its accessories, including image production, elemental analysis, and elemental mapping of solid materials. Geological applications will be emphasized, but the methods presented will be useful for microscopic examination of solid materials in any discipline. 2 hours of lecture and lab per week for 8 weeks.

Prerequisites: Permission of the instructor.

GEOLOGY 5541 Environmental Geophysics Credits: 3

Fundamental theory and near-surface applications of the geophysical methods including seismic methods, potential methods, and electrical methods. Emphasis will be placed on the use of these methods in environmental and engineering investigations, addressing such issues as water resources, contaminant transport, geotechnical properties, and archaeological protection. Course will include a field component illustrating application of selected techniques to a local environmental problem.

Prerequisites: Baccalaureate degree in Geology.

GEOLOGY 5542 Electrical Methods in Environmental Geophysics Credits: 3

Fundamental theory and near-surface applications of the electrical geophysical methods; (1) electrical resistivity, (2) electromagnetics, (3) ground penetrating radar, and (4) induced polarization. Emphasis will be placed on the use of these methods in environmental and engineering investigations, addressing such issues as water resources, contaminant transport, geotechnical properties and archaeological protection. Course will include a field component illustrating application of selected techniques to a local environmental problem.

Prerequisites: Baccalaureate degree in Geology.

GEOLOGY 5546 Petroleum Geology Credits: 3

This course addresses the geological habitat of oil and natural gas, the impacts of petroleum on society, subsurface mapping techniques, and the acquisition and interpretation of subsurface and production data.

Prerequisites: GEOLOGY 220, baccalaureate degree in geology.

GEOLOGY 5551 Geotechnics Credits: 4

Integration of the basic principles and concepts from material sciences, rock and soil mechanics, and civil engineering. Mechanical properties, geologic aspects and engineering classifications of earth materials and the effects of physical forces on their engineering behavior will be emphasized. Three hours of lecture and two hours of laboratory each week. Field trips.

Prerequisites: PHYSICS 210, PHYSICS 220, GEOLOGY 350.

GEOLOGY 5555 Environmental Impact Analysis Credits: 3

A systematic analysis of the spectrum of environmental changes related to human use and occupancy in urban settings. Study of the nature of activities such as industrialization, mining, urbanization and transportation, and their effect on the specific site and general region. Methods of measuring aesthetic and economic quality of the urban areas will be explored in an attempt to facilitate writing environmental impact statements.

Prerequisites: Baccalaureate degree in geology.

GEOLOGY 5559 Inquiry-Based Field Studies for Teachers Credits: 3-6

Inquiry-based studies in environmental science, environmental chemistry and geology involving collaborations between course participants, practicing scientists and professional educators. The course is designed especially for pre- and in-service teachers of all levels and contact areas to enhance critical thinking, problem solving and process skills as defined by state and national standards. Projects will balance field and lab studies with analysis and presentation of results through electronic, oral and written means.

GEOLOGY 5561 Geologic Mapping Credits: 3

Analysis of the stratigraphic section in the greater Kansas City area by field investigation. Compilation of descriptive data and the construction of detailed geologic maps. Practical problems to determine the most beneficial use of the land in an area that is rapidly becoming urbanized. Previous field mapping experience highly recommended.

Prerequisites: Baccalaureate degree in geology.

GEOLOGY 5570 Advanced Hydrogeology Credits: 3

This course will focus on advanced groundwater hydrology with emphasis on flow equations and computational modeling in various geologic settings. Students will be introduced to basic analytical skills to derive dynamics of groundwater flow, comprehensive understanding of aquifer characteristics, and interpretation of field based groundwater data using computational simulations.

Prerequisites: Baccalaureate degree in Geosciences, GEOL 370R, or permission of instructor.

GEOLOGY 5571 Tectonics Credits: 3

A detailed inquiry into plate tectonics and the geophysical and geological data that define the motion of lithospheric plates. Global examples of divergent, convergent, and transform plate boundaries will be studied through lectures, discussions, problem sets, and term papers.

Prerequisites: GEOLOGY 325, GEOLOGY 350.

GEOLOGY 5572 Earthquake Geology Credits: 3

This course is detailed inquiry into the study of present and past earthquakes as they are preserved in the seismological, geophysical, and geological record. Global examples of earthquakes will be studied through lectures, discussions, problem sets, term papers, field trips and field projects.

Prerequisites: GEOLOGY 350.

GEOLOGY 5597 Graduate Seminar in Geosciences Credits: 3

This graduate seminar examines emerging and current issues in Environmental and Urban Geosciences. Most environmental issues and their solutions are inherently multidisciplinary and are characterized by significant interactions between oceans, atmosphere, land, and society. In addition to examining these issues, this seminar engages students in the process of critically evaluating Earth and human systems studies. The course provides students with a fundamental background of today's important environmental challenges and experience doing the craft of science through critically reading, thinking, writing, and speaking.

GEOLOGY 5598 Special Topics in Urban Environmental Geology Credits: 1-3

Individual research into practical geoscience problems in the urban environment. Provides opportunity for individual research in applied geology. Topic and method to be established by student and academic supervisor prior to enrollment.

GEOLOGY 5598A Special Topics In Urban Environmental Geology: Petroleum Geology Credits: 1-3**GEOLOGY 5598B Spec Topics In Urban Environmental Geology: Soil/Rock Mechanics Credits: 1-3****GEOLOGY 5598C Sp Topics In Urban Environmental Geol: Stratigraphy/Paleontology Credits: 1-3****GEOLOGY 5598D Spec Topics In Urban Environmental Geology-Environmental Geology Credits: 1-3****GEOLOGY 5598E Special Topics in Energy and Mineral Resources Credits: 1-3**

This course provides students an opportunity for advanced independent research in energy and mineral resources.

GEOLOGY 5598H Special Topics in Urban Environmental Geology - Geochemistry and Mineralogy Credits: 1-3**Special Topics In Urban Environmental Geology - Geochemistry and Mineralogy****GEOLOGY 5598I Special Topics In Urban Environmental Geology Credits: 1-3****GEOLOGY 5598J Special Topics In Urban Environmental Geology: Environmental Sci Credits: 1-3****GEOLOGY 5598K Issues in Waste Management Credit: 1**

This course focuses on the critical problems of managing the waste materials generated in our society. The course includes discussion of various types of waste-municipal solid waste, hazardous (industrial) waste, nuclear and medical wastes. Sources, handling, storage, transportation, treatment and disposal of these wastes are reviewed. Experts from government and the waste management industry give guest lectures.

GEOLOGY 5598M Special Topics in Geostatistics and Modeling Credits: 1-3

Advanced independent research in geostatistics and modeling techniques.

GEOLOGY 5599 Research and Thesis: Geology Credits: 1-9

Individual directed research by the student leading to the preparation of a formal written thesis and oral defense.

GEOLOGY 5690 Special Research Topics Credits: 1-3

Student will produce a major research paper suitable for publication under the direction of their instructor.

GEOLOGY 5699R Research And Dissertation Credits: 1-10

Research for dissertation in partial fulfillment of the Geosciences requirements for the Ph.D. degree.

GEOLOGY 5899 Required Graduate Enrollment Credit: 1

Guitar (GUITAR)

Courses

GUITAR 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

GUITAR 5500A Graduate Guitar-Secondary Credits: 2**GUITAR 5500B Special Applied Studies Credits: 2**

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

GUITAR 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

GUIAR 5500JA Graduate Applied Jazz Studies Credits: 2

One hour lesson weekly. Jury examination is required.

Prerequisites: Graduate status.

GUIAR 5500JB Special Applied Jazz Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.

Prerequisites: Graduate status.

GUIAR 5500JC Applied Jazz Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied jazz study in an area other than, and in addition to, their primary performance study.

Prerequisites: Graduate status.

GUIAR 5501 Graduate Guitar - Masters Performance Credits: 4

GUIAR 5601 Graduate Guitar - Doctoral Performance Credits: 4

Harpsichord (HRPCHD)

Health Administration (HLTH-ADM)

Courses

HLTH-ADM 5551 Leadership and Strategy in Healthcare Credits: 3

This course provides an overview of major leadership and strategic issues in healthcare organizations in the areas of: 1) leadership and organizational dynamics, 2) strategic thinking and planning, 3) population health and health policy, 4) human resources, 5) performance management, and 6) organizational ethics. The course is eligible for inclusion in the Executive MBA program.

Prerequisites: Instructor approval required.

HLTH-ADM 5552 Managing Healthcare Organizations Credits: 3

This course provides an overview of major issues and essential tools in managing healthcare organizations in the areas of: 1) legal and regulatory issues that confront a healthcare organization, 2) healthcare quality and data analysis, 3) patient safety, 4) risk management, 5) process management, 6) healthcare economics, 7) cost and comparative effectiveness, 8) fundamental principles of financial management. The course is eligible for inclusion in the Executive MBA program.

Prerequisites: Instructor approval required.

HLTH-ADM 5571 Financial Management Issues of Health and Human Services Organizations Credits: 3

This course is intended to provide an overview of the financial management problems of health and human services organizations. A broad range of topics is examined: financial statements, ratio analysis, cost accounting, reimbursement and pricing, management of working capital, budgeting and programming, capital financing, and cash management.

HLTH-ADM 5572 Quality and Safety in Health Care Credits: 3

Overview of the quality, safety, and process management concepts, approaches, and issues relevant to healthcare delivery settings, including use of analytical techniques used to identify and mitigate contributing factors and process management tools that enable healthcare organizations to achieve their quality and safety goals.

HLTH-ADM 5573 Health and Social Equity Credits: 3

Examines the complex relationship between the social and political environment and health outcomes. All policy is health policy – economic, transportation, natural and built environments, schools. This course examines how social equity shapes health behaviors and how the life odds in different communities expose the historical legacies of past injustices. Only ten percent of health disparities are explained by access to care, although health care and health insurance dominate the public conversation. Draws on guest speakers, books, journal articles, popular press, film and art; as varied as are the social determinants of health, so are media that explore those relationships.

HLTH-ADM 5577 Leadership and Management in Health Care Organizations Credits: 3

An overview of leadership and management in health care, reflecting the uniqueness of this sector, is provided. Concepts of interprofessional relationships and team-based care delivery are introduced. Approaches to aligning diverse perspectives and interests with organizational priorities, leading change and improvement efforts, and promoting organizational learning are discussed.

HLTH-ADM 5578 Data Analysis for Health Care Managers Credits: 3

Data analysis tools that are useful to health care managers are developed. Common health care data structures and coding systems are introduced using health care databases that track actual patients and providers. Methods of data analysis used in health care management decision-making are studied, including risk-adjustment, contract analysis, quality measurement, cost-effectiveness analysis, and competition analysis.

Prerequisites: PUB-ADM 5510 or equivalent

HLTH-ADM 5580 The Economics of Health and Medicine Credits: 3

We will study health care markets and how they function, with a particular focus on health care markets in the U.S. We will explore economic phenomena that distinguish health care markets, such as price discrimination, adverse selection, moral hazard, public goods, and supplier-induced demand. We will take an in-depth look at the U.S. markets for health insurance, hospitals, physicians, medical devices, and pharmaceuticals and compare the structure of these markets to their foreign counterparts. We will study government regulations and reform efforts and their impact on health care markets. Economic tools that are useful for health care managers (e.g., the analysis of risk, bargaining theory) will also be covered. Recommended preparation: Some mathematical social science.

HLTH-ADM 5581 Health Policy in the United States Credits: 3

This course helps students develop an understanding of the determinants of health, major current health policy issues, and health policy making in the United States. The public policy process and its effects on the organization, financing, and delivery of health care are examined in detail. The roles of key players in health policy formulation and the public policy responses to current health policy are also examined.

HLTH-ADM 5586 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

HLTH-ADM 5587 Special Topics Credits: 3

This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

HLTH-ADM 5595 Internship Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

Health Professions Education (HPRE)

Courses

HPRE 5500 Leadership and Administration in Health Professions Education Credits: 3

Current approaches to academic leadership within the context of health professions education. Topics include management skills, problem solving, communication, group skills, motivation, managing conflict, and delegating. Attention to developing skill in presenting, interviewing and in facilitating meetings. Focus on application within the context of health professions education.

HPRE 5508 Principles and Methods of Research Credits: 3

Investigate the role and importance of quantitative, qualitative and mixed-methods research in the health professions. Primary goals are to develop the knowledge and skills to read and interpret educational research in the health professions and to develop a plan to conduct research projects.

HPRE 5522 Curriculum Design in Health Professions Education Credits: 3

Examination of the theory and strategies for the development, implementation, and evaluation of of curricula in health professions education. Focus on contextual factors, learner needs, current models, outcome-based approaches, leadership, and faculty development for design and delivery.

HPRE 5530 Current Issues in Health Professions Education Credits: 3

Consideration of the major social, historical, educational, professional, and cultural issues that affect health professions education today. Focus on investigation of various topics as linked to learning and teaching in the health professions. This course will provide the foundations for the Certificate in Health Professions Curriculum and Evaluation.

HPRE 5535 Community Engagement in Education Credits: 3

Provides a foundation grounded in examination of the forces and factors that shape successful community engagement projects associated with measurable outcomes. Students will apply education concepts in developing a project with community partners to identify needs and implement a health improvement project.

HPRE 5540 Independent Study Credits: 1-3

Focused readings and/or special research project in an area selected by the graduate student in consultation with the advisor.

HPRE 5550 Assessment in Health Professions Education Credits: 3

Focus on the design, implementation and evaluation of tools for assessing student learning and performance in health professions education. Consideration of validity, reliability, writing test items, survey design, checklists, observational assessment, simulations and rubrics. Emphasis on best practices, assessment challenges, and on the effective implementation of comprehensive assessment programs in health professions education.

HPRE 5560 Teaching in Health Professions Education Credits: 3

Emphasis on learning and teaching theories and current research in health professions education as applied to instructional methods, delivery, learning contexts. Focus on individual differences, mentoring and tutoring, and on teaching in clinical, small group and large group situations.

HPRE 5565 Simulation for Health Professions Education Credits: 3

This course is designed to assist learners in developing the skills necessary to teach with simulation. Simulation is an educational methodology that leads to knowledge gains, which are transferrable to patient care settings. This course will focus on the core pedagogical principles and best-available evidence in simulation-based health professions education. The course is designed for adult learners with the goal of assisting each participant in expanding their existing knowledge base and learning to apply it in a meaningful way to everyday teaching and curriculum needs.

HPRE 5566 Teaching about Culture and Health Credits: 3

The course begins with a foundation in cultural competency for health profession educators including content about social determinants of health, health disparities and culturally appropriate care. Curriculum development and instructional design topics including small group facilitation, active learning, case-based learning, use of narrative and media, distance learning, debriefing and assessment are specifically tailored for teaching cultural competency in health professions education.

Prerequisites: HPRE 5560, HPRE 5522, HPRE 5550

HPRE 5580 Program Evaluation in Health Professions Education Credits: 3

Applied research as linked to program development and evaluation in health professions education. Topics include needs assessment, summative and formative evaluations, evaluation paradigms, methodologies, data collection, data analysis, reporting findings. This course is project-based.

Prerequisites: EDUC-R&P 5508.

HPRE 5588 Learning Portfolio in Health Professions Education Credits: 1-3

Learning Portfolio in Health Professions Education (HPRE) is an individualized course which provides the opportunity to document and reflect on academic and applied work related to the learning outcomes of the Master of Health Professions Education program. Students engage in a process of selection, documentation, reflection, and collaboration with the goal of developing deeper understandings regarding their educational development, accomplishments, and application. The course may be taken for 1-3 credit hours per semester, although the full three credit sequence is required.

Prerequisites: Enrollment in the Master's in Health Professions Education program.

HPRE 5599 Summer Conference in Health Professions Education Credits: 3

The Summer Conference in Health Professions Education provides an opportunity for second year students in the Masters in Health Professions Education program to design, deliver and assess a one day, "mini" conference for area health professions educators. Students will work collaboratively, under faculty guidance, to design objectives, organize resources, develop timelines, publicize, deliver and evaluate a conference designed to reflect a particular theme in health professions education. The conference will consist of educational research presentations, hands-on, skill-based workshops, consultations, and literature/resource dissemination. It will serve to showcase student accomplishments and skills and be open to the public.

HPRE 5899 Required Graduate Enrollment Credit: 1

Required enrollment for students who will graduate during a term when they are not enrolled in a course. Option for students who will complete assignments in order to be eligible for graduation.

History (HISTORY)

Courses

HISTORY 5500B Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500BB Special Topics in History for Graduate Students Credits: 3

HISTORY 5500C Special Topics In History For Graduate Studies Credits: 3

HISTORY 5500CL Cluster Course:Nordic Culture Credits: 3

HISTORY 5500CP Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500CZ Special Studies History Credits: 1-3

HISTORY 5500D Special Topics in History For Graduate Studies Credits: 1-3

HISTORY 5500E Special Topics In History For Graduate Studies Credits: 3

HISTORY 5500G Special Topics in History for Graduate Students Credits: 3

HISTORY 5500GB Special Topics in History for Graduate Students Credits: 3

HISTORY 5500GR Special Topics in History for Graduate Students Credits: 3

HISTORY 5500H Special Topics In History For Graduate Students Credits: 1-3

HISTORY 5500JCA Special Topics in History for Graduate Students Credits: 3

HISTORY 5500LA Special Topics in History for Graduate Students Credits: 3

HISTORY 5500P Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500R Special Topics in History for Graduate Studies Credits: 1-3

HISTORY 5500RC Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500RD Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500RJ Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500SS Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500W Special Topics in History for Graduate Students Credits: 3

HISTORY 5500Z Special Studies: Labor In Industrial America Credits: 3

This course examines the history of work and the working class in the U.S. from 1877 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.

HISTORY 5501A Religion in America Credits: 3

An in-depth examination of selected aspects of the history of religions in America from the colonial period to the present. Special emphasis will be given to methodological issues in the study of American religious history.

HISTORY 5502 America, 1000-1763: The Formative Era Credits: 3

Early American history encompasses the formative era of many institutions and attitudes which still persist in present-day America. A study of how these patterns and policies emerged will enlighten us as to our current ways our society seeks to adapt to change.

HISTORY 5503 America, 1763-1783: The Revolutionary Heritage Credits: 3

The American Revolution created American history by creating a new nation. What the American Revolution was depends to a large extent upon what Americans think they are or ought to be. The goals of this course, therefore, are twofold: (1) to probe the nature, causes and consequences of the American Revolution; (2) to assess the intentions and behavior of both the Framers of the Constitution in 1763-1783 and the inheritors of modern America.

HISTORY 5504 America, 1783-1828: The National Experience Credits: 3

HISTORY 5505 America, 1828-1852: The Jacksonian Period Credits: 3

HISTORY 5506 America, 1850-1877: Civil War and Reconstruction Credits: 3

HISTORY 5506A History of Christianity to Middle Ages Credits: 3

This course examines the historical and theological development of Christianity from its origins to the High Middle Ages. The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major social, institutional, and intellectual force with a focus on pattern of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.

HISTORY 5507 America 1877-1917: Development of Industrial America Credits: 3

HISTORY 5507A The History of Christianity from the Middle Ages to the Present Credits: 3

This course examines the historical and theological development of Christianity from the High Middle Ages to the present. The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major social, institutional and intellectual force with a focus on patterns of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.

HISTORY 5508A America 1914-1945: The Era of the World Wars Credits: 3

HISTORY 5508B America 1945-Present: Our Times Credits: 3

HISTORY 5511 Medieval Civilization I Credits: 3

Medieval Civilization I

HISTORY 5512 Medieval Civilization II Credits: 3

Medieval Civilization II

HISTORY 5512A Medieval Women & Children Credits: 3

This course explores the roles of women in the social, economic, political, and cultural environments of medieval and early modern Europe. We examine the lives of women in all areas of life, from the ordinary to the extraordinary, in urban and rural environments, from the centers of religious and political power to the margins of society. Focus will be on the world of work for urban and peasant women and on the social and legal institutions of marriage, kinship, and the family. The course makes extensive use of primary source by and about women during this period.

HISTORY 5513 Renaissance Credits: 3

HISTORY 5514 Reformation Credits: 3

HISTORY 5515B 17th And 18th Century European History Credits: 3

This course is designed to present the upper-division undergraduate with a firm grasp of the major intellectual, cultural, political and economic development of 17th and 18th century Europe. It considers the bitter Thirty Years War in Century Europe, the rise of the Netherlands, the fall of Italy and Spain, the rise of constitutional and absolutist styles of government, the scientific revolution, the colonization by Europeans of the Pacific and Indian Ocean Basins, Enlightenment political philosophy, the Agricultural Revolution, and the French Revolution. Also offered for undergraduates as 415B. Graduate students will be held to a higher standard in terms of additional, in-depth historiographic research, writing, and discussion.

HISTORY 5516 The French Revolution and Napoleon Credits: 3

HISTORY 5517 19th Century European History Credits: 3

This upper-division course will survey significant trends in warfare, politics, economics, social relations and culture in 19th century Europe, paying particular attention to the rise of modern ideologies and identities, world hegemony, and the social technologies of dehumanization that foreshadowed the unprecedented inhumanities of the 20th century. Graduates will be held to a higher standard in terms of additional, in-depth historiographic research, writing, and discussion.

HISTORY 5518 20th Century European History Credits: 3

This upper-division course traces the history of Europe in the 20th century. It will survey significant trends in warfare, politics, economics, social relations and culture, paying particular attention to the issues of modernity and postmodernity, imperialism and decolonization, dehumanization and genocide as well as the role of ordinary people in these systems of mass destruction. Graduate students will be held to a higher standard in terms of additional, in-depth historiographic research, writing, and discussion.

HISTORY 5519 Contemporary European History: 1950-2000 Credits: 3

This upper-division course traces the history of Europe in the period of living memory. It will survey significant trends in warfare, politics, economics, social relations and culture, paying particular attention to the rise of globalization and the condition of postmodernity, decolonization and neo-colonization, European unification and everyday life. Graduate students will be held to a higher standard in terms of additional, in-depth historiographic research, writing, and discussion.

HISTORY 5521 Oral History Credits: 3

This course focuses on the methods, theories, ethics, practices, and applications of tools in documenting and recovering the experiences of people hidden from the "traditional records." Through lectures, readings, discussions, and fieldwork, students will learn the various steps in developing a robust oral history project. Students will go out into the community to capture the histories of communities in Kansas City.

HISTORY 5525R European Criminal Justice History, 500-1900 Credits: 3

This course will survey European crime, criminal procedure, policing and punishment between 500 and 1900. Particular attention will be given to changing methods of proof (oaths, ordeals, juries); changing type of criminal activity (banditry, vagrancy, witchcraft, professional theft) and changing penal strategies (the stocks, breaking on the wheel, the workhouse, the prison, the penitentiary). English experiences are emphasized.

HISTORY 5526 Modern Latin America Credits: 3

This course studies social, political, economic and cultural trends in Latin America in the nineteenth and twentieth centuries. Discussion topics include nation building after Independence with an emphasis on gender and race in the creation of national identities and new forms of social stratification; integration of national economies into the world economic system; the expansion of political participation and citizenship; immigration (national and transnational) and the tensions caused by the forces of modernization and tradition. Although the purpose of the course is to provide a general background for a large and diverse region (more than 20 countries), case studies from Argentina, Mexico and Brazil will illustrate the above-mentioned themes and will provide the basis for a comparative regional perspective.

HISTORY 5526R The Scientific Revolution 1500-1700 Credits: 3

HISTORY 5527 The Darwinian Revolution, 1650-1900 Credits: 3

HISTORY 5528A History Of The Body Credits: 3

This advanced course will explore the new field of the history of the body, with particular attention to sexuality and gender. Topics will include the history of sexualities, the body and society, body disciplines, medical practices and representations of illness, beauty, and fashion, and the relationship between sexualities and nationalisms.

HISTORY 5528B Women & Medicine: Patients & Practitioners From Antiquity-Present Credits: 3

This course explores, in a selective fashion, the role of women in Western Medicine both as health care providers and patients. The subject of the history of medicine is too broad to be covered comprehensively in a semester, and so we will focus on diseases or physical conditions which were believed to be limited to women-childbirth, certain mental health conditions, reproductive health, breast cancer-as well as the increasing marginalization of women within the profession of health care providers to those branches concerned primarily with "women's problems."

HISTORY 5531 Medieval England, 1066 to 1485 Credits: 3

HISTORY 5532 Tudor-England, 1485-1688 Credits: 3

This course covers the history of England from the accession of Henry VII in 1485 to the crowning of William and Mary in the Glorious Revolution. Its main emphasis is the Tudor dynasty 1485-1603 with special reference to the transformation of England into a modern state, Re-Reformation, the role of Parliament, etc. The course concludes with the major characteristics of the early Stuart period.

HISTORY 5533 History of Britain 1603-1832 Credits: 3

This course analyzes the rise and fall of the Stuart dynasty and the effects of civil war, rebellion, and religious turmoil on the peoples of Britain. The domination of politics and culture by the aristocracy in the eighteenth century is examined. The rise of the Navy due to constant warfare and the exploration of the Pacific are discussed. The monarchy of George III, the loss of the American colonies, and the wars with Napoleon are examined. Finally, the Agricultural and early Industrial Revolutions are considered through an analysis of the social changes they brought in Britain and the Empire

HISTORY 5534 History of Technology Credits: 3

The course examines technology as it shapes and is shaped by human society. Students will consider technology as a product of historically-specific and sometimes overlapping contexts shaped by culture, economics, natural environments, and social processes.

HISTORY 5536 Modern German History: 1890-1990 Credits: 3

This course traces history of Central Europe from the fall of Bismarck to the reunification of Germany one century later. It will ask students to think critically about the relationship between state and society, elites and 'ordinary' Germans, in the various German-speaking regimes that existed over the course of this era: two empires, two interwar republics, two fascist dictatorships, and three post-fascist republics. All assigned readings will be in English; a background knowledge of European history is recommended.

HISTORY 5537 Nazi Germany Credits: 3

Nazi Germany

HISTORY 5544 Islam & the Arabs: The Formative Period Credits: 3

HISTORY 5545 The Ottoman Empire in the Middle East to WWI Credits: 3

Cross Listings: HISTORY 445.

HISTORY 5546 The Middle East from World War I to the Present Credits: 3

HISTORY 5548 Missouri/Kansas Border Wars Credits: 3

This course explores the history of the Civil War on the Missouri/Kansas border, where residents first shed blood over the issue slavery. An exploration of this most uncivil of wars provides insight into the ways in which societies can be fragmented by ideology and ultimately rebuilt upon different lines.

Prerequisites: undergraduate degree.

HISTORY 5549 Civil War in Memory and Film Credits: 3

This course explores how the era of the Civil War and Reconstruction has been portrayed in film, literature, and art, and if the popular memory of the war accurately reflects the history. We also will discuss how the understanding of this pivotal event in American History has changed over time and how cultural artifacts often say more about the time in which they were produced than the actual history of the Civil War.

HISTORY 5552 Latin American History through the Movies Credits: 3

This course explores the national cinemas and film industries of various regions in Latin America. Students will analyze films both as artistic endeavors and as sociological documents that provide a window into the socio-historical context of the nation in question. This course will also examine the history of Latin American cinema from the beginnings of sound to present.

HISTORY 5554 Women in Modern America Credits: 3

HISTORY 5556 Rise of the City in the U.S. Credits: 3

HISTORY 5556R Kansas City: History of a Regional Metropolis Credits: 3

HISTORY 5557 The American West Credits: 3

HISTORY 5558 Black Civil Rights in the 20th and 21st Centuries Credits: 3

This course examines the fight for black civil rights in the United States in the 20th and 21st centuries, focusing on the Jim Crow period, the fight to end segregation, and the enduring problem of race in the United States.

HISTORY 5558R History of the American South Credits: 3

History of the American South

HISTORY 5559 World War II Film and Propaganda Credits: 3

This course examines film and propaganda, including posters, political cartoons, speeches, and other media, created in prewar or wartime conditions by both the Allies and Axis powers from 1933 to 1945 as it affected World War II.

HISTORY 5561R American Foreign Relations Credits: 3

HISTORY 5562J Japanese Civilization Credits: 3

A survey of Japanese civilization and cultural history from the prehistorical period to the present. Emphasis on the interplay between religion, the arts, politics, and social structure.

HISTORY 5563R Military History of the U.S. Credits: 3

Military History of the U.S.

HISTORY 5566R American Economic History Since 1865 Credits: 3

The course deals with the emergence of Industrial America since 1865. It will cover the rise to dominance of the large modern corporation, with the problem of economic and social instability and stability, with the rise of trade associations, cartels, and government regulation in an unstable economy, and with the evolution of American economic policy and national economic planning.

HISTORY 5566RR American Labor History Credits: 3

This course examines the history of work and the working class in the U.S. from 1750 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.

HISTORY 5569 Women and Work in Early America Credits: 3

This course examines the ways in which gender, race, region, and class have shaped the historical experiences of American women. Students will trace women's lives from pre-European contact to 1877 through an examination of a wide variety of social, cultural, economic, and political forces and factors.

HISTORY 5570 Introduction to Material Culture Credits: 3

HISTORY 5570R Ancient Egypt Credits: 3

HISTORY 5571 American History Through Film Credits: 3

This course will move through the twentieth century and highlight major themes and developments that reveal the contours of American history as depicted in film. Students will examine the ways in which filmmakers have presented history, paying particular attention to the presentation of political, cultural, and social conflicts.

HISTORY 5571R Ancient Greece Credits: 3

HISTORY 5572R Ancient Rome Credits: 3

HISTORY 5574 Late Antiquity: The Transformation of the Mediterranean World (200-600 AD) Credits: 3

The decline of the Roman Empire and the barbarian invasions transformed the Mediterranean and European worlds, forming the foundation of Europe and the Islamic world. Students will investigate the multicultural society of Late Antiquity and become familiar with the primary sources for the period.

HISTORY 5575 Ancient Israel Credits: 3

Judaism has had a tremendous impact on our civilization and yet most Americans are only dimly aware of its origins and development. This course will trace the roots of the Jewish religion in its historical context from its beginning through the formation of rabbinic culture. The rise of Christianity will be examined in its original Judaic context, and recent discoveries, particularly those pertaining to the Dead Sea Scrolls, will be interpreted.

HISTORY 5575R The History of Ancient Israel Credits: 3

The History of Ancient Israel

HISTORY 5576R Medieval Jewish History Credits: 3

HISTORY 5577R Modern Jewish History Credits: 3

HISTORY 5578R The Holocaust and the State of Israel Credits: 3

The Holocaust and the State of Israel

HISTORY 5579 Public History: Theory and Method Credits: 3

This course explores the theoretical and methodological challenges that surround the public preservation and presentation of history in spaces like museums and historical societies. Students will learn the skills professionals use to communicate historical scholarship to wider audiences and will grapple with the issues around expanding history's stakeholders.

HISTORY 5580 The History Of The American South I Credits: 3

A study of the political, intellectual, cultural, economic, and social development of the American South up to and including the Civil War. Special topics discussed will be the plantation system, slavery, abolition, secession, the Confederacy and the interaction of the region with the nation.

HISTORY 5581 Research Methodologies Credits: 3

An introduction to a variety of research tools and techniques including such topics as evidence, critical method, verification, bibliography, book review, computers, statistics, and archival methods.

HISTORY 5581GR How To - History I Credits: 3

This foundational course in the doing of history will use the "great books" of historical scholarship to introduce graduate students to historical questions, methods, theories, and rhetorical strategies. The goal of the course is for the student to learn how to engage in historical criticism and formulate historical questions for themselves. This required course must be taken in the first year of graduate study in history.

HISTORY 5582 Colloquium In American History I Credits: 3

These courses are designed to acquaint the graduate student with the writings and theories of major American historians. Faculty lectures are combined with student bibliographical essays and the reading of important historical works in order to prepare the student for the final examination taken upon completion of M.A. course work. Books read in the course compose a large proportion of the departmental reading list.

HISTORY 5582A How To - History II A Credit: 1

This course teaches research-proposal writing including how to ask and answer a viable question and become an autonomous researcher in a scholarly community. Students will learn about career paths and development.

Prerequisites: HISTORY 5581GR.

HISTORY 5582B How To - History II B Credit: 1

This course, the second in a two-part sequence, will introduce graduate students to professional obligations and research methodologies of academic and public historians as well as examine diverse career paths for historians. Students will focus primarily on career development curriculum and experiences.

HISTORY 5583 Colloquium In American History II Credits: 3

These courses are designed to acquaint the graduate student with the writings and theories of major American historians. Faculty lectures are combined with student bibliographical essays and the reading of important historical works in order to prepare the student for the final examination taken upon completion of M.A. course work. Books read in the course compose a large proportion of the departmental reading list.

HISTORY 5583GR Medieval Methods & Paleography Credits: 3

This course examines the methodology and historiography of Medieval and Renaissance Studies. Through an introduction to paleography, the study of handwritings, it prepares students for advanced work in these fields. Using an interdisciplinary approach, this course examines the historical and cultural settings for texts, their physical form and production, as well as the tradition of textual transmission in the medieval and early modern world. In addition to gaining familiarity with many different types of primary sources, such as literary, artistic, legal, and notarial sources, students will be exposed to methods for archival work in various European nations.

HISTORY 5584R Colloquium In European History I Credits: 3

The European History Colloquium I will examine some of the crucial problems or watersheds in European history from antiquity through the Reformation. Course requirements include weekly discussions on specific topics and a research paper or project due by the end of the semester.

HISTORY 5585 Colloquium In European History II Credits: 3

The European History Colloquium II will examine some of the crucial problems or watersheds in European history from the Reformation through the 20th century. The course seeks to provide an in-depth study of specific topics and of the associated bibliography.

HISTORY 5585GR Colloquium in U.S. History Credits: 3

Students read broadly in the historiography of a particular historical problem, place, period, or specialization in U.S. History in order to master the relevant literature and hone their skills of historical criticism.

Co-requisites: HISTORY 5581GR.

HISTORY 5586GR Colloquium in World History Credits: 3

Students read broadly in the historiography of a particular historical problem, place, period, or specialization in world history in order to master the relevant literature and hone their skills of historical criticism.

Co-requisites: HISTORY 5581GR.

HISTORY 5587R Research Seminar Credits: 3

Students in this course will produce a major research paper under the direction of the instructor: a self-contained thesis chapter, an article for publication, or the equivalent.

Prerequisites: HISTORY 5582A.

HISTORY 5587RA Research Seminar Credits: 3

HISTORY 5587RB Research Seminar Credits: 3

HISTORY 5590 History Of The American South II Credits: 3

A study of the political, intellectual, cultural, economic, and social development of the American South since the Civil War. Topics discussed will be the molding of a "New South," twentieth century internal developments and the interaction of the region with the nation.

HISTORY 5591 Archival Methods Credits: 3

HISTORY 5592 Public History Internship Credits: 1-3

HISTORY 5593 Museum Studies Credits: 3

This course is designed to acquaint students with specific careers in museums and historical agencies; to introduce students to the wide range of operating issues facing those working in the museum profession on a day-to-day basis; and to familiarize students with the organizations, reference works and resources available to develop the skills and training required for those who choose to make this their profession.

HISTORY 5594 Public History and New Media Credits: 3

This course provides students with an understanding of how new media can advance the work of cultural heritage. While contributing to an ongoing digital project, the course will consider how historians utilize digital technology to analyze primary sources as well as how museums use social media to reach broader audiences.

HISTORY 5597 Non-Thesis Research/Reading Credits: 1-6

Individual direction of student reading or research by selected, consenting faculty. This course can be taken only when faculty supervision is unavailable in colloquia or seminars.

HISTORY 5599R Thesis Credits: 1-6

A contribution to knowledge based upon extensive research and reflective of careful analysis. Before writing a thesis, the student must clear the topic and research design with the Supervisory committee.

HISTORY 5680 Doctoral Colloquium Credits: 3

This course will examine the writings and theories of major historians in a particular field of history. The authors, works and intellectual currents which form the basis of the colloquium will vary from semester to semester, depending upon the professor's expertise and design for the course.

HISTORY 5687 Doctoral Research Seminar Credits: 3

Students in this course will produce a major research paper under the direction of the instructor. This shall consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

HISTORY 5687RB Doctoral Research Seminar Credits: 3

Students in this course will produce a major research paper under the direction of the instructor. This shall consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

HISTORY 5697 Doctoral-Level Independent Reading Credits: 1-6

Individual reading under the supervision of members of the History Doctoral Faculty in preparation for the Comprehensive Examination for the Ph.D.

HISTORY 5699R Dissertation Credits: 1-15

Course credits in dissertation.

HISTORY 5899 Required Graduate Enrollment Credit: 1

HISTORY 5990 Capstone Credits: 1-6

Horn (HORN)

Courses

HORN 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

HORN 5500A Graduate Horn-Secondary Credits: 2

HORN 5500B Special Applied Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

HORN 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

HORN 5501 Graduate French Horn - Masters Performance Credits: 4

HORN 5601 Graduate Horn - Doctoral Performance Credits: 4

Humanities (HMNTY)

Courses

HMNTY 5510 Methods in Critical Theory Credits: 3

Course introduces students to influential modern techniques of reading and interpretation, not only of literature but also of culture or visual art. Methods will themselves be seen in historical and social context, and theoretical texts may be subject to rhetorical analysis. Undergraduates only with instructor's permission

Law (LAW)

Courses

LAW 8501 Contracts I Credits: 3

Formation and performance of simple contracts; consideration; express and constructive conditions, excuse of conditions; remedies for breach; contracts for benefit of third parties; assignment; impossibility of performance and discharge.

LAW 8502 Contracts II Credits: 3

Prerequisites: LAW 8501.

LAW 8511 Torts Credits: 3

Wrongs to the person and to property; legal remedies through which compensation or other relief may be obtained.

LAW 8521 Civil Procedure – Pleadings, Motions, and Related Matters Credits: 3

Pleading; joinder of parties and claims; pre-trial motions; discovery; summary judgment; pre-trial and trial procedure; post trial motions.

LAW 8522 Civil Procedure - Jurisdiction Credits: 2

Court systems; personal jurisdiction and venue; federal jurisdiction; choice of law; preclusion; appellate procedure.

LAW 8522D Discovery Practice in Civil Litigation Credits: 1-3

This course focuses on the various discovery techniques which are commonly used in federal civil practice, and also compares state procedures. General topics include the uses of discovery, informal discovery, building the discovery plan, ethical issues, privileges and protections, the discovery tools, electronic discovery, experts, motions to compel discovery, and sanctions.

LAW 8522E Electronic Discovery Credits: 1-2

Discovery practice and laws related to electronically stored information in litigation.

Prerequisites: LAW 8521 LAW 8522.

LAW 8522L Civil Procedure Skills Lab Credits: 1-3

Students are trained in practical skills necessary for pre-trial litigation, including client interviewing and drafting pre-trial documents such as pleadings.

Prerequisites: LAW 8521 (or co-requisite).

LAW 8522W Civil Procedure: War or Justice Credit: 1

Philosophical problem in civil dispute resolution: identifying relevant criteria for evaluating a civil dispute resolution system, and assessing the extent to which the current system and alternatives satisfy those criteria.

Prerequisites: LAW 8521 Civil Procedure – Pleadings OR LAW 8522 Civil Procedure – Jurisdiction

LAW 8531 Lawyering Skills I Credits: 3

Introduction to legal reasoning; case analysis and synthesis; case research; structure and style in legal writing with emphasis on expository writing, including office memoranda.

LAW 8531I Common Law, Legal Analysis & Writing Credits: 3

Introduction to legal reasoning; case analysis and synthesis; case research; structure and style in legal writing with emphasis on expository writing, including office memoranda.

LAW 8532 Lawyering Skills II Credits: 2

Introduction to advocacy; introduction to interviewing, counseling and negotiation; statutory and computerized research; writing to and on behalf of a client, including a trial or appellate brief; oral advocacy.

LAW 8532I Introduction to American Legal Skills Credits: 2-3

Introduction to oral and written advocacy; interviewing, counseling and negotiation; and alternative dispute resolution.

Prerequisites: LL.M. students.

LAW 8532R American Legal Research Credit: 1

Introduction to research resources in the U.S. and techniques to systematically process and solve basic research problems found in law practice.

LAW 8541 Property I Credits: 3

Introduction to the nature of property; basic personal property law; adverse possession; possessory estates; basic future interests; marital and concurrent interests; landlord-tenant relationships.

LAW 8542 Property II Credits: 3

Licenses, easements, real covenants, equitable servitudes; nuisances; basic water law; brokerage; financing, mortgages, deeds of trust; contract of sale, deeds, closing; title insurance, warranties; recording; eminent domain; zoning.

LAW 8543 Adverse Possession Credit: 1

Explores the ancient yet evolving subject of adverse possession as it applies to real property in the United States and around the world. Topics explored include: the ancient doctrine as developed under the common law, the variety of statutory refinements to adverse possession doctrine in the United States and modern attempts to statutorily limit the doctrine, and comparative perspectives on adverse possession including the abrogation of the doctrine in Canada, and the effects of that abrogation on resolution of property disputes there.

Prerequisite: Property I

LAW 8552 Federal Taxation Credits: 3

Theory, history, and principles of federal income taxation; basic concepts of income, classification of income and deductions.

LAW 8590 Special Topics Credits: 1-6

The study of a contemporary topic of interest. This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

LAW 8601 Business Organizations Credits: 3

Partnership, limited liability company and corporation law; choice of business forms, formation of partnerships, limited liability companies and corporations; rights, duties, and powers of partners, members, shareholders, directors, and officers; closely held corporations; proxy regulation; derivative suits; dividends and stock redemptions; introduction to the Securities Act of 1933 and Securities Exchange Act of 1934.

LAW 8601C International Criminal Tribunals Credit: 1

This course will examine the types of international criminal tribunals available for the prosecution of individuals accused of war crimes, the crime of aggression, crimes against humanity, and genocide. The course will begin with an introduction to the history of international criminal law and a comparative examination of various international criminal tribunals, including the Nuremberg trials, ad hoc criminal tribunals (ICTY and ICTR), the permanent International Criminal Court in The Hague, and hybrid criminal tribunals (Cambodia, Lebanon, and Sierra Leone). The course will then focus more specifically on the International Criminal Court (ICC), including the ICC's formation and jurisdiction and examples of individuals and situations investigated and prosecuted thus far by the court.

Prerequisites: Part of the Ireland Law Program.

LAW 8601L Transactional Lawyering Skills Lab Credit: 1

Students are trained in counseling clients and negotiating business formation, dissolution, and liability issues as well as drafting appropriate documents.

Co-requisites: LAW 8601.

LAW 8601R Doing Business In Ireland, Part I Credit: 1

A survey of International Trade Law and European and American Competition Law that impact on American multinational companies operating in the Republic of Ireland.

LAW 8601S Doing Business in Ireland, Part II Credits: 0.5

A survey of the Ireland Company Law and comparative United States Corporate Law and a survey of United States corporate taxation of multinational companies operating in Ireland.

LAW 8602 International Field Experience Credits: 1-2

In connection with relevant coursework, this limited international field experience will permit students to visit a foreign country to see the application of their coursework in a comparative perspective, including tours of legal facilities, visits with experts from the host country, and service learning opportunities.

Prerequisites: Permission of instructor and designated accompanying coursework.

LAW 8603 Taxation Of Business Organization Credits: 2-3

Survey course of the taxation of business enterprises, particularly partnerships, corporations and subchapter S corporations.

Prerequisites: LAW 8552, LAW 8601.

LAW 8605 Antitrust And Fair Competition Law Credits: 2-3

This course examines fair competition law as a body of law designed to protect consumers. Understanding fair competition law requires looking at Supreme Court case law but also lower court decisions, economic analysis, and government enforcement guidelines and policy statements.

LAW 8609 Ethical Issues In Family Law Representation Credits: 1-2

Advanced study of the ethical obligations of public and private attorneys in estate, family, and juvenile law representation. Topics may include identification of the client, ethical and legal obligations of confidentiality and disclosure, competence and client communication, respect for third persons (particularly obligations toward children of clients) and other related subjects. Paper and presentation required. When offered for 2 credit hours, the course fulfills the Schools Professional Responsibility graduation requirement.

Prerequisites: (or concurrent) LAW 8611, LAW 8751.

LAW 8610 Introduction to Trusts Credit: 1

This course explores the law of trusts, including the elements of a valid trust; its creation, administration and termination; the nature of a beneficiary's interest; and the fiduciary duties of trustees.

Prerequisites: Property I and Property II, Estates and Trusts

LAW 8611 Estates And Trusts Credits: 3

Intestate succession; testamentary dispositions; execution, modification, and revocation of wills; will contests; advancements, ademption, and exoneration; family allowances; rights of estate creditors; express, implied, resulting, and constructive trusts; basic tax aspects of estates and trusts; rule against perpetuities; will substitutes.

LAW 8611L Estates and Trusts Lab Credits: 1-3

This experiential course applies the knowledge acquired in the basic Estates and Trusts course to the process of gathering, evaluating, planning, drafting, and executing an estate plan in a non-tax environment.

Prerequisites: LAW 8611; LAW 8541; LAW 8542.

LAW 8613I Estate Planning and Drafting Lab Credits: 2

Students are assigned to attorneys at law firms or trust departments and will work on estate planning projects assigned by the supervising attorney. Exams may include drafting will and trust instruments, researching legal issues, and drafting memos.

Prerequisites: LAW 8611.

LAW 8614 Estate Planning and Drafting Credits: 1-4

Continuation of Estates Trusts I using problems and cases as a basis for class discussion. Working in teams, students engage in the planning of estates for actual clients, proceeding through the entire process and culminating in the execution of wills, trusts or other appropriate instruments.

Course is not open to students who have taken Estate Planning.

Prerequisites: LAW 8611.

LAW 8614R Estate Planning For Retirement Plan Benefits Credit: 1

The income, gift, estate and generation-skipping transfer tax consequences and rules related to the ownership, distribution and withdrawal of retirement plan benefits, including minimum required distributions, designating beneficiaries, spousal rights and rollover options

LAW 8615 Estate Planning and Practice Credits: 3-4

Tax-oriented examination of contemporary estate planning problems for the larger estates, with emphasis on issues of direct concern to practitioners. This course is designed for LL.M. students.

LAW 8615R Estate Planning For Charitable Giving Credit: 1

Survey of federal income tax and transfer tax laws governing gifts to charitable organizations, charitable remainder trusts and charitable lead trusts; procedural requirements to assure deductibility; and planning and drafting considerations.

LAW 8617R Elder Law For Estate Planners Credit: 1

An examination of the legal tools available for the elderly client for decision-making, both health care and financial, in the event of incapacity, and asset preservation, including Medicare and Medicaid qualification. The course will cover the use of trust; durable powers of attorney, and advance directives for health care and living wills and the relationship to court guardianship.

LAW 8621 Evidence Credits: 3

General principles relating to proof of facts in civil and criminal trials; presumptions; order of proof; relevancy; judicial notice; real and demonstrative evidence; authentication; best evidence rule; hearsay; competency; impeachment; rehabilitation.

LAW 8631 Constitutional Law Credits: 4

Core issues relating to the U.S. Constitution, including the doctrine of judicial review, the powers of Congress and the President, limitations on state power, and judicial protection of individual rights.

LAW 8633 First Amendment Law Credits: 2-3

Basic themes and advanced problems relating to the law of the First Amendment to the United States Constitution, including exploration of the values behind the protection, subversive advocacy, regulation of speech in the public forum, access to the media, regulation of the press, symbolic expression, libel, obscenity, commercial speech, picketing, right of association, loyalty oaths, legislative investigations and government demands for information, separation of church and state, free exercise of religion, state aid to the religious schools, regulation of religion-based conduct.

LAW 8633R Law and Religion Credits: 1-2

Explores the interaction of the legal system with religious beliefs and institutions. The course examines issues such as the establishment and free exercise clauses of the United States Constitution, the influence of religion in law making, and religion issues presented in famous trials.

LAW 8634 Criminal Law Credits: 3

Introduction to substantive criminal law, its role and purpose in our society; principles of liability, common law and statutory offenses; defenses; punishment.

LAW 8634I International Criminal Law Credits: 1-2

An introductory course in International Criminal Law focusing on the criminal prosecution of individuals under international law, primarily by international tribunals (or "hybrid" international/national tribunals) and secondarily by national tribunals applying international law. The course will include a consideration of aspects of criminal law that are common to most criminal legal systems, with a particular focus on those crimes that are "international;" will revisit the concept of criminal jurisdiction, how it is acquired, and its limitations, such as immunity for heads of state and diplomats; and will examine the elements of war crimes, crimes against humanity, and genocide, as well as a few other crimes of international concern; and excuses or justifications under international law, such as self-defense and insanity.

LAW 8635 Criminal Procedure I Credits: 3

Introduction to the administration of criminal justice; constitutional rights of the accused; due process; privilege against self-incrimination; right to counsel; arrest, search, and seizure; wire-tapping; police interrogation and confessions; pre-trial identification procedures.

LAW 8635S Wrongful Convictions Credits: 2-3

An examination of the causes of wrongful convictions, a consideration of systemic reforms that might minimize convicting the innocent and a focus on recurring ethical issues that confront prosecutors and criminal defense lawyers. Students also will work with The Midwestern Innocence Project on cases of possible actual innocence. This course provides an insider's look into the operation of the criminal justice system and is designed to help students gain insight into features of the criminal justice system that have a tendency to produce wrongful convictions. It should be of particular interest to any student interested in working in a prosecutor's office, public defender's office or for a firm doing defense work. It is a prerequisite for any student wishing to enroll in the Innocence Project clinic. Limited enrollment (normally, up to 16 students)

LAW 8635T Wrongful Convictions II Credits: 2-3

A follow-up class to Wrongful Convictions I, open only to students who have completed Wrongful Convictions I. The course will involve "hands on" work with cases that have passed through the first level of screening in Wrongful Convictions I with students receiving the transcripts and case documents in addition to the briefs and opinion in the case. Students will receive these documents and report on the likelihood that an inmate is innocent and the strategies available for pursuing the claim of innocence.

LAW 8636 Criminal Procedure II Credits: 3

Continuation of the study of the administration of criminal justice; exclusionary rules; bail; prosecutor's discretion; grand jury; preliminary hearing; jurisdiction, venue; joinder and severance of offenses and defendants; right to speedy trial; pleas of guilty; discovery; trial by jury; publicity; double jeopardy.

LAW 8636A Federal Trial Practice Credits: 2-3

A practical skills course involving consideration and application of the rules of procedure and evidence to civil and criminal cases brought in federal court, including, but not limited to the legal requirements of federal jury instructions, motions in limine, pretrial preparation, pretrial conferences, notice requirements, voir dire, opening statements, direct and cross, evidentiary foundations for exhibits, computerized and computer-related evidence, character and related evidence, witnesses (lay, lay opinion, summary, character, experts), and closing arguments.

LAW 8637R U.S. Attorney's Office Law Internship Credits: 3-6

US Attorney's Office Legal Interns work in the United States Attorney's Office directly with Assistant US Attorneys (AUSA's) in one of the Criminal Division units. Activities include legal research and drafting memoranda, motions and briefs; observations and participation in trials, pre-trial hearings, and motions, as appropriate; and general assistance with litigation.

Co-requisites: LAW 8749.

LAW 8638R Entrepreneurial Lawyering: Solo And Small Firm Practice Credits: 3

Course will focus on law practice management for solo and small firms. Topics include organizational structure, firm management, fee setting and allocation, and effective and ethical marketing. Course includes attendance at the Missouri Bar Solo and Small Firm Conference.

LAW 8639 Legal Practice Technology Skills Credits: 1-3

This course will facilitate technology competencies for students for use in practice settings, regardless of the size or setting of the law firm, business, or agency. The course will familiarize students with the basic legal technologies necessary for the twenty-first century lawyer, but will also include word-processing, spreadsheet and database skills appropriate for the legal setting. More advanced portions of the course include computer-assisted drafting, file architecture design, security protocols, and client communications.

LAW 8639B Legal Tech-Competency Training Credit: 1

This course provides students with the opportunity to gain advanced knowledge in the software skills needed by legal practitioners, including: word processing, visual communication, cloud computing, document automation, data analytics, and project management.

LAW 8639D Legal Document Assembly Credits: 1-3

Document automation and assembly can help attorneys more efficiently and accurately deliver legal services to the public and their employer—thus helping attorneys be more competitive in the legal services market place. This two-credit hour course will teach students the skills necessary for document automation and familiarize them with HotDocs, the predominant provider of document assembly applications. Students will produce programmed documents, interviews, and systems for estate planning, businesses planning, or such other projects as are suitable for document assembly. The course may be taught over an eight week period or a summer term. No computer programming experience is required.

LAW 8639L Practice Management Technology Lab Credits: 2-3

Building on theory of the role technology in law practices, students will learn how to use document assembly software and learn to be proficient with other software with hands on exercises and work.

LAW 8641R Legislation Credits: 2-3

This course explores a variety of topics under the broad heading of "Legislation." Included among them are: electoral and representational structures, legislative drafting, canons of statutory interpretation, identifying and utilizing legislative history, the role of referendums and initiatives as a supplement to representative institutions, public choice theory, and other theories of legislation. The course also includes an opportunity for students to participate in the drafting of legislation for the Kansas or Missouri State legislatures. Paper optional.

LAW 8643C Competitive Business Intelligence Credit: 1

Develops the skills necessary to search publicly available information to find vital facts about individuals, businesses, organizations, markets, and industries, and conduct so-called "due diligence" investigations. The first focus is on using public records, commercial services, and company information to gather information about parties. The second focus is on data and statistics, including finding, processing, and interpreting that information.

Prerequisites: Lawyering Skills 1

LAW 8643D European Union Data Protection & Privacy Credit: 1

This course will examine the history of global data protection and privacy, with a particular focus on the General Data Protection Regulation, essentials of a data privacy policy, enforcement, key privacy laws in the U.S., and an evaluation of the future of privacy law.

LAW 8643F Advanced Legal Research: Foreign, Comparative and International Law Credit: 1

The course is designed to familiarize students with the basic resources of international law by taking an in-depth look at foreign and comparative law resources, teaching students how to utilize and think systematically about those resources and instructing students in the strategies and processes necessary to conduct scholarly research and practice international law. Students taking the course will improve their research competency in authorizing scholarly papers with a comparative or international perspective.

LAW 8643L Advanced Legal Research-Litigation Credit: 1

Prepares students who wish to focus on advocacy and litigation (including students in litigation with respect to Family Law and Urban, Land Use and Environmental law). The course is also intended to facilitate research for the student's legal research and writing requirement. The course will refresh and refine research skills, help students to think systemically about legal research, and familiarize students with applicable resources. As the final project, students will have the opportunity to develop an in-depth research "path finder" or guide for an approved topic of their own choosing.

LAW 8643T Advanced Legal Research: Transactional Law Credits: 1-2

Prepares students who wish to focus on transactional law. The course is also intended to facilitate research for the student's legal research and writing requirement, although it does not satisfy the writing requirement. The course will refresh and refine research skills, help students to think systemically about legal research, and familiarize students with applicable resources relevant to transactional law including business organizations, tax, pension, labor and employment, competitive business intelligence, real estate, securities, sale of businesses, etc. As the final project, students will have the opportunity to develop an in-depth research "path finder" or guide for an approved topic of their own choosing.

LAW 8650 Race and the Law Seminar Credits: 1-3

In-depth examination of the role that race plays in American society as a whole and in judicial decision-making in particular. Course will examine the effect of race on various areas of the law, including torts, contracts, property, criminal law, and criminal procedure. Course will also examine the effect of race on jury decisions and explore the concept of implicit bias. Research paper.

LAW 8656 Public Defender Trials Internship Credits: 3-6

Public Defender Law Interns assist in the defense of indigent criminal defendants. Each intern is assigned to a single public defender to allow the intern to observe the life and practice of a public defender, including direct engagement with client (fact development and defense strategy), case file analysis, research, drafting, and exposure to all stages of court proceedings. This is a two-semester internship providing a progression of skill building. Students eligible for Rule 13 student practice authorization may present directly in court.

Co-requisites: LAW 8749.

LAW 8656A Missouri Attorney General's Office Internship Credits: 3-6

Law Interns work side by side with Assistant Attorneys General in the Kansas City regional office representing the State of Missouri in civil or criminal proceedings. Law Interns may be placed in one or more of the divisions of the AG's office: financial services, litigation, labor, consumer protection, public safety, or governmental affairs. Students eligible for Rule 13 student practice authorization may present directly in court. Students may appear in Jackson, Clay, Platte, and/or Cass Counties.

Co-requisites: LAW 8749.

LAW 8656C Jackson County Prosecutor Internship-Family Law Prosecution Credits: 1-3

Family Law Prosecution Interns assist Jackson County Prosecutor's Office, Child Support Division, in prosecuting cases involving paternity establishment and child support. The internship provides formalized instruction, and individual mentoring and supervision from assistant prosecutors.

Co-requisites: LAW 8749.

LAW 8656F Federal Public Defender Internship Credits: 3-6

Federal Defender Interns work in the Federal Public Defender's Office, under attorney supervision to engage with clients; undertake legal research; draft memoranda, motions and briefs; observe and participate in trials, pre-trial hearings and motion hearings; and assist, in general, with litigation.

Co-requisites: LAW 8749.

LAW 8656P Jackson County Prosecutor Internship Credits: 3-6

Law Interns work with attorneys of the Jackson County Prosecuting Attorney's Office in downtown Kansas City and Independence offices. Interns are assigned to specific units: General Crimes, Violent Crimes, Sexual Violence, Warrant Desk, or Independence Office. The internship provides practical experience, courtroom exposure, and an introduction to prosecution hearings and trials. The internship is a two-semester progression of fieldwork allowing students opportunity to build skills and confidence. Students eligible for Rule 13 student practice authorization may present directly in court.

Co-requisites: LAW 8749.

LAW 8662 Federal Court Internship Credits: 2-6

Federal Court Interns serve in a clerkship with a judge or magistrate in a federal court, principally in the Western District of Missouri. Students may also intern with federal judges in different states, with approval of the faculty director of the field placement program. Students generally undertake research, draft memoranda and other documents, observe court, and debrief with judges and clerks regarding the legal issues and lawyering styles in the matters before the court.

Prerequisites: LAW 8522.

Co-requisites: LAW 8749.

LAW 8662F Family Court Internship Credits: 2-6

Family Court Interns serve in the chambers of Family Law judges and commissioners and observe mediation, conciliation, adult abuse docket, and cross-court visits. The internship offers students an opportunity to gain practical legal skills, learn about the programs ordered by the judges to assist families in crisis, and develop a working knowledge of the Family Court Division. Family Court judges hear a wide range of matter concerning families, marriage, and children, including marriage (dissolution, annulments, maintenance), child custody, paternity, child support, adult abuse, juvenile delinquency, adoptions, and guardianships.

Prerequisites: LAW 8521, LAW 8522; LAW 8751 (completed or currently enrolled).

LAW 8662M Missouri Court of Appeals Internship Credits: 2-6

Appellate Court Interns work in the chambers of a Missouri Court of Appeals Judge. Students generally undertake research, draft memoranda, and produce substantial written work under the supervision of the judge or the judge's clerks. They also observe various proceedings (both in chambers and in the courtroom) and interact with the judges, their clerks, and court staff. Students debrief with judges and clerks regarding the legal issues and lawyering styles of the matters and advocates before the court.

Co-requisites: LAW 8749.

LAW 8665A Animal Law Credits: 2

This course will begin with a brief overview of the philosophical and cultural issues underlying human/animal relationships, including basic theories of the legal systems's responses to social change. Legal issues relating to food animals, companion animals, laboratory animals, wild animals, and performing animals will be examined with reference to: (1) federal statutes (Animal Welfare Act, Endangered Species Act, Marine Mammal Protection Act, Wild Horses and Burros Act, Animal Damage Control Act, National Wildlife Refuge System Administration Act, Refuge Recreation Act, National Environment Police Act, and Humane Slaughter Act); (2) state statutes (anti-cruelty, wills and trusts, hunting, racing and fighting statutes); (3) local animal control regulations; and (4) extensive common law (standing, rights, free exercise of religion, property, landlord-tenant disputes, torts, marital dissolution and custody, and bailment).

LAW 8700 Trial Advocacy I Credits: 2

A practical skills course in advocacy which introduces students to the fundamental components of a typical civil and criminal trial and requires students to perform exercises involving each component and try a mock civil or criminal case from provided problem materials.

Co-requisites: LAW 8621.

LAW 8700C Drafting Civil Jury Instructions Credits: 1-2

Covering the essential skills in drafting appropriate civil jury instructions and preserving objections for appeal in civil cases. This is a "skills course" in which students learn the fundamentals of drafting and arguing civil jury instructions.

LAW 8700D Taking and Defending Depositions Credits: 1-2

introduces the fundamentals of depositions, concluding with a mock deposition. Topical coverage includes: what is a deposition and what is the purpose of depositions; who may be deposed and when; deposition questioning; using exhibits; objections; preparing for the deposition; and producing a witness for deposition. Each student will take and/or defend a mock deposition.

LAW 8701 International Study Exchange Credits: 1-15

Semester study at foreign law school.

Prerequisites: by permission.

LAW 8702 Conflict of Laws Credits: 1-3

Domicile; jurisdiction and limitations on the exercise of jurisdiction; judgments; full faith and credit; choice of law; conflicts problems in federal and international settings; conflicts problems in selected areas.

Prerequisites: LAW 8521.

LAW 8703 Trial Advocacy II Credits: 2-3

A practical skills course in the art of trial advocacy with an emphasis on technique, style, and methods of persuasion. During class sessions, students perform exercises involving the various stages of a law suit, and are critiqued on their performances. Following performance of the exercises, students are divided into teams and try a mock case in a trial competition, from which the Law School's National Trial Competition Teams are selected. The trials are evaluated by trial lawyers and federal or state judges. Limited enrollment.

Prerequisites: LAW 8700.

LAW 8704A Lawyering Skills Competition-Appellate Credits: 1-4

This course is limited to students who represent the law school in faculty supervised regional, national or international lawyering skills competitions. These competitions require application of lawyering skills in a range of substantive law areas and intensive practice of lawyering skills, judged by faculty and practitioners in the field. Students enrolled in this course will be representing the school in various moot court appellate advocacy competitions. Students will research and draft briefs or equivalent advocacy documents, develop oral arguments, conduct practice oral arguments before a range of student, faculty, and practitioner judges, and represent the law school in regional national or international competitions.

LAW 8704C Lawyering Skills Competition-Client Counseling Team Credits: 1-2

The course is limited to students who represent the law school in faculty supervised regional, national or international lawyering skills competitions. Students enrolled in this course will be representing the school in the client counseling competitions. Students will research a problem from a range of areas of law and develop problem solving and client counseling strategies and documents and conduct mock client interviews.

LAW 8704I Lawyering Skills Competition Credits: 1-2

This course provides an overview of international commercial arbitration and focuses with more specifically on international investment protection law and bilateral investment treaty provisions. The course will provide preparation for the International LL.M. Commercial Arbitration Competition, but it is open to J.D. students.

LAW 8704N Lawyer Skills Competition-Negotiation Team Credits: 1-2

The course is limited to students who represent the law school in faculty supervised regional, national and international lawyering skills competitions. Students enrolled in this course will be representing the school in various negotiation competitions. Students will research a problem from a range of law and develop negotiation strategies and documents and conduct mock negotiations.

LAW 8704T Lawyer Skills Competition-Transactional Practice Teams Credits: 1-2

The course is limited to students who represent the law school in faculty supervised regional, national or international lawyering skills competition. Students enrolled in this course will be representing the school in various negotiation competitions and meets. Students will research a problem involving business transactions or tax and prepare analysis and problem solving strategies.

LAW 8705 Trial Advocacy III Credits: 2

Students, under the supervision of trial advocacy faculty, participate in trial competitions. Enrollment by invitation only.

Prerequisites: LAW 8700, LAW 8703.

LAW 8705I Comparative Advocacy in Ireland Credit: 1

This course will look into the comparative role of Advocacy both in the courtroom and the boardroom for European and U.S. systems. The course will introduce students to a comparative look at the basic structure and legal systems in Ireland and the US. The field of Advocacy is rapidly expanding as evidenced by the adoption of affirmative advocacy programs in Ireland as well as the U.S. An example of the topics covered include: A comparative overview of the Barrister/Solicitor and U.S. systems of justice. The students will be introduced to "access to justice" which is a comparative look at European and US approaches. The course will also focus on the prosecutions under both the European and US systems as well as a discussion of the influence of crimes on international trade, business and a comparative look at the role of advocacy in those systems. Students will be exposed to advocacy for persons with disabilities that include a comparative look at the Ireland and US systems with resulting effects on business and trade. Finally the course will involve review and discussion of the global considerations for Advocacy.

Prerequisites: Part of the Ireland Law Program.

LAW 8706 Class Actions and Multidistrict Litigation Credits: 2-3

As related to litigation of complex cases, study of special issues of party joinder and intervention, class action requirements and limitations, discovery, case management, and estoppel by verdict or judgment.

Prerequisites: LAW 8521, LAW 8522.

LAW 8707A Advanced Legal Writing: Practical Skills Development Credits: 2-3

Preparation of students for writing problems commonly encountered in the first two years of law practice: jury instructions, general correspondence, opinion letters, simple contracts, litigation motions and pleadings including a complaint, answer and some discovery documents. Individual feedback provided.

LAW 8707B Advanced Legal Writing: Business Contract Drafting Credits: 3

Preparation of transactional documents including, for example, confidentiality agreements, consulting agreements, employment agreements, technology licensing agreements.

Prerequisites: LAW 8501, LAW 8502, LAW 8601.

LAW 8707C Advanced Legal Writing: Litigation Drafting Credits: 2-3

Preparation of litigation documents and pleadings, including complaint or petition; cross-claim, counterclaim or third-party petition; answer; discovery documents such as a set of interrogatories or requests to admit; dispositive motions; and settlement agreements.

Prerequisites: LAW 8521, LAW 8522.

LAW 8707E Advanced Legal Writing: Scholarly Writing Credit: 1

Preparation of students for scholarly writing including independent study, law review, and seminar papers. Focus will be on topic identification and refinement; developing a thesis; research strategies including reiterative and mediated searching, systemic evaluation of resources, problem typing and solving, and resources for specific topics in the law; proper attribution and use of authority; developing a working draft; and creating a balanced, thorough, and carefully reasoned and supported analysis.

LAW 8707F Advanced Legal Writing: Appellate Brief Writing Credit: 1

Preparation of federal and state court appellate briefs, including the jurisdictional statement; statement of the case; statement of facts; points relied on; statement of the issues presented; summary of the argument; argument; and responses and replies to arguments. Prepares students to outline and organize arguments; edit and revise written work; and finalize an appellate brief.

LAW 8707G Advanced Legal Writing: Compliance Drafting Credits: 1-2

This course provides students the opportunity to prepare compliance-related documents to support businesses in highly-regulated industries like health care, higher education, and business and financial institutions. The course will include an overview of the current compliance landscape both domestically and internationally. Classes will include discussions of applicable laws and regulations governing corporate behavior. Students will draft a portfolio of documents—e.g., policies and procedures; codes of conduct—common to corporate compliance programs. Recommended preparation: LAW 8764, LAW 8731.

Prerequisites: LAW 8531, LAW 8532.

LAW 8707J Advanced Legal Writing: Compliance Drafting Credits: 3

Preparation of compliance-related documents to support businesses in highly-regulated industries like health care, higher education, and business and financial institutions. Drafting a portfolio of documents—e.g., policies and procedures; codes of conduct—common to corporate compliance programs.

Prerequisites: LAW 8531 Lawyering Skills 1; LAW 8532 Lawyering Skills 2

LAW 8707R Advanced Legal Research Administrative Regulations/Legislative History Credit: 1**LAW 8708 Master Clinical Advocacy Course Credits: 3-4**

This semester-long intensive course will introduce students to the law, advocacy and execution of trial strategy in active litigation. The course will function as a unique clinical course, with a law school professor and local counsel serving as the supervising attorneys. The professor will select an active case in local litigation, preferably in its early stages. The students will be responsible, with supervision, for all areas of the litigation process from drafting pleadings, motions, discovery and taking and attending depositions and trial.

LAW 8710 Lawyering Skills Teaching Assistant Methods Credits: 1-3

Legal analysis, research and writing; instruction and discussion of the research and writing process and related topics in legal method and legal education; supervised production of an expository writing, advocacy writing and scholarly writing; development of research and writing exercises for use in the first-year Legal Writing Program and service as Teaching Assistants in the Program; limited enrollment.

LAW 8710B Legal Analysis & Methods Credits: 2

Preparation of students for the bar review and exam process with a focus on improving analytical skills to approach and do well on practice bar exam questions, including essay, multiple-choice, and performance questions. The course will cover specific topics tested on the bar exam with additional emphasis on refining memorization skills and learning how to self-assess understanding of concepts.

LAW 8711 Remedies Credits: 2-3

Remedies for violation of legally protected interests; history and development of equity jurisdiction and modern equity practice; injunctions; declaratory judgments; rescission; reformation; restitution; contempt; damages.

Prerequisites: LAW 8521.

LAW 8712 Problems And Issues In The Death Penalty Credits: 1-2

Issues and problems in the administration of the death penalty; the Missouri capital sentencing scheme; constitutional limitations, statutory schemes, state review systems, procedural matters and collateral review of death sentences.

LAW 8713 Death Penalty Clinic Credits: 1-2

The post-conviction process of collateral review in death penalty cases; training in legal representation of the postconviction petitioner.

Co-requisites: LAW 8712.

LAW 8713C Capital Punishment in the Modern World: Constitutional & Human Rights Perspectives Credit: 1

A consideration of problems and issues in the death penalty, including the following topics: the historical and constitutional perspectives on the death penalty; the practical application of the death penalty in the United States; capital punishment and human dignity; and the future of capital punishment

LAW 8713P Wrongful Convictions Clinic Credits: 1-6

Students, under supervision, provide investigate and legal assistance to prisoners with persuasive actual innocence claims. Students meet weekly with the director of the program for training and evaluation. Assigned tasks depend on the needs of the Innocence Project, and may include interviewing potential clients, gathering records, investigating actual innocence claims, consulting with experts, drafting post-conviction and/or clemency pleadings, and appearing at court hearings. Clinical students work in conjunction with law and journalism students enrolled at the University of Missouri-Columbia. Limited enrollment (normally, 8 students).

Prerequisites: LAW 8634, LAW 8635, LAW 8635S.

LAW 8714 Gender and Justice Credits: 2-3

Students will examine and discuss legal issues of special importance to women. Topics will include (among others) sexual discrimination, sexual harassment, domestic violence, reproductive autonomy, and pornography. The course seeks to present each topic in its social context by supplementing legal readings with materials drawn from the social sciences, literature, and film. Paper required. Enrollment limited to fifteen students.

LAW 8715 Harry Potter and the Law Credit: 1

This course uses the narratives (stories) from the Harry Potter series to explore themes about the role of law and justice in society. The course is designed to help students become more familiar with narrative criticism and the use of narrative for persuasion.

LAW 8716 Cyberlaw Credits: 3

Survey of the areas of the law with existing or potential application to the internet and computers and how changes in the information environment affect law and its application. Areas of law include jurisdiction, contract law, intellectual property law, criminal law, and constitutional law.

LAW 8716C Cybercrime Credits: 1-4

Cyber threats are a global problem challenging all areas of business, and attorneys must be able to advise and defend clients from these threats. Criminal lawyers must be fluent in how new technologies work and how they impact investigations. In this course, students will learn how these new cyber threats and emerging technologies are challenging attorneys across the country. The course will prepare students to think as lawyers when confronting these threats. Course topics will include computer hacking, spamming, spear phishing, Internet fraud and social engineering, cyberstalking, and the rising use of computers and social media in violent crimes.

LAW 8720 Secured Transactions Credits: 3

Secured Transactions in personal property under Article 9 of the Uniform Commercial Code, function and form of a security agreement, process of perfecting a security interest, priority among unsecured parties; secured sales of goods under Article 2 of the Uniform Commercial Code.

LAW 8721 Commercial Transactions Credits: 3

This course offers a study of the Uniform Commercial Code provisions that deal with negotiable instruments (commercial paper)(Article 3), bank collections and deposits (Article 4), funds transfers (Article 4A), and letters of credit (Article 5), as well as the study of alternate payment systems (including electronic fund transfers, credit and debit card payments, and related federal law).

LAW 8723 Banking Law Seminar Credits: 2

Federal and state law governing banking activities; regulation of bank holding companies; formation of banks; the FDIC and FSLIC; interstate banking; deregulation of banking transactions; banking activities by non-banks; regulation of securities activities of banks. Paper required.

Prerequisites: LAW 8721.

LAW 8725 Water Law Credits: 2-3

Private acquisition of water rights through riparian ownership and prior appropriation; public rights to water existent in bed ownership easements and trusts; ground water management; water distribution organizations; federal allocation and control of water resources; interstate allocation.

LAW 8725E Energy Law Credits: 3

The course will deal with the legal, economic and environmental issues of energy production on federal lands and/or under federal jurisdiction. It will focus on a number of energy sources including: oil, coal, natural gas, oil shale, coal bed methane, geothermal, water, wind, and solar. It will also cover the special problems of hydraulic fracturing, air and water pollution, climate change spills, collapses, meltdowns and other disasters as well as liability for cleanup and reclamation.

LAW 8728 Law And The American Indian Credits: 2-3

An anthropological, historical and legal study of the American Indian, including a focus on American Indian traditional law and values, federal policy and current legal issues.

LAW 8729 Preservation Law Credits: 2-3

An exploration of the legal and economic issues impacting preservation of land, wilderness, buildings and archeological and historical sites, including a study of various federal and state preservation legislation, and private land use preservation measures.

LAW 8729C Cultural Preservation Law Credits: 3

This course will focus on Federal, State, and Local Law, directed at the preservation of Prehistoric, Historic, and Modern Culture. It will include sections on: The Values and Philosophy of Preservation, Archaeological Protection Law, the Native American Grave Protection and Reparation Law, Sacred Site Protection, Historic Protection in State and Local Government, the Takings Clause, Land trusts and Conservation Easements, Public-Private Partnerships and Modern Ethnic and Socio-economic Communities.

LAW 8730I Introduction to American Law & Culture Credits: 2-3

Introduction to the American legal system, including government structure, sources of law, common law development, and core substantive areas. Available to LL.M. International students only.

LAW 8731 Professional Responsibility Credits: 2

This course covers the Model Rules of Professional Conduct; role of the lawyer as a professional; confidentiality; conflict of interest; zeal within the bounds of the law; competency; providing legal services. The course explores the meaning of professional judgment and client-centered lawyering.

LAW 8731E Professional Responsibility in Context: Environmental and Resource Law Credits: 2

Covering the law governing lawyers and professional responsibility, setting the perspective and context in the practice of environmental law and resource law. The central focus relates to understanding the role of the lawyer and professional responsibility. The experiential focus is to achieve this goal in a practice context of environment and natural resource law.

LAW 8732C Cross-Cultural Dispute Resolution Credits: 2-3

This course examines the impact of culture on the dispute resolution process. Cultural differences are most pronounced in the international arena, but are also seen in the domestic setting, especially in the US jurisdiction. Students will begin to develop a "cultural fluency" in their law and dispute resolution practice. The subject is timely, and discussion thereof will benefit especially international LLM students, and J.D. students with interests in alternative dispute resolution or international practice. Cross-cultural Dispute Resolution is a blend of both a "course" and a "seminar," as it includes lecture, skills discussion, small-group exercises, independent research and intensive writing. Successful completion of the required research paper will satisfy the research and writing requirement.

LAW 8732I Cross-cultural Business Negotiation Credits: 1-3

This course will introduce students to the foundations of negotiation with several opportunities to participate in negotiation simulations. Negotiation exercises will focus on international business transactions. To create opportunities for cross-cultural interaction and work experience, negotiation teams will, to the extent possible, pair American J.D. students with an international LL.M. students.

LAW 8732R Intro to the Resolution of International Commercial Disputes Credit: 1

This course will introduce students to international commercial dispute resolution. While all forms of dispute resolution will be considered, the course will focus on introducing the fundamentals of arbitration, the use of arbitration between European Union members to resolve commercial disputes, and the use of arbitration between EU members and non-member states to resolve commercial disputes.

LAW 8733 Children In The Law Credits: 2-3

The ways in which the legal system treats children differently from adults and the justifications for such treatment, who should make decisions for the child, decisional authority that should be granted to parents, children and the state in various contexts (e.g., abuse and neglect, health care for the child, foster care, adoption and education).

LAW 8733E Elder Law Credits: 2-3

A course providing a basic foundation for legal practice with older persons, including the following substantive topics: The Older Americans Act, the delivery of legal services to the elderly, ethical considerations, consumer protection, discrimination, Social Security and Supplementary Security Income, Medicare, Medicaid, capacity issues, guardianship and alternatives to guardianship, elder abuse and neglect, adult protective services, nursing homes, long term care, housing, healthcare decisions, end-of-life decisions, estate planning and grandparents' rights.

LAW 8733R Juvenile Offenders & The Law Credits: 2-3

An examination of our justice systems's historical treatment of juvenile delinquent and status offenders, and how the goals and objectives of the past have evolved into today's juvenile offender laws; the rights of juvenile offenders in contrast to those of adult criminals; pre-trial and trial procedural issues under the juvenile code; certification of the juvenile offender as an adult; dispositional/treatment alternatives for juvenile offenders; schools and the juvenile offender.

LAW 8734 Mediation Credits: 2

The process in which a neutral third party assists others in resolving a dispute or planning a transaction; introduction to the nature of the process, its possibilities and limitations, its current and future uses, and how lawyers can and should be involved in it; public policy and political issues surrounding the mediation movement; professional responsibility and malpractice.

LAW 8735 Seminar In Famous Trials Credits: 2-3

Historical and jurisprudential issues involved in a number of "political trials.

LAW 8735R Law Of The European Union (Part I) Credit: 1

An in-depth study of the legal and political framework and institutions of the European Union; the Commission, Council of Ministers, Court of Justice, Court of Auditors, and the European Parliament. Course will examine the interlocking web of European treaties, the expansion of the European Union, the European Union as a trade block and Ireland as a gateway to the European Union for non-bloc nations.

LAW 8736 Debtor-Creditor Rights Credits: 2-3

Creditors' remedies and debtors' rights; provisional remedies; secured transactions (Article 9 of the Uniform Commercial Code); liens and exemptions; overview of bankruptcy law.

LAW 8736M Introduction to Bankruptcy Concepts Credits: 1-2

The course will introduce basic bankruptcy concepts and processes, with a focus on issues that arise in Chapter 7 bankruptcy cases.

LAW 8737R Law Of The European Union (Part II) Credits: 2

An examination of the substantive and procedural law governing the member states of the European Community including such topics as the nature and application of European Union Law, the relationship between European Union and national laws, remedies in national courts, enforcement actions, damages and money claims, free movement of goods and workers competition laws, intellectual property, equal treatment of women and men, and non-discrimination.

LAW 8738 Immigration Law And Process Credits: 2-3

Admission, exclusion, deportation, and naturalization of aliens; structure and powers of relevant federal agencies; categories of immigrant and non-immigrant visas and visa application procedures; asylum, extradition, and refugee status; rights of aliens; public policy issues and proposals for reform; practical problems in immigration.

LAW 8738C Employer Immigration Compliance Plans, Policies & Procedures Credits: 1-2

A practical lawyering skills course in which students learn how to help employers comply with employer immigration compliance requirements in order to avoid possible non-compliance fines, forfeiture of business and personal assets, and jail terms. This course includes an overview of the applicable immigration law and instructs in such matters as corporate client interviewing; Form I-9 Employment Eligibility Form; E-Verify and FAR E-Verify for federal contractors; ICE Best Employment Practices, drafting employer immigration compliance plan, policies and procedures; I-9 Self-Audits, and defending a corporate client in I-9 inspections/investigations by ICE/DHS.

LAW 8738P Immigration Law and Policy Credits: 2-3

A focus on the historical development of immigration law in the United States and fundamental questions of immigration policy. Immigration bills in Congress have been the subject of heated debate, particularly in recent years. This course provides a historical, statutory, and theoretical background for evaluating such proposals. Students will evaluate proposed federal and state legislation across the country and immigration reforms in foreign countries. Particular emphasis will be placed on post-9/11 reforms and the relationship between immigration law and the war on terrorism. The subject matter is useful for the student who intends to practice immigration law, as well as for the non-specialist interested in Immigration law as a policy matter.

LAW 8738R Chinese Law Credits: 4.5

A summer abroad program in Chinese law taught at the University of Peking, Peoples Republic of China by Chinese Professors. Subjects include such topics as: Cultural History and Political Systems of China, Organization of the Chinese Legal System, Chinese Contract Law, Civil Law, Trial Practice Rules of Evidence, Criminal Law Procedure, Family Law, Human Rights Issues, Business Organizations, Taxation, Intellectual Property Law, Banking and Finance, Real Estate Law, Investment Law Practice in China, and Alternative Dispute Resolution.

LAW 8738V Immigration Law & The Violence Against Women Act Credit: 1

A practical lawyering skills course in which students learn how to help abused immigrant women and children to apply for permanent residence in the United States, and how to help victims of violent crimes to apply for legal status. The course includes a short overview of the applicable immigration law and instructs in such matters as client interviewing; analysis of cases; working with victim advocates and experts; drafting affidavits, evidence indexes, petitions, motions and supporting documents; preparation of checklists for clients, case flowcharts, and case timelines; the review and development of evidence; and the drafting of letters to clients and the government.

LAW 8740A Missouri Appellate Procedure Credits: 1-2

Practical application of Missouri appellate procedure rules: appellate jurisdiction, what is appealable and when, appellate case process and the interplay between statutes, Missouri Court Rules and Missouri case law with regard to appellate issues.

Prerequisites: Law 8522 Civil Procedure II.

LAW 8740M Missouri Civil Procedure Credits: 2-3

Selected problems in Missouri civil procedure under Missouri statute and rules. Topics may include venue and personal jurisdiction, pleading and motion practice rules on joinder of parties and claims, statutes of limitation, trial procedure, post-trial motions appellate procedure, discovery, and preclusion.

LAW 8743 Global Legal Systems Credits: 1-3

A study of different legal traditions and systems, mainly within the Civil and the Common Law traditions, focusing on each tradition's history, legal structures, legal actors, procedures, and sources of law. Non-Western Legal traditions such as Islamic, Jewish, Hindu and Indigenous Law may also be considered, time permitting.

LAW 8743C Comparative Criminal Law Credit: 1

A comparative analysis of criminal law jurisprudence in the United States and Europe (especially Ireland and the United Kingdom) with respect to the exclusionary rule, the death penalty, the jury system and the reintegration of ex-offenders into society.

LAW 8743I Ireland Program: Selected Topics in Comparative Law Credits: 1-2

This course addresses a focused area of law from a comparative perspectives of United States, Ireland, and/or EU legal systems.

Prerequisites: part of Ireland Study Abroad Program

LAW 8743L Comparative Health Law Credit: 1

An examination of how the legal systems of several other nations address particular aspects of health law. Specifically, the focus of this course is on patent rights with respect to the health care they receive. This will include, for example, consideration of patient rights when the care received has caused injury due to professional negligence. If time permits, it will also look at how other legal systems address the controversial issues surrounding the "right to die" as well as assisted suicide and euthanasia.

LAW 8745 Law Review Credits: 1-4

Editorial work in connection with the "UMKC Law Review." Open to students selected on basis of scholarship. Ungraded.

LAW 8745R Law Review Board Credits: 1-5

The members of the Law Review Editorial Board edit articles and student notes and comments for publication in the University of Missouri Kansas City Law Review; and shepherd the articles and student pieces through the production process.

LAW 8746 Research & Writing Requirement Credits: 2

Completion of a paper of publishable quality, demonstrating intensive research and analysis under faculty supervision.

LAW 8746C Court Internship Credits: 3-6

Judicial Interns serve in a clerkship with a judge, magistrate, commissioner, or other judicial officer in a state court. Students generally undertake research, draft memoranda, observe hearings and other judicial proceedings, and debrief with judges and clerks regarding the legal issues and lawyering styles in the matters before the court.

Co-requisites: LAW 8749.

LAW 8746I Internship-Estate Planning Credits: 2-6

Estate Planning Interns are mentored by an attorney with an estates law practice, in a private firm or trust company. Law Interns undertake assignments such as review and analysis of estate planning documents, draft provisions for such documents or probate court filings, and/or conduct legal research. The objective of this internship is to expose student to the estate planning law practice.

Prerequisites: LAW 8611 AND LAW 8552.

Co-requisites: LAW 8749.

LAW 8746R Independent Study Credits: 1-3

Independent study, including research and writing projects, under faculty supervision.

LAW 8746W Introduction to Workers' Compensation Law and Practice Credits: 1-2

An introduction to the general history and purpose of the workers' compensation laws with a particular emphasis on Missouri law. Students will be presented with and guided through actual workers' compensation problems which will introduce them to the practical aspects of the practice in this specialized area. With permission from Jefferson City and the Department of Labor and Industrial Relations, the students will be exposed to actual workers' compensation hearings, mediations and other courtroom practices held at the law school and presided over by an Administrative Law Judge.

LAW 8747 Introduction to Appellate Advocacy Credit: 1

Preparation of memorandum (points relied on and summary of argument); presentation of two arguments before practicing attorneys.

LAW 8748 Appellate Advocacy - Ellison Moot Court Competition Credits: 2

Ellison Moot Court Competition; preparation of an appellate brief and presentation of two oral arguments before federal and state judges. Open to the 16 finalists from Appellate Advocacy II. Ungraded.

Prerequisites: 8747 Intro to Appellate Advocacy.

LAW 8749 Field Placement Seminar: Learning from Practice Credits: 1-2

Learning from Practice (LFP) is a seminar (tied to a field placement). The seminar will explore dimensions of professional development of an effective lawyer, including the capacity for reflection, deliberate skill acquisition, and ability to form meaningful professional relationships. Each LFP section has a different focus, but all are designed to complement and provide deeper context to the law interns' fieldwork. One LFP seminar, focused on attorney ethics and values, is catalogued under Professional Responsibility (LAW 8731). It covers the Model Rules of Professional Conduct and explores the dimensions of client-centered lawyering.

Prerequisites: Completion of 30 credit hours toward JD.

Co-requisites: Any field placement course.

LAW 8750C City of Kansas City Municipal Internship Credits: 1-6

City Law Interns work in the Law Department of the City of Kansas City, in municipal court litigation, legal advising, and legal aspects of policy development. Intern assignments include litigation and non-litigation based research and drafting. In litigation context, law interns draft briefs, conduct discovery and case file analysis, and prepare witnesses, and other aspects of trial preparation.

Co-requisites: LAW 8749.

LAW 8751 Family Law Credits: 3

Pre-marital contracts; marriage; annulment; paternity; parent and child; divorce; alimony; division of property; separation agreements; adoption.

LAW 8751F Family Law & Film Credit: 1

An exploration of the function of family law and lawyers in society by examining legal decisions, statutes and legal commentaries in the context of films, including classic, contemporary mainstream, foreign, documentary and independent films. The seminar entails participants viewing a film followed by discussion. During the discussion session students will critique the film in light of assigned reading materials. Using films as analytical tools, the seminar examines the ways in which pop culture products (such as film and television) both reflect and change the social views about family law and lawyers. A pass/fail course.

LAW 8751S Family Violence Credits: 2-3

An in-depth examination of family violence from a legal perspective. Course topics will include interdisciplinary study of the dynamics and psychology of family violence, of historical and social policies, specialized problems of family violence (including intimidated partner violence, child abuse and neglect, gay and lesbian battering, and elder abuse) and legal responses. Students will receive practical training in safety planning, intake, review of community resources, case logistics, and advocacy for temporary orders.

LAW 8752G Guardian Ad Litem Workshop Credits: 2

Advanced study of guardian ad litem practice. (GAL). Topics may include adult and child orders of protection, requirements for guardian ad litem appointments, role of the GAL, ethical considerations, working with social workers and other professionals, and best practices in investigation, recommendation, and representation. Students will partner with volunteer attorneys to act as guardians ad litem in order of protection cases.

Prerequisites: Rule 13 certification.

LAW 8752R Family Law Practice Credits: 2

A practical skills course in family law in which students participate in all phases of family law practice, including the initial client interview; the drafting of questionnaires, pleadings, motions custody and discovery plans, support and maintenance proposals, orders and other documents; negotiation, and preparation for litigation. Students work in teams and perform exercises which simulate "real world" situations.

Prerequisites: LAW 8751.

LAW 8752S Child & Family Services Clinic Credits: 1-6

Students represent the clients in obtaining legal rights to custody of children who are currently in foster care or otherwise under the authority of the Department. Students work under the supervision and direction of clinic faculty and faculty directors, receiving classroom instruction in the substantive law and procedure governing juvenile court actions.

Prerequisites: Rule 13 certification.

LAW 8753 International Law Credits: 2-3

Survey of international legal studies; nature and role of international law, its effectiveness in dealing with international problems and its application in domestic jurisdictions.

LAW 8754 International Business Transactions Credits: 2-3

Legal problems encountered in international business; jurisdiction and choice of law; enforcement of judgments; methods of protecting foreign investments; extra-territorial application of United States regulations, e.g. anti-trust law.

LAW 8757 Business Planning Credits: 2-3

Problem-method study of choice of entity and various other legal issues and planning challenges in forming a closely held business entity and in private and public financing of an existing enterprise. The course includes practical training from drafting organizational documents to conducting simulated client interviews and providing written advice concerning hypothetical transaction. Limited enrollment.

LAW 8757L Special Topics In Entrepreneurial Lawyering Credits: 2

Examination of issues related to ethical and effective management and marketing of law practice, emphasizing solo and small firm practice. Topics will vary from year to year, but will generally address issues such as forms of practice, dissolution of practice, practice management systems (including technology assistance), human resources management, advertisement and solicitation, insurance and malpractice.

LAW 8757N Entrepreneurship & New Venture Creation Credits: 3

Jointly-taught by Law School and Bloch (Business) School faculty, this interdisciplinary course provides education in entrepreneurship to a combined class of students from law, business, engineering and perhaps other graduate-level disciplines. Using a combination of readings lectures, electronic blackboard discussions, team business planning projects and presentations, and individual presentations on selected topics, the Course is designed, from a law student's perspective, to both (1) familiarize the student with substantive knowledge of issues from multiple disciplines involved in creating a new venture to commercialize technology and (2) train law students in techniques designed to effectively communicate and resolve legal issues inherent in such projects in a collaborative manner with clients and their advisors from other disciplines.

LAW 8757R Entrepreneurial Law & Practice Clinic Credits: 2

Under faculty supervision, students will counsel start-up companies and their owners and implement business planning advice by drafting articles of incorporation and organization, by-laws, partnership agreements and other business contracts. Other business-related matters ranging from regulatory, consumer, licensing, and taxation requirements; copyrights, trademark, and patent creation; and 501(C)(3) applications for non-profits may also be covered in this course. Clinic students will also receive classroom instruction in the areas of client counseling and business planning and drafting of business documents.

Prerequisites: LAW 8601 and LAW 8552.

LAW 8757V Social Entrepreneurship Ventures Credit: 1**LAW 8758S Securities Regulation Credits: 2-3**

Problem and policy method study of the Securities Act of 1933 and selected aspects of the Securities Exchange Act of 1934; financing of an enterprise; reorganizations; tender offers; proxy regulation; and securities fraud claims.

LAW 8760 Insurance Credits: 2

Life, fire, accident, and liability insurance; nature of insurance; nature of insurance contract; special rules of construction; standard policy provisions; regulation of insurance industry.

LAW 8761M Law, Medicine & Bioethics Credits: 2-3

A study of bioethics and selected legal and ethical issues in medicine with focus on decision-making at the beginning and end of life; reproductive rights and assisted reproductive technologies; the patient-provider relationship (fiduciary, treatment, confidentiality, and disclosure obligations); physician obligations of informed consent and patient care issues; potential hospital and physician liability for medical malpractice; and end of life decision-making (withdrawal and refusal of life sustaining treatment by individuals and their surrogates) and physician-assisted suicide.

LAW 8762 Personal Injury Tort Practice And Procedure Credits: 1-3

Advanced treatment of law of negligence; right of recovery and defenses; practice and procedure in negligence cases, including case intake, pre-discovery investigation, settlement demand packages and other communications with opposing counsel, injury petitions, initial discovery, depositions, retention of experts, pre-trial motions, and mediation.

Prerequisites: LAW 8521, LAW 8522, LAW 8511, LAW 8531 LAW 8532.

LAW 8763 Labor Law Credits: 2-3

Regulation of labor relations pursuant to the national Labor Relations Act, focusing on the establishment of collective bargaining relationships, unfair labor practices, collective bargaining, strikes, picketing and pre-emption.

LAW 8764 Administrative Law Credits: 1-3

Introduction to the administrative process; role, function, and processes of administrative agencies; policy issues of administrative government; judicial review.

LAW 8765 Federal Jurisdiction Credits: 2-3

Federal court system and jurisdiction of the federal courts; diversity of citizenship; removal of cases from state to federal courts; conflicts between state and federal judicial systems; original and appellate jurisdiction of the Supreme Court.

Prerequisites: LAW 8521.

LAW 8766 Land Use Law Credits: 2-3

Legal and administrative aspects of land use and the problems and techniques of urban planning; statutory anti-nuisance devices; controlling land use by private methods (restrictive covenants, easements, and servitudes); zoning; subdivision controls; public acquisition of land; building and housing; urban renewal and redevelopment; environmental quality control (air, water, and conservation); relationship of lawyers, planners, private builders, and owners to governmental policies.

LAW 8767 Land Title Clinic Credits: 1-6

Under supervision, students provide legal assistance to The Land Bank to bring quiet title actions and pursue other legal strategies necessary to return vacant and abandoned properties to productive use.

Prerequisites: Rule 13 eligibility.

LAW 8768R Department of Labor Internship Credits: 3-6

Department of Labor Law Interns assist agency attorneys in the Regional Solicitor's Office of the United States Department of Labor enforcing federal labor statutes, including the Fair Labor Standards Act, Occupational Safety and Health Act, and Office of Federal Contract Compliance Programs, among others. Students undertake legal research, draft discovery requests, review and analyze evidence, participate in client and staff conferences related to enforcement strategy, and assisting enforcement personnel in investigations.

Co-requisites: LAW 8749.

LAW 8769 Law & Poverty Credits: 1-3

Selected problems arising out of the relation of the law to the poor and its effect upon the individual and the family structure; income maintenance (e.g., welfare, social security); discrimination in employment and housing; delivery of professional services (legal, health); administrative and judicial remedies.

LAW 8770 State And Local Government Law Credits: 2-3

Structure, powers, and divisions of local governments in metropolitan areas; role and powers of cities, counties, towns, school and special districts; decentralized and neighborhood governmental units and other local governmental units; legislative, home-rule, and constitutional sources of power; sovereign immunity; boundary adjustments; public employee relations; citizen participation; reapportionment; licensing and permits; ethics and public access to records; regional governance; intergovernmental cooperation; interstate compacts and authorities; function of local government with reference to solution of problems created by urban growth; role of judicial, administrative, and political processes.

LAW 8771 Public Finance Credits: 2-3

Fiscal, economic, and taxation problems and powers of local government in metropolitan areas; constitutional limitations; spending and public finance; property taxes; special assessments and exactions; interstate tax acts; local income taxes; debt financing; debt adjustment; public expenditures and contracts; financing education.

LAW 8773 Environmental Law Credits: 2-3

This course covers law developed to control pollution and to protect our country's physical environment. The course provides introductions to ecological theories and to early common law efforts to protect the environment. But the course mainly focuses on current environmental statutes (for instance, the Superfund Act, the Resource Conservation and Recovery Act, the Clean Air Act, and the Clean Water Act) and on current federal constitutional issues involving the environment. (Priorities in this mix may vary from year to year, depending on current events and related course offerings). Enforcement policies, citizen activism the needs of private industry, and the administrative process are also considered.

LAW 8773C Environmental Compliance Auditing and Permitting Credits: 3

This course provides students with an overview of the key federal environmental statutes and their inter-relationships, including consideration of the Clean Water Act, the Clean Air Act, the Emergency Planning and Community Right to Know Act and the Resource Conservation and Recovery Act. Students will learn about inspections, enforcement and liability; environmental management systems and auditing; and generally, how Congress and the EPA formulate environmental laws and regulations and about the roles in the process of the legislature, the regulators, the regulated communities, citizens and public interest groups.

LAW 8773N Negotiating SuperFund Settlements Credits: 1-2

This course will engage students in the simulated resolution of one or more Superfund cases, with a particular focus on the skills required for negotiated resolution of these matters.

LAW 8773R Environmental Law Internship Credits: 3-6

Environmental Law Interns work with attorneys in government agencies, such as the U.S. Environmental Protection Agency or non-profit organizations focused on environmental protection, resource conservation, public health and related issues. The nature of the lawyering assignments will vary with the host office.

Co-requisites: LAW 8749.

LAW 8774 Citizen Suits under the Endangered Species Act Credit: 1

This course will cover the citizen suit provision of the federal Endangered Species Act, walk-through an example case from initiation to settlement, and consider possible reform to meet the goals of the statute.

Prerequisites: LAW 8521 LAW 8522.

LAW 8775 Appellate Advocacy National Moot Court Competition Credits: 1-2

Participation on National Moot Court competition team. Ungraded.

Prerequisites: LAW 8748, Ellison Moot Court Competition.

LAW 8778 American Academy Matrimonial Lawyers Board Credits: 2

Under direction of professor, students provide editorial assistance in publishing Journal of the American Academy of Matrimonial Lawyers, write a paper on selected topics and prepare summaries and bibliography of current works. Limited enrollment.

LAW 8783 Federal Public Land & Resource Law Credits: 2-3

Exploitation and conservation of natural resources; management of federal lands; water law; energy law; federal wildlife preservation; resolution of disputes involving use of natural resources.

LAW 8783B Buffalo National River: Issues in National Park Law & Management Credit: 1

Specialized study of topics in natural resources law as it relates to the Buffalo National River in northern Arkansas. Students will explore the history of the Buffalo River; the state and federal laws in operation governing the park (e.g., the wild and scenic rivers act, the endangered species act, national historic preservation, etc.); and planning and management issues presented by the multiple uses of the area and its surroundings.

LAW 8783P Preservation of Land & Natural Resources Credits: 2-3

This course will provide a survey of the law and policy of land and natural resource management, with an emphasis on preservation, conservation and sustainability.

LAW 8790 Legal Aid Internship Credits: 3-6

Legal Aid Interns are assigned to one of the practice groups in Legal Aid, focused on legal issues of people with limited means (housing (public and private), consumer protection, community development, government benefits, family law, municipal criminal defense). Principally, students work in one of the Kansas City offices, but may also intern in other offices in Missouri or another state, with approval of the faculty director of the field placement program. Students eligible for Rule 13 student practice authorization may present directly in court.

Co-requisites: LAW 8749.

LAW 8791 Civil Rights Credits: 2-3

Elements of a Section 1983 case, enforceable rights and available defenses; procedural aspects of civil rights cases; suits against federal and state governments.

Prerequisites: LAW 8631.

LAW 8793A Health Law I: Liability and Quality Issues in Health Care Credits: 2-3

Health Law I: Liability and Quality Issues in Health Care

LAW 8793B Health Law II: Regulation, Organization and Finance Credits: 2-3

Health Law II: Regulation, Organization and Finance

LAW 8796 Economics And The Law Credits: 2-3

Tools of economic analysis which have particular application in the law; equity and efficiency are weighed in regulation, pollution, discrimination, monopoly, financial markets, human resources and government expenditure and taxation policy. Principles will be introduced and expanded upon using both lecture and case study techniques.

LAW 8797 Business Torts and Unfair Competition Credits: 2-3

The common law applicable to relations between businesses that compete against each other or that cooperate with each other in the production and distribution of the same product. Tort, contract and property law principles as remedies not available in parallel statutory schemes, such as the antitrust or patent laws. Statutes that codify the common law or create statutory procedures or remedies for common law rights.

LAW 8798 Copyright Law Credits: 2-3

Surveys when copyright protections are extended, the exclusive rights included in copyright, and the limitations of those rights. Additional consideration is given to third-party liability, the challenges of digital technologies, and protections afforded by the Digital Millennium Copyright Act.

LAW 8798A Art Law Credits: 2-3

This course examines several key topics related to the protection of visual arts, including copyright and moral rights and their intersection with First Amendment protection.

LAW 8800 Legal Research Thesis Credits: 1-8

Research for LL.M. thesis.

LAW 8808 Intellectual Property Law Credits: 2-3

Substantive and procedural law of intellectual property. Coverage includes copyrights and patents and other areas at the option of the instructor.

LAW 8808I International Intellectual Property Credit: 1

This course focuses on the main principles of protection and obligations of the signatories to the World Trade Organization Trade Related Intellectual Property Agreement (GATT/TRIP's) - in particular focusing on the main intellectual property and Industrial property rights, including (1) Copyright, (2) Performers Rights, (3) Patents, (4) Trade Marks, and (5) Related rights such as unfair competition and the protection of geographical indications; and addresses what the obligations are that are imposed on signatories in respect of protection and enforcement of these rights.

LAW 8808L Intellectual Property Licensing Credits: 2-3

This course provides for advanced engagement with intellectual property concepts while also providing training in practical skills. The course will first entail reminding students of the differences among the three essential areas of intellectual property law (copyright, patent, and trademark) and indentifying how these differences translate into different standard license agreements. Additionally, students will consider the challenges in drafting a consolidated license agreement that transfers interests in multiple types of intellectual property. Second, the course will include considerable practice for students in drafting contract language.

LAW 8808S Intellectual Property Remedies Credits: 2-3

This course will explore the remedies available to intellectual property owners and the protections available to those accused of infringing copyrights, trademarks, trade secrets and patents. The course will delve into issues of how rapidly advancing technology has made it more difficult to apply the current remedies and explore whether they go too far or not far enough in protecting owners of intellectual property. It will also help students recognize that case evaluation does not end after analyzing whether liability exists.

LAW 8809 Missouri Cannabis Law Credit: 1

This miniterm course will survey the essential features of medical marijuana law in Missouri. It will cover the regulations regarding application for a medical marijuana license (cultivation, dispensary, and infusion/extraction).

Prerequisites: Administrative Law is recommended, but not required.

LAW 8813 Employment Discrimination Law Credits: 2

Substantive and procedural aspects of Equal Employment Opportunity Act and related matters.

LAW 8814R Employment Law Credits: 2-3

Survey of legal doctrines regulating the employment relationship, including the regulation of wages, hours and benefits; privacy in the workplace; workers' compensation; suits for wrongful termination; non-competition agreements; and unemployment compensation. May be offered as a seminar.

LAW 8814U Unemployment Compensation Clinic - Hearings Practice Credits: 1-3

Students represent claimants in administrative hearings appealing denials of their unemployment compensation claims. Students interview and counsel clients, investigate their cases, prepare evidence, and advocate for the clients in these hearings.

LAW 8815 Products Liability Credits: 2-3

Theory and practice in products liability cases; negligence; misrepresentation; strict liability; theories of product defect; applicability of the Uniform Commercial Code including warranties and disclaimers; actions among members of the distribution chain.

LAW 8815R Disabilities And The Law Credits: 2-3

An interdisciplinary study of the law relating to disabled persons in the areas of employment, education, and access to transportation, health, welfare and social services to provide an understanding of how the law affects individuals with disabilities and public and private entities. Legislation considered include the American with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, the individuals with Disabilities Education Act, the Family and Medical leave Act, the Fair Housing Act, the Voting Accessibility for the Elderly and Handicapped Act, and the Title VII of the Civil Rights Act of 1964. The enrollment of graduate students from other disciplines, such as education, business, and health sciences is encouraged to allow for interdisciplinary discussion of the topics involved.

LAW 8815S Leadership In Disability Studies: A Multidisciplinary Approach Credits: 3-4

An overview of the history of disability issues, some individualized perspectives of persons with disabilities, the rationale for interdisciplinary approaches regarding disability studies, and opportunities for leadership development with regard to disability issues. The students will participate in a forum that encourages reflection, exchange of ideas, interaction with persons with disabilities and persons from various fields of study, and case analysis. After an orientation to the study of disabilities, various aspects of community membership for persons with disabilities will be addressed, particularly with regard to the workplace, the neighborhood, and the home. Emphasis with placed on vital leadership roles that facilitate community membership and contribution of persons with disabilities to society.

LAW 8820 Criminal Trial Techniques Credits: 2

Strategy and tactics in handling a criminal case; effective representation of the accused at various stages of the criminal process; securing pre-trial release; plea bargaining; motion practice; discovery; voir dire; opening and closing statements; examination of witnesses; use of the expert; sentencing; appeal; collateral attack.

LAW 8821 Sentencing Mitigation Clinic Credits: 1-6

Students will work in conjunction with practicing attorneys, paralegals, social workers, and investigators serving clients of the Federal Public Defender Offices in the District of Kansas and the Western District of Missouri. The focus of the client representation will be geared towards investigation, development and presentation of mitigating evidence to impact sentencing outcomes.

Prerequisites: LAW 8913.

LAW 8822 Post Conviction Remedies Credits: 2-3

Federal and state remedies for collateral attacks on criminal convictions; vacation of sentences and convictions; federal habeas corpus and similar devices. Paper required when course is offered as a seminar.

Prerequisites: LAW 8635.

LAW 8831R International Human Rights Law Credits: 1-3

Study of the law protecting individuals and groups against governmental violations of internationally guaranteed rights; historical antecedents and theoretical underpinnings; human rights in national law (the United States); post World War II developments; principal international human rights instruments; regional human rights arrangements; human rights of women, refugees, ethnic minorities; implementation of rights; international obligations of the United States; selected civil, political, economic and social rights.

LAW 8832 Law Of International Trade And Finance Credits: 3

Study of the World Trading System, focusing on policy and application, including the WTO, the NAFTA, U.S. trade remedies, foreign direct investments controls, and export controls.

LAW 8832I Introduction to International Trade Credits: 1-3

An examination of the structure and workings of the major global trade regimes, including the World Trade Organization ("WTO") and the North American Free Trade Agreement (the "NAFTA"). The role of international trade in such areas as the environment, labor rights, national security, the developing world, and non-market economies will also be considered. The course will also focus in depth on United States domestic trade remedies, including antidumping, countervailing duties, section 301 and 337 actions as well as on other international trade restricting practices.

LAW 8834 Tax Procedure Credits: 2

Problem-method study of procedures and taxpayers' rights when deficiencies are assessed by the Internal Revenue Service; tax liens; commencement of litigation in Tax Court, Federal District Court, and Court of Claims.

LAW 8834R Tax Clinic Credits: 1-4

Students in the Kansas City Tax Clinic represent low-income clients before the IRS and in United States Tax Court under the supervision of the Clinic Directors. Cases may include delinquent filers, examinations, administrative appeals, Tax Court litigation, innocent spouse, and collection cases including due process, installment agreements, and offers-in-compromise. Students also receive classroom instruction in tax procedure subjects and in client counseling. There is a ten hour orientation prior to the beginning of classes. There is also an additional five hour lecture held during the course of the semester.

LAW 8835 Blockchain, Cryptoassets and the Law Credits: 1-2

Covering blockchains, cryptoassets and related topics in the FinTech area. Blockchains are incorruptible decentralized digital ledgers maintained by a distributed network of computers. All transactions on a blockchain are recorded chronologically and publicly. Cryptoassets are digital assets that use blockchains and cryptography to regulate the creation of new units, verify transactions, and secure the transactions without the intervention of any middleman. Will address whether governments have the power to regulate blockchains and what is the right balance of regulation to protect the public but encourage innovation.

LAW 8837 Negotiating Mergers And Acquisitions Credits: 2-3

Problem-method study of corporate, tax, securities, and business problems entailed in buying and selling a corporation; fundamental corporate changes: recapitalizations, mergers, sale of assets, sale of stock, and tender offers; corporate finance and rehabilitation of financially distressed corporations.

LAW 8837R Mergers & Acquisitions Deals and Corporate Governance Issues Credit: 1

An introduction to the tactical and strategic complexities of litigation and client counseling arising from contested mergers and acquisitions and corporate tactics involving activist shareholders.

Prerequisites: Business Organizations

LAW 8838L Legal Accounting Credit: 1

Accounting as it relates to the work of a lawyer. Understanding financial statements (balance sheet, income statement, cash flow, shareholder's equity), analysis of financial statements; deferral concepts (inventory, depreciation, prepaid expenses), understanding accounting principles, valuation (present value, future value.).

LAW 8838R Tax Practicum I Credits: 1-3

Practical skills training in the sources and methods of tax research (including electronic database sources) using problem method approaches; analytical and planning skills are developed through in-depth case study research.

LAW 8843 Federal Income Taxation Of Estates And Trusts Credits: 2

Income tax problems of the fiduciary; grantor's trusts; income, estate, and gift tax problems relating to optional or discretionary acts of the fiduciary in retention and/or distribution of income or corpus.

LAW 8845 Deferred Compensation Credits: 2-3

Problem-method study of deferred compensation arrangements; qualified pension and profit sharing plans; individual retirement accounts; qualified stock option plans; other methods of deferred compensation.

LAW 8847 Personal Injury Tort Litigation Credits: 1-2

Introduction to the fundamentals of personal injury litigation, including case intake, pre-discovery investigation, settlement demand packages and other communications with opposing counsel, injury petitions, initial discovery, depositions, retention of experts, pre-trial motions, and mediation.

LAW 8848R State And Local Taxation Credits: 2-3

State and local taxation of income, sales and property, including the apportionment of tax obligations to multiple states. Restrictions imposed by constitutional doctrines such as the uniformity and equality requirement and the prohibition on interfering with interstate commerce.

LAW 8850 Applied Evidence Credits: 1-3

Problems and simulations in evidence; application of the rules of evidence in many of the following topic areas: objections to the form of the question; hearsay; lay and expert opinion; authentication, the introduction of real and demonstrative evidence, rules of relevance, cross-examination and impeachment.

LAW 8853 Seminar in Law Science & Technology Credits: 2-3

This class surveys a variety of current topics lying at the intersection of law, science, and technology. During the course of the semester each student will develop their own thesis relating to some specific issue arising out of the interaction of law, science, and technology.

LAW 8858 Consumer Protection Credits: 2-3

Protection of consumers from false advertising, unfair sales practices, and consumer credit and debt collection abuse. Topics which may be covered are Truth-in-Lending Act, Uniform Consumer Credit Code, Fair Debt Collection Practices Act; Interstate Land Sales Disclosure Act, Federal Trade Commission and Missouri Attorney General activity, Missouri consumer credit legislation, consumer warranties, consumer class actions, abusive collection practices.

LAW 8858L Consumer Protection Lab Credit: 1

This course provides students with skills needed for reviewing and investigating consumer complaints; developing problem solving strategies and drafting Attorney General letters, pleadings, and other documents necessary for the enforcement of the complaint. Students work with the Missouri Attorney General's office to screen consumer complaints and recommend actions.

Prerequisites: LAW 8858.

LAW 8861 Real Estate Finance Credits: 2-4

Real estate investment and development; basic financing instruments (e.g., mortgages, deeds of trusts, contracts for deed); foreclosure remedies; home finance, national housing market; financing of commercial and industrial properties; construction financing; mechanic's liens; priority disputes; bankruptcy issues affecting real estate security interests.

LAW 8863 Fair and Affordable Housing Seminar Credits: 1-3

This seminar course will explore issues of fair and affordable domestic housing law through a real property lens. It will be unique in its approach to housing law from an advanced property perspective. Through a mixture of classroom lectures and discussions, experiential exercises and scholarly writing, housing issues will be examined from many perspectives including that of residential and commercial owners, developers, homeowner associations, landlords, tenants, and government regulators.

Prerequisites: LAW 8541; LAW 8542.

LAW 8868 Trusts: Planning, Drafting, Administering & Litigating Credits: 2-3

Focus on advanced planning and drafting of inter vivos private express trusts for individuals, including proper use of readily available forms (tax-related drafting limited to marital and charitable deduction forms), consideration of trustee's duties, powers and liabilities pursuant to the Missouri Trust Code and related cases, and special emphasis on the recently-adopted Uniform Investor Act and the significant changes it has introduced to Missouri trust investment law.

Prerequisites: LAW 8611.

LAW 8870 Seminar in Educational Equality and the Law Credits: 1-3

This seminar will explore the legal aspects of providing educational equality in a nation of diverse ethnicities, cultures, religions, sexual identities, and socio-economic conditions. Through the lenses of legal scholarship and primary legal authorities, students will examine past and current attempts to address the inequities that have long plagued U.S. public education in the K-12 setting. In addition, the course will include extensive instruction in scholarly research, writing, and publication skills.

LAW 8870R Education Law: Government & Legal Aspects Of Education Credits: 2-3

This course is designed to give students an introduction to the major legal doctrines that affect K-12 schools, as well as the policies that underlie or are changing those doctrines. Students should gain a working understanding of the impact of federal and state law on the operation of schools, the rights and responsibilities of teachers and administrators, and the rights of the students who attend those schools.

LAW 8874 Tax-Exempt Organizations Credits: 2

An in-depth examination of the state and federal laws that govern the formation and operation of tax-exempt organizations, with emphasis on Sec. 501 (c) (3) charities; criteria for tax-exempt status; IRS application and reporting procedures; unreported business income tax issues.

LAW 8875 Real Estate Transactions Credits: 2-3

Practice-oriented course, including the development of drafting skills, in which questions involving basic residential and commercial real estate sales and civil and leasing transactions are considered, such as title, title insurance, contract conditions, contract remedies, commercial leasing (office and shopping center issues) and issues concerning and confronting brokers; special emphasis on Missouri and Kansas law.

LAW 8875L Legal Context of Real Estate Decision Making Credits: 1-3

A study of fundamental matters involved in real estate decision making, including an understanding of basic real estate terms of art; the unique attributes of commercial real estate the distinction between office, retail and industrial property leases; the significant business and legal issues that arise in lease negotiations; financing issues, including the negotiation of construction and permanent loan documents; loan application/brokerage agreements; the impact of bankruptcy on real estate transactions; an explanation of different types of insurance coverage applicable to commercial real estate; and construction issues, including how buildings are constructed and the "green" movement impact on current construction practices.

LAW 8876 Sales and Leasing Credits: 1-3

This course is a survey course on the law of sales leasing. The course will examine the sale of goods under Article 2 of the Uniform Commercial Code (UCC), studying the rights, duties, and liabilities of parties to modern sales transactions. The course will also analyze Article 2A (leasing) of the UCC and explore the rights, duties, and liabilities of parties to modern lease transactions. The course will also consider the United Nations Convention on Contracts for the International Sale of Goods (CISG). Topics encompassed will include sale and lease contract formation, establishment of express and implied contract terms,

LAW 8877 Bankruptcy Court Internship Credits: 2-6

Bankruptcy Court Interns serve in the chambers of US Bankruptcy Judge, principally in the Western District of Missouri. Students may also intern with bankruptcy judges in different federal districts, with approval of the field placement faculty director. Legal issues arise under the Bankruptcy Code, as well as secured transactions, contract law, labor law, and tax law. Students undertake research, draft memoranda, observe hearings and other judicial proceedings, and debrief with judges regarding legal issues and lawyering styles.

Co-requisites: LAW 8749.

LAW 8881 Seminar on the Supreme Court Credits: 2-3

Students simulate the work of the Supreme Court on nine cases presently pending before that court. The student justices study the briefs and related material filed in each case, discuss and vote on the cases, and write majority and dissenting opinions. Enrollment in the seminar is limited, fittingly, to nine justices.

LAW 8881P Seminar in Presidential Power Credits: 2

In this course students will examine unsettled and often controversial questions regarding the extent of presidential power in sensitive contexts. Emphasis is placed on how these issues are implicated in current national life. Students will examine and will be expected to actively discuss during class sessions issues such as the president's authority to decline enforcing federal law, the extent of the president's authority to engage in overseas military action without congressional approval (and, assuming approval is required, what form that "approval" must constitutionally take), presidential authority to indefinitely detain "enemy combatants" at Guantanamo Bay, Cuba (or similar locations), the legal effect of presidential signing statements, the extent of presidential oversight authority over administrative agencies, and the propriety of the Court's invocation of the "political question doctrine" when confronted with sensitive questions regarding presidential power.

LAW 8882 Patent Law Credits: 2-3

This course will focus primarily on substantive U.S. patent law, including the laws governing the patentability of particular inventions, the patent procurement process, the rights granted by a patent, and patent enforcement and litigation. As time permits, the course will explore policy issues raised by the current patent system, discuss proposals for reform and international harmonization, and consider alternatives to patent protection such as trade secret and regulatory exclusivity.

LAW 8882R Patent Prosecution Credits: 2-3

This course will focus primarily on the practical application of substantive U.S. patent law, including the laws governing the patentability of particular inventions, the patent procurement process, the rights granted by a patent, and patent enforcement and litigation. In particular, this class will focus on teaching students how to draft a patent application and how to prosecute the application in the U.S. Patent and Trademark office. This class will be designed to mirror the substantive patent law being taught in the Patent Law course. For example, the Patent Law course will present the law and theory of obviousness or novelty; the Patent Prosecution course will instruct in how to deal with and respond to an obviousness or novelty rejection from the U.S. Patent and Trademark Office.

Co-requisites: LAW 8882.

LAW 8884 White Collar Crime Credits: 2-3

Examines substantive federal law in the areas of fraud, public corruption, financial crimes and conspiracy; it also includes examination of procedural and policy issues related to business and white-collar investigations.

Prerequisites: LAW 8634.

LAW 8885 Seminar In Philosophy And Law Credits: 2

An examination from a philosophical perspective of the historical and conceptual relationships present in the evolution, development and analysis of law, including natural law theory, legal positivism and legal realism, and focusing on a specific area of controversy in the law.

LAW 8885H The Quest for a Satisfying Career in Law Credits: 1-2

An examination of what research suggests about the likelihood that a career in law will prove satisfying, including an exploration of the specific types of firms and work environments that are most likely to produce happy lawyers; a consideration of what studies from the fields of neuroscience and psychology suggest about steps that lawyers, law firms, and law schools can take to improve prospects for career satisfaction; and a consideration of how high happiness should rank among life's goals.

LAW 8886 Corporate Taxation I Credits: 2-3

Tax treatment of corporations and shareholders with respect to formation, non-liquidating distributions, stock dividends, redemptions and liquidations. The course may also cover the personal holding company tax, the accumulated earnings tax, collapsible corporations, multiple corporations and tax consequences of corporate reorganizations; survival of tax attributes; acquisition of loss corporations; and a survey of consolidated return reporting.

LAW 8887 Corporate Taxation II Credits: 3

Tax consequences of corporate reorganizations; survival of tax attributes; acquisition of loss corporations; and a survey of consolidated return reporting.

Prerequisites: LAW 8886.

LAW 8888A Partnership Taxation II Credits: 1-3

A study of selected topics in tax planning and in negotiating and drafting organizational documents (e.g. partnership agreements and operating agreements) for entities that will be classified as partnerships for tax purposes, including advanced exploration of issues relating to special allocations and book/tax disparities, optional adjustments to basis, payment to retiring and deceased partners, the impact of I.R.C. Section 751 on partnership distributions and on sales and exchanges of partnership interests, partnership mergers and divisions, partnerships with tax-exempt partners, and tiered partnerships.

Prerequisites: LAW 8888R.

LAW 8888R Partnership Taxation I Credits: 2-3

An in depth examination of the tax principles governing partnerships limited liability companies and other unincorporated organizations classified as partnerships for tax purposes, including questions involving the tax consequences of the formation of such organizations, operating distributions, basis computations, liquidating distributions, and sales of ownership interests.

LAW 8889R Subchapter S Taxation Credits: 1-2

An examination of the tax principles governing Subchapter S Corporations, including the tax consequences of their formation; the taxation of their income and the deductibility of their losses; operating distributions; basis computations; liquidations; distributions; and sales of S Corporation shares of stock.

Prerequisites: LAW 8886.

LAW 8890A Sports Law I, Amateur Sports Law Credits: 2

Coverage of various amateur sports law issues with a focus on the regulation of interscholastic, intercollegiate sports, Olympic and international sports, and sports broadcasting; including such topics as constitutional law, tort law, contract law, and Title IX gender discrimination; and a consideration of federal disability discrimination laws, the status of collegiate athletes who participate in big time sports programs, the regulatory authority of the National Collegiate Athletics Association, The National High School Athletic Association, international and Olympic sports organizations.

LAW 8890B Sports Law II, Professional Sports Law Credits: 2

A focus upon the multitude of legal issues and unique relationships in the sports industry, including, among other issues, professional team sports, other professional sports, facilities management in professional sports, legal implications and the practical realities of the unique labor-management relationships in professional sports. The most significant areas to be studied in the context are antitrust, labor, communications, taxation, contracts law, and intellectual property law.

LAW 8890C The Emergence and Transformation of Concussion Litigation Credits: 1-2

This course will examine the emergence, transformation and development of concussion litigation. Concussion litigation spans multiple areas of the legal landscape – from torts, civil procedure, sports law, labor and employment law and, inter alia, medical-legal aspects. We will begin with the theoretical underpinnings of the emergence of concussion litigation. We will then look at how society, the legislature and the courts have responded to sports concussions. This will require us to analyze what the concussion litigation landscape looks like currently and how it will be shaped in the future.

LAW 8890I Selected Topics in International and Comparative Sports Law Credit: 1

The course introduces students to the basic structure and techniques of dispute resolution utilized in international sports law. The field of international sports law is an ever-expanding area of the law and the term "international sports law" refers to an emerging and distinctive body of rules that govern transnational sports and sporting activities. Distinct bodies of international sports law have developed under the aegis of the Olympic Charter that applies to international sports competition well beyond Olympic competition itself, and encompasses both traditional Olympic sports and non-Olympic sports. Many international sports law disputes are now resolved in the Court of Arbitration For Sport (CAS), a body that may rightly be referred to as a Supreme Court for a very wide array of international sports disputes involving such matters as doping, eligibility, cheating, violence, discrimination, commercialization and intellectual property.

LAW 8890R Entertainment Law Credits: 2-3

An examination of the legal issues affecting the print and broadcast media. Topics covered may include copyright, antitrust, spectrum allocation, right of privacy, first amendment issues (prior restraint, obscenity, commercial speech, defamation and access to both information and judicial proceedings), licensing and new technologies including and beyond cable television.

LAW 8890X Sports Law Internship Credits: 2-6

Sports Law Interns work in offices focused on collegiate or professional sports to learn about the regulatory, compliance, and business aspects of sport and the sporting enterprise. Students analyze and apply regulatory standards, conduct legal research regarding novel legal issues, draft memoranda, legal documents, or other documentation.

Co-requisites: LAW 8749.

LAW 8892R Estate and Gift Tax Credits: 2-3

Problem method study of estate, gift and generation skipping transfer taxes and the income taxation of estates and gifts. Emphasis on lifetime and post-mortem planning as well as compliance requirements.

LAW 8893 International Taxation Credits: 2-3

An introduction to the taxation of income of U.S. citizens, residents and corporations from foreign sources and the income of foreign residents and non-residents from U.S. sources. Topics may include sources of income rules, foreign tax credit provisions, the earned income exclusion for foreign source income, income tax treaties and a survey of the tax treatment of U.S. investments made offshore.

LAW 8893R Taxation Of Property Transactions Credits: 2-3

Income taxation of property transactions. Detailed study of capital gains and losses, passive losses, the at-risk rules, and the alternative minimum tax.

LAW 8895S Jury Selection Credit: 1

Students study the purpose of voir dire and the law pertaining to jury selection and receive hands-on experience in selecting a jury role-playing as lawyers; jurors, and presiding judge in a concluding 2 1/2 hour courtroom simulation (where a jury is selected after making challenges for cause and exercising preemptory strikes); and learn that jury selection is an art not a science-which needs to be tailored to the facts of the case and the witnesses the attorney expects to present. An actual case involving a badly injured young plaintiff and a large corporate defendant-where liability is questionable-is used for the simulation. Students learn active listening skills and how to interpret non-verbal behavior. Examples from prominent, practicing lawyers are presented. The course is graded on a pass/fail basis.

LAW 8897 Seminar In Analytical Strategies Credits: 1-2

Pedagogical philosophy of legal education; common themes in first-year legal education; techniques of cooperative learning of legal materials. Students may act as study group leaders for various first-year course subjects. Ungraded.

LAW 8897B Building MBE Skills Credit: 1

Preparation of students for the bar exam by building bar exam multiple choice skills. Focus will be on strategies and tactics in the topics tested by multiple choice questions. Additional emphasis will be on learning how to self-assess understanding of concepts and judgment errors through intense review of errors. The course will require eight to ten hours a day of class and outside work.

LAW 8897E Introduction to Law Study Credits: 0

This course is designed to help incoming law students navigate the challenging transition to law study. The course is a rigorous, five-day introduction to law school. Each day focuses on a "stage" of law school learning; orientation, class preparation, class, after class review, exam preparation, and exam taking. The course addresses the skills of reading, writing, and thinking at each of these stages through simulated classes, direct teaching of study skills, written and oral exercises, and individual meetings with faculty.

LAW 8897R Governmental and Legal Aspects of Education Credits: 2-3

Study of legal issues within higher education. Focus is on state and federal law and regulations as they pertain to issues from academic freedom to governance and administration. Focus on strategies for preventive law is a major component of the course.

LAW 8898 Construction Law Credits: 2

The Construction Law course would emphasize state and federal construction law and would provide the students with practical experience in drafting contracts, negotiating disputes, and conducting a mock arbitration. The course would cover the contract responsibilities and remedies of contractors, subcontractors, design professionals, sureties and owners, including the United States Government. The course would emphasize the controlling state and federal statutes and regulations, as well as case law which illustrates the application of the statutes and other areas of law not covered by statute. The classroom sessions will include discussion of the practical aspects of legal practice in the construction industry, with instruction and examples regarding the drafting of documents and contracts, negotiation of disputes, and decision-making regarding the type of dispute resolution forum to recommend to a client.

LAW 8900 Takings Law Credits: 1-2

An examination of all aspects of takings law including the historical and constitutional basis for eminent domain, the public use requirement, regulatory takings, development exactions, and alternatives to takings. Comparisons between U.S. and state regimes and comparative takings law.

LAW 8901 Advising Life Sciences and Technology Entrepreneurs Credits: 1-2

A condensed study of the key legal issues for the entire cradle-to-grave (founding-to-exit transaction) life cycle of high-growth technology and life sciences ventures, focusing on these critical phases: structuring and organizing the high-growth venture; relationships with key constituencies; acquiring, protecting and licensing intellectual property assets; financing transactions and realizing wealth through exit transactions.

Prerequisites: LAW 8601.

LAW 8902 Topics and Cases Related to In-House Counsel Credit: 1

This course surveys a wide range of legal issues from the in-house counsel perspective, including those related to professional responsibility, corporate governance, transactions, compliance, risk management, intellectual property and litigation. Through the use of case studies, students will use legal principles and business judgement to analyze scenarios in various corporate settings.

Prerequisites: LAW 8601.

LAW 8903 Fundamentals of Legal Investigations Credits: 2

This course focuses on skills and methods needed to fully obtain facts so as to determine strategies and analyze possible outcomes for all stages of litigation, both criminal and civil. Detailed information on searching public records, Internet sites, and other document retrieval, as well as methods to locate and interview people, will be provided to students through an interactive format. Using an investigation on parallel tracks approach, i.e., paper and people, students will learn the relationship between documents/physical evidence and thorough, reliable interviewing of clients and witnesses.

LAW 8904 Multicultural Lawyering and Spanish for Lawyers Credits: 1-2

In this course, students acquire skills and knowledge needed to represent Spanish speaking clients, including mastering selected Spanish legal vocabulary, working with translators, conducting initial client interviews, and identifying cultural impacts on communication. Ethical dimensions of cross-linguistic and cross-cultural counseling are examined and students receive training in counseling skills.

Prerequisites: Audition with professor to determine minimum Spanish language ability.

LAW 8905 Intellectual Property Litigation Credits: 2

Advanced engagement with intellectual property concepts and practical skills in litigation of these cases. The course will address the three essential areas of intellectual property law concept (copyright, patent, and trademark) and explore how these differences translate into different procedural and substantive considerations in litigation. Simulations of various stages of litigation will focus on litigation strategy and drafting skills.

LAW 8907 Seminar in Advanced Trademark Credits: 2-3

This course examines advanced substantive topics in various trademark areas, some of which are not covered in prior classes and some of which explore areas of controversy in greater depth. Students will also be exposed to the trademark administrative process in greater depth.

LAW 8908 Family Tax Law Credit: 1

The study of federal tax issues relevant to attorneys who practice family law.

Prerequisites: LAW 8552.

LAW 8909 State and Local Government Law in a Nutshell Credit: 1

This course will examine the laws and structures through which Kansas City local government operates. Topics will include the context for local government functions, the city charter and structure of local government, and examination of the particular topics such as economic development tools, property tax abatement, and local agency interactions.

LAW 8910 Intellectual Property Clinic Credits: 2

Under the supervision of faculty who are licensed attorneys, students will counsel start-up companies and their owners and assist with intellectual property matters related to Trade Secrets, Copyright Trademark, Patent and planning in connection with concepts related to Business Torts. Students will conduct patentability and trademark searches, prepare patent landscape reports, trademark registrations, opposition and cancellation responses and assist Clinic clients in identifying trade secrets and potential patentable inventions and preparing invention disclosures as well as provide general intellectual property information and advice to Clinic clients.

Prerequisites: LAW 8808 or LAW 8797 and LAW 8798 or LAW 8882.

LAW 8911 Winning Voir Dire Credit: 1**LAW 8912 Client Interviewing Credits: 1-3**

Basics of client interviewing. Training will include the following components: a) Passive vs. Active Listening b) Forms of Questions c) Preliminary Problem Identification d) Techniques for conducting Initial Interviews e) Providing Information the Supervising Attorney Wants/Needs"

LAW 8913 Mental Health Investigation I Credits: 1-2

This is a one-week, one or two-credit hour practical skills course which focuses on skills and methods needed to identify and understand mental health issues and phenomena that every lawyer will encounter. Students will examine what mental illness is, how it affects sufferers, and how it presents to lay observers so that it can be understood and explored in relevant legal contexts. This course is offered in connection with the Mitigation Skills Workshop, which trains lawyers representing capital clients how to interview clients and witnesses for information relevant to developmental, cognitive and mental health issues; students will participate in role-playing a practical skills exercises with Workshop participants.

LAW 8913B Mental Health Investigations II Credits: 1-2

This is the second half of a practical skills course which focuses on skills and methods needed to identify and understand mental health issues and phenomena that every lawyer will encounter. This course is offered in connection with the Mitigation Skills Workshop, which trains lawyers representing capital clients how to interview clients and witnesses for information relevant to developmental, cognitive and mental health issues; students will participate in role-playing a practical skills exercises with Workshop participants.

LAW 8914 Selected Reading in Legal Scholarship Credit: 1

Students and faculty will read and discuss a substantial book by a legal scholar examining a contemporary issue in law and society from a historical, comparative, or jurisprudential perspective. The course will include discussions with the author and students will complete a short project related to the book topic.

LAW 8914F Law and Film Credits: 1-3

Exploration of the function of law and lawyers in society by examining legal decisions, statutes, and legal commentaries in the context of films, including classic, contemporary mainstream, foreign, documentary, and independent films. Students will view and critique films in light of assigned reading materials. Using films as analytical tools, the seminar examines the ways in which popular culture products (such as films and television) both reflect and change the social views about law and lawyers.

LAW 8915 Social Venture Creation Credit: 1**LAW 8917 Law and Human Trafficking Credits: 1-2**

Theory and legal structures relating to human trafficking, including practical skills in representing victims.

LAW 8919 The Insanity Defense Credits: 1-2

This course will review several aspects of the insanity defense: its history, how it works, and the public perception of the defense. The course will focus on the trial of John Hinckley Jr. for attempted murder of President Ronald Reagan as a vehicle for discussing how the defense is presented, the changes in the defense that the verdict in that trial brought about, recent significant cases and possible future changes in the defense.

LAW 8920 Introduction to Islamic Law Credits: 1-2

This course will provide a basic overview of Islamic law from its origins to the present. Students will study both primary and secondary sources of Islamic law. The course will also compare Islamic legal concepts to those in common law countries.

LAW 8921 Selected Projects in Law, Technology and Public Policy Credits: 1-6

This "studio" course involves the creation of interdisciplinary teams of law and graduate students from UMKC and other graduate and law schools and their media laboratories to work on cutting edge projects at intersections of law, technology and public policy.

LAW 8922 Access to Justice (A2J) Workshop Credits: 1-6

Students will identify an area of law or law process that can be made more accessible with the application of a technology solution. Specifically the students, after analyzing the area of law, will use the CALI A2J-Author guided interview software and document assembly software to create the forms and directions to assist self-represented litigants.

LAW 8923 Interdisciplinary Perspectives on Counseling an Aging Population Credits: 1-2

Study and practice of interdisciplinary perspectives of aging and core competencies in active listening, narrative translation, and service opportunity identification. Using a combination of readings, simulations, skills trainings, team preparations and presentations of case studies and individual reflective papers, the course is designed to engage professional students in understanding each discipline's approach to describing the problem, interacting with patients/clients in identifying the problem and sharing perspectives on developing plans to prevent and address the problem with and on behalf of these patients/clients.

LAW 8925 Entrepreneurial Urban Development Credits: 1-4

The projects-based Entrepreneurial Urban Development course will feature interdisciplinary teams of faculty and graduate or upper-level undergraduate students providing analysis on real estate-based projects relating to the development or redevelopment of properties in urban areas, with a particular focus in, but not necessarily limited to, Kansas City, MO and Kansas City, KS. Students enrolled in the course will receive classroom instruction through modules related to development, land use controls and entitlement processes, affordable housing law and policy, cost analysis, market analysis, feasibility analysis, investment analysis, finance, incentives, design, urban planning, and community engagement.

LAW 9740A Missouri Appellate Practice Credit: 1

Basic rules and procedures for preparing an appeal in Missouri.

Life Sciences (LIFE-SCI)

Courses

LIFE-SCI 5899 Required Graduate Enrollment Credit: 1

Life Sciences - Cell Biology and Biophysics (LS-CBB)

Courses

LS-CBB 5501 Graduate Biophysical Principles Credits: 3

The focus of this course is on the theoretical principles underlying the biophysical methods used by a wide range of biological chemists. The approaches covered include thermodynamics, chemical kinetics, molecular interactions, transport properties, quantum mechanics, optical spectroscopy, and molecular structural approaches involving nuclear magnetic resonance spectroscopy, X-ray diffraction, and Mass spectrometry.

LS-CBB 5504 Graduate Virology Credits: 3

Survey of the molecular biology of animal, plant, and bacterial viruses. The course will emphasize the molecular mechanisms of virus replication, viral pathogenesis, and the use of virus as model systems to study mammalian cells.

LS-CBB 5505 Molecular and Cellular Neurobiology Credits: 3

The molecular basis of chemical and electrical communication between nerve cells. Topics will include: neurotransmitters, neuropeptides, receptors, channels, second messengers, cytoskeleton, cell adhesion, development, neuronal plasticity and psychopharmacology.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5520 Cell and Molecular Biology II Credits: 3

A presentation of the cellular and subcellular organization and function of eukaryotic cells. Discussions will emphasize basic concepts by which structure and functions are integrated.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5530 Cell and Molecular Biology I Credits: 3

Molecular aspects of gene structure and function in prokaryotic and eukaryotic organisms and their viruses. Emphasis in genome structure and organization and regulation of gene expression.

Co-requisites: LS-MBB 5561.

LS-CBB 5538 Molecular Recognition in Cellular Biology Credits: 2

Graduate Research Seminar. Studies of the latest development leading to an increased understanding of cellular biology processes when the experimental tools for structure biology analysis and molecular genetics are applied.

Co-requisites: LS-MBB 5561.

LS-CBB 5566 Membrane Biochemistry and Biophysics Credits: 3

Structure and function of biological membranes including architecture, dynamics, models, biochemical compartmentation, energy transduction, transport mechanisms, membrane protein structures, and cell surface receptors.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5569 Structural Biology, Methods and Strategies Credits: 3

Analysis of strategies and methodologies such as X-ray crystallography, nuclear magnetic resonance and advanced microscopy procedures including imaging analysis for the study of relationships of higher order macromolecular structures to biological functions.

Prerequisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5583 Current Topics in Cell Biology and Biophysics Credits: 1-3

Current topics and recent developments in cell biology and biophysics with emphasis on rapidly developing research areas.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5591 Directed Individual Studies in Cell Biology and Biophysics Credits: 1-6

Intensive reading and/or research in an area selected by the graduate student in consultation with the instructor.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5596 Advanced Experimental Cell Biology I Credits: 2

Structured laboratory work with individual tutorial sessions designed to familiarize first year Interdisciplinary Ph.D. students with concepts and techniques of modern cell biology research. 1-2 hr/wk tutorial and 15-20 hr/wk of laboratory work.

Co-requisites: LS-MBB 5561.

LS-CBB 5597 Advanced Experimental Cell Biology II Credits: 2

Continuation of LS-CBB 5596.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5599 Thesis Research in Cell Biology and Biophysics Credits: 1-12

Research and thesis preparation for M.S. degree candidates.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5612 Seminar in Cell Biology and Biophysics Credit: 1

Presentation and discussion of selected areas in cell biology and biophysics. This course may be repeated by doctoral students for a maximum of 3 credit hours.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5690 Analytical Methods in Cell Biology and Biophysics Credits: 1-4

A course that emphasizes the development of skills in experimental design, analytical methods and instrumentation as applied to problems of interest to modern cell biology and biophysics, and analysis of results. Can be repeated up to a maximum of eight hours total.

Prerequisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5696 Dissertation Development Credits: 1-6

This course is individually directed research leading to the fulfillment of the Comprehensive Exam requirements for the Cell Biology and Biophysics primary discipline. This includes submission of the final, revised version of the NIH-style research proposal to committee members and (ii) successful oral defense of the proposal before the student's research advisory committee. **Prerequisites:** BIOLOGY 5501.

LS-CBB 5699 Dissertation Research in Cell Biology and Biophysics Credits: 1-12

Research and dissertation preparation for interdisciplinary Ph.D. degree students who have Cell Biology and Biophysics as a discipline.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

Life Sciences - Molecular Biology and Biochemistry (LS-MBB)

Courses

LS-MBB 5503 Eukaryotic Molecular Biology Credits: 3

Molecular aspects of gene structure and function in eukaryotic organisms and their viruses. Emphasis on genome structure and organization, gene expression and regulation and the molecular basis of growth and development.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5509 Graduate Developmental Biology Credits: 3

Principles of development and differentiation of structure during embryology in animals. Molecular, cellular and organismal level concepts and mechanism will be considered.

LS-MBB 5510 Graduate Biochemistry for Nurse Anesthetists Credit: 1

This course will present the fundamentals of biochemistry necessary for the practice of nurse anesthesia, specifically, the structure and characteristics of biomolecules found in the cell, how molecules are metabolized to generate biochemical energy, and the basic mechanisms to regulate metabolic processes with regard to the nutritional state of the organism. The course is limited to graduate students in the nurse anesthetist program or in other disciplines where a fundamental understanding of biochemistry would be useful.

LS-MBB 5538 Molecular Recognition in Molecular Biology Credits: 2

Graduate Research Seminar. Analysis of the impact of most recent developments in molecular genetics and structural biology as related to fundamental molecular recognition events.

Co-requisites: LS-MBB 5561.

LS-MBB 5561 General Biochemistry I Credits: 4

The first semester of a two-semester sequence in general biochemistry. This course will emphasize the structure of biological molecules, thermodynamics and kinetics of biological reactions, and selected aspects of energy metabolism and metabolic pathways.

Prerequisites: CHEM 322R.

LS-MBB 5562 General Biochemistry II Credits: 3

The second semester of a two-semester sequence in general biochemistry. This course will emphasize selected aspects of the biochemistry of metabolism and macromolecular assemblies. The molecular basis of genetic and metabolic regulation will be discussed.

Prerequisites: LS-MBB 5561.

LS-MBB 5565 Structure And Function Of Proteins Credits: 3

This course will discuss structure-function relationships of proteins. Topics will include: methods of structure-function analysis, catalytic mechanisms, and regulation of enzyme activity.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5567 Physical Biochemistry Credits: 3

Application of physical and chemical principles to elucidate structure and function of biochemical systems. The various modes of interactions between biologically important molecules and the specificity of their interaction will be examined through selected literature examples.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5569 Current Topics in Molecular Biology and Biochemistry Credits: 1-3

Current topics and recent developments in biochemistry and molecular biology with emphasis on rapidly developing research areas.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5591 Directed Individual Studies In Molecular Biology And Biochemistry Credits: 1-6

Intensive readings and/or research in an area selected by the graduate student in consultation with the instructor.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5596 Advanced Experimental Molecular Biology I Credits: 2

Structured laboratory work with individual tutorial sessions designed to familiarize first year Interdisciplinary Ph.D. students with concepts and techniques of modern molecular biology research. 1-2 hr/wk tutorial and 15-20 hr/wk of laboratory work.

Co-requisites: LS-MBB 5561.

LS-MBB 5597 Advanced Experimental Molecular Biology II Credits: 2

Continuation of LS-MBB 5596.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5599 Thesis Research in Molecular Biology and Biochemistry Credits: 1-12

Research and thesis preparation for M.S. degree candidates.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5611 Seminar in Molecular Biology and Biochemistry Credit: 1

Presentation and discussion of selected areas in biochemistry and molecular biology. This course may be repeated by doctoral students for a maximum of 3 credit hours.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5690 Analytical Methods in Molecular Biology and Biochemistry Credits: 1-4

A course that emphasizes the development of skills in experimental design, analytical methods and instrumentation as applied to problems of interest to modern molecular biology and biochemistry, and analysis of results. Can be repeated up to a maximum of eight hours total.

Prerequisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5696 Dissertation Development Credits: 1-6

This course is individually directed research leading to the fulfillment of the Comprehensive Exam requirements for the Molecular Biology Biochemistry primary discipline. This includes submission of the final, revised version of the NIH-style research proposal to committee members and (ii) successful oral defense of the proposal before the student's research advisory committee.

Prerequisites: BIOLOGY 5501.

LS-MBB 5699 Dissertation Research in Molecular Biology and Biochemistry Credits: 1-12

Research and dissertation preparation for interdisciplinary Ph.D. program students who have Molecular Biology and Biochemistry as a discipline.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

Management (MGT)

Courses

MGT 5501 International Business Environment Credit: 1.5

The aim of this course is to provide a broad introduction of the international business environment. Students will develop understanding of different economic, cultural political and legal environments affecting international business activities. They will further explore why international trade and government interventions occur among and across countries and how world financial institution have developed historically.

MGT 5502 Leadership in Organizations Credit: 1.5

This course focuses on how organizations work and how leaders can help them work better, Its goal is to provide ideas, tools, and tactics that will help students become more effective leaders. The course is designed to challenge students conceptually through readings, discussions, and developmental assessments, and to challenge at the level of self-awareness and action through teamwork, reflective activities, role plays, case applications, ad "leadership challenges".

MGT 5503 Leadership Residency Credits: 2

The leadership residency engages students in the fundamentals of business and effective leadership practice during a one-week immersive experience. Using a business simulation, students learn the fundamentals of collaborative teamwork and basic concepts in the program's leadership curriculum. Additionally, the simulation introduces students to the core management areas of financial management and decision making, providing an overview of management strategy rooted in financial modeling and analysis.

Prerequisites: Admission to Executive MBA Program.

MGT 5507 Human Capital Management Credit: 1.5

This course seeks to provide managers with knowledge, skills, and resources to effectively manage human capital in organization of all sizes. It presents an overview of the theory, research, and practices used to strategically align HR policies and practices with the organization's overall business goals. The course highlights how HR policies and practices can support business objectives in a diverse, global environment while supporting ethical principles. Within a strategic HRM framework, functional areas of staffing, training and development, performance management, total rewards (compensation and benefits), and managing employment relationships are covered.

MGT 5512 Leading and Managing People, Teams and Organizations Credits: 3

Leading and Managing People, Teams and Organizations focuses on how aspiring leaders can enhance their effectiveness by addressing the human side of enterprise. It combines an exploration of key leadership tasks (e.g. shaping vision and purpose, engaging and influencing others, and sustaining momentum) with the study of essential human resources practices including hiring, developing, motivating, and creating a positive, rewarding workplace. Students will leave with concrete tools for understanding the organizational context, managing human capital, and bringing the best out of talented people.

Prerequisites: Students must be enrolled in a Bloch School graduate program.

MGT 5514 Strategic Management in the Globalized World Credits: 3

As the world has become increasingly integrated through globalization, today's business leaders must possess an awareness of global business environments and ability to navigate them. The aim of this course is to provide a broad introduction of the international business environment and strategic management concepts, and how a firm can gain competitive advantages. Upon completion of this course, students will possess an ability to recognize the opportunities and challenges and formulate strategies in the globalized business environment.

Prerequisites: FIN 5509 or concurrent enrollment; DSOM 5511 and MKT 5504.

MGT 5516 Leading Teams Credits: 3

This course is designed to enhance the student's understanding of designing, forming, developing, leading, and evaluating high-performing teams in traditional and virtual organizations. In-class projects will facilitate students' assessment and application of their own talents to the arts of member selection, coaching, and trust building to engage team members in productive and ethical group processes to achieve successful outcomes. Cases will be used to diagnose and potentially solve team difficulties considering intra-team, organizational, and extra-organizational factors.

Prerequisites: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5517 Leading Through Influence and Persuasion Credits: 3

This course challenges students to think about power dynamics in organizations and the array of influence approaches leaders develop and use to build support for their ideas and strategies. Using reading, case studies, and self-reflection tools, this course engages students in critical thinking about business scenarios that require a variety of leader influence strategies beyond traditional "command and control" approaches. Through exploration of concepts such as mapping the terrain, building social capital, and managing across, students develop a toolkit of ethical strategies for enhancing their organizational credibility and influence.

Prerequisites: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5518 Leadership & Motivation Credits: 3

The course explores leadership as a relationship between leaders and those they are leading that enables people to work together in the service of shared goals. The course focuses on five basic tasks of leadership: (1) diagnosis-understanding what's happening; (2) shaping purpose and values; (3) enlisting and engaging people (including coaching, building high-performance cultures, motivating and inspiring); (4) sustaining momentum; (5) reflection and assessment.

Prerequisites: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5519 Conflict Management and Negotiation Strategies Credits: 3

This course explores the nature of successfully managing conflict in organizational settings, as well as the skills needed to be an effective negotiator. In this course, students will learn the difference between functional and dysfunctional conflict, how to stimulate functional conflict, various styles for managing conflict, ways to identify the desired outcomes of conflict, how to prepare for negotiations, various dispute resolution techniques, and the characteristics of effective negotiators. The course uses a variety of tools - readings, case studies, videos, and guest speakers - to engage students in real business scenarios related to managing conflict and negotiation strategies.

Prerequisites: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5523 Negotiation, Conflict Management, and Influence Skills Credits: 2

Opportunities for negotiation, conflict management, and influence are everywhere. Effective negotiators use analytical skills, interpersonal sensitivity, and communication acumen to resolve conflicts, influence others, and reach agreements that serve their interests and preserve or enhance their reputations. Students will develop deep familiarity with fundamental negotiation concepts such as BATNA, reservation price, interests, and distributive and integrative negotiation. Students will also develop their practical knowledge and skills from pre-negotiation planning to post-negotiation evaluation through intensive experiential simulations with peer review and rapid feedback, personal journals, and coaching.

Prerequisites: Admission to Executive MBA Program.

MGT 5531 Leadership, Strategy and Human Resources Credits: 2

Focuses on the leader as a catalyst in developing high-performance, market-based cultures and as a human resource strategist in marshaling the workforce. Geared to the general manager, the course presents ideas and tools for building, bonding, and linking the workforce to accomplish the organization's mission. Topics include ideas and tools for identifying, recruiting, and retaining talent; developing and coaching subordinates; appraising and rewarding performance; and delegating to balance control and risk.

Prerequisites: Admission to Executive MBA program.

MGT 5533 Leading and Managing Change Credits: 3

This course provides students with analytical skills and insights to more effectively manage and lead change, especially within those organizations characterized by complexity and/or uncertainty. Using a variety of vehicles-including case studies, articles, and speakers-the course engages students in timely, real change scenarios and associated management challenges, such as adaptation in changing markets; turnarounds in troubled businesses; integrative change in acquisitions, and process change in stable businesses.

Prerequisites: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5538 Strategic Management Credits: 3

Strategic Management sets the tone for year 2 of the Executive MBA. Students study the formulation and evaluation of strategy, including industry analysis, strategic positioning, and the boundaries of the firm. Students address the capacity of executive leadership to create and communicate a clear direction for a company's future. Additional focus areas include competition and innovation.

Prerequisites: Admission to the Executive MBA Program. Completion of Semester 1 and Semester 2 of the Executive MBA program.

MGT 5545 International Management Credits: 3

Examination of the management of contemporary international business organizations through a study of the political, economic, social and technological factors and their relationship and impact upon the administrative activities and strategies of the international firm.

MGT 5546 Seminar in International Management Credits: 3

This course focuses on the issues that business organizations face in a global economy. The instructor will introduce global strategic decisions via case studies.

Prerequisites: MGT 5545.

MGT 5547 Global Initiatives in Management Credits: 2

Global Initiatives in Management examines the complexity of management across national boundaries. The course explores the interrelationship and impact of political, economic, social, and technological factors when formulating and executing strategy internationally.

Prerequisites: Admission to the Executive MBA program

MGT 5552 International Study in Business Credits: 3

This course is designed to provide a study-abroad experience for the student. The course involves three components: study of international business through on-campus lectures and discussions; travel to a foreign country for visitations to business firms, government organizations, and cultural sites; and critique sessions of the international learning experience after travel completion.

Prerequisites: special application and selection process.

MGT 5557 Leadership And Organizations Credits: 3

Leadership and Organizations provides tools and tactics for assessing organizations' needs and constraints through multiple lenses, and assessing one's own leadership strengths and weaknesses for development and alignment with organization needs. Additionally, students will be introduced to a framework for ethical decision making, and how ethics is important to the strategic outcomes of an organization.

Prerequisites: Admission to Executive MBA Program.

MGT 5566 Attracting, Retaining, and Developing Human Capital Credits: 3

This course presents theoretical frameworks and practical applications for determining optimal person-organization fit and person-job fit within organizations. Emphasis will be placed on integrating recruitment, selection, retention, and training and development strategies and practices with overall business strategies. The importance of strategically planning and implementing staffing and development processes will be addressed as critical contributors to organizational effectiveness and sustainability. Recommended preparation: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5567 Total Rewards Management Credits: 3

Total Rewards Management presents both theory and practice for designing effective rewards systems within organizations. The development of base pay and incentives and how they can be linked to performance will be covered. Characteristics of the work environment, such as recognition and development opportunities will also be considered in terms of their contribution to the total reward system. Recommended preparation: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5568 Talent Management Credits: 2

Attraction, retention, motivation, and management of the organization's human resources is critical in our knowledge-based economy. This course will address strategic issues around sourcing, acquiring, motivation, retaining, and managing workers in domestic and global enterprises from a variety of industries.

Prerequisites: Admission to Executive MBA program.

MGT 5569 Leadership Accountability and the Legal Implications Credits: 2

Highlights the accountability of leaders and the challenges they face in the rapidly changing business environment. The course studies the political, social, ethical, and global environment in which American business organizations operate and the impact on today's leaders. Topics include creating and maintaining affiliate relationships and joint ventures, as well as prohibitions in anti-competitive behavior, protection of intellectual property, operating within a regulated environment, and securities law.

Prerequisites: Admission to Executive MBA Program.

MGT 5570 MBA Capstone-Global Management Consultancy Credits: 3

An integrative global management consulting experience for a real world organization that applies analytical skills in the areas of finance, marketing, information systems, supply chain management, human resources, leadership, innovation, international, and strategy. Course deliverables include written and oral reports for the client organization. The course requires travel to visit client organization's operations.

Prerequisites: MBA students must have completed all required core courses AND be in the last year of their program. MSA, MPA, MSF, MSERE, or MSGE program students may enroll with consent of instructor. Special application and selection process.

MGT 5571 Influence, Persuasion and Change Credits: 2

Presents ideas, strategies, and tools for leading change in complex organizations. This course challenges students to think about the execution of change strategies through assessment or organizational power dynamics and appropriate influence styles for achieving results. Emphasis is placed on analyzing these attributes and skills most critical for building influence, especially in change initiatives, and on defining an ethical approach to leading, influencing, and persuading others.

Prerequisites: Admission to the Executive MBA program.

MGT 5572 MBA Capstone-The Capstone Consulting Project Credits: 3

An integrative management consulting experience for a real world organization that requires application of conceptual models and analytical skills in multiple disciplines including areas such as finance, marketing, information systems, supply chain management, human resources, leadership innovation, international, and strategy. Course deliverables include written and oral reports for the client organization. The course requires interaction with senior managers in the client organization with anticipation of in-person or virtual visits to the firm.

Prerequisites: MBA students must have completed all required core courses AND be in the last year of their program. MSA, MPA, MSF, MSERE, or MSGE program students may enroll with consent of instructor.

MGT 5581 Current Issues in Management with Technology Credits: 2

Technology is being incorporated in all aspects of management. The current issues course explores the strategic deployment of technology in operational areas like supply chain, marketing, human resources and accounting. Students are exposed to technology as a strategic tool to be incorporated in core management functions.

Prerequisites: Admission to EMBA program.

MGT 5585 Integrated Business Strategies (Capstone) Credits: 2

Integrates the disciplines of business to help the student develop a comprehensive understanding of business planning and strategy. Students will use cases and simulation to plan and test alternative business strategies in a competitive environment. The course examines the critical factors involved in strategic decision making.

Prerequisites: Admission to the MBA Program.

MGT 5587 Special Topics Credits: 3

The study of a contemporary management topic of interest.

MGT 5595 Internship Credits: 1-3

An opportunity for students to integrate their academics studies via employment with a business/organization in the community.

MGT 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

MGT 5899 Required Graduate Enrollment Credit: 1

Management Information Systems (MIS)

Courses

MIS 5507 Business Analytics and Statistics Credits: 3

Business Analytics is about the science and the art of using data for making well-informed business decisions. The course covers the techniques used for acquiring and preparing data, as well as various statistical methods and procedures for mining the data to identify and infer patterns, relationships, and trends. It discusses how these methods can be used by managers for descriptive, predictive, and prescriptive purposes. Upon the successful completion of this course, the student will have the knowledge and the hands-on skills to apply business analytics techniques to various business contexts.

Prerequisites: Bloch School graduate program student.

MIS 5529 Decision Support Systems Credits: 3

Information systems to support decision makers in organizations. This course focuses on influences of cognitive biases and group think on decision makers. Identification of both potential uses of information technology to support decision makers and potential effects of information technology on the decision making processes, and may include a number of computer-oriented assignments.

Prerequisites: MIS 5507.

MIS 5540 Information Technology as a Strategic Tool Credits: 2

This course examines the critical linkage between an organization's business, cultural, and information technology (IT) strategies. In organizations today, information technology has become a key component in accomplishing strategic and operational goals. The course provides concepts and a framework for understanding and enhancing the role IT can play in innovation, change, and continuous organizational learning.

Prerequisites: Admission to the Executive MBA program.

MIS 5552 Data Base Management Credits: 3

Data administration, including theory of relational databases and projects using relational data management packages. The course looks at data modeling and information engineering, entity-relationship modeling, database design, normalization, data dictionaries, distributed databases, database servers, data quality assurance, data integrity, SQL, and may include a number of computer-oriented assignments.

Prerequisites: MIS 5507.

MIS 5554 Systems Analysis, Design And Engineering Credits: 3

This course introduces tools for documenting information system requirements and design and implementation methods; organization of software projects; system specifications, documentation and diagramming standards; programming languages and methodology; costs and schedule estimation, project management; program verification, and internal control issues.

MIS 5557 Data Management and Data Mining for Business Analytics Credits: 3

Data are the major ingredient for making quality business decisions. Students are introduced to the major steps in storing and preparing data as the raw input for decision-making. This includes an introduction to relational databases and data warehouses. Students also learn data mining techniques and statistical methods for inferring and extracting actionable insight from data. These methods help identify relationships and trends in existing cases and provide predictive power about new, unseen cases. Upon successful completion of this course, students will have an understanding of how data can be used to support fact-based decision-making across various business functions and contexts.

Prerequisites: MIS 5507, or DSOM 5509, or PUB-ADM 5510, or ACCTNG 5568, or RL-EST 5573, or FIN 5560.

MIS 5558 Management of Information Technology Credits: 3

Topics to be covered include procurement and management of computer systems, economics of hardware and software, software acquisition, RFQs, RFPs, contract terms and conditions, end-user computing; capacity planning, contribution of computing to business objectives, control, audit, and security of information technology; legal and ethical perspectives; and international issues.

MIS 5587 Special Topics Credits: 3

Special topics in management information systems.

MIS 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

MIS 5899 Required Graduate Enrollment Credit: 1

Marketing (MKT)

Courses

MKT 5501 Marketing Management Credit: 1.5

This course goes beyond the explanation of basic concepts of marketing. The goal is to present a strategic and integrative perspective of marketing in the contemporary digital, global and competitive marketing environment. The emphasis is on the interface between an organization's objectives, capabilities, resources and marketplace needs and opportunities. Examples of major topics to be covered are market-oriented philosophy and corresponding strategy, customer relationship management, branding and brand equity, services marketing, marketing ethics, defensive and offensive marketing strategies, product positioning, distribution and pricing strategies.

MKT 5504 Marketing Management Credits: 3

The course presents concepts of marketing, describes marketing strategy, and defines marketing tactics. Marketing law, fiduciary responsibilities, and marketing ethics for executives impacted by marketing success are identified. The goal is to present a strategic and integrative perspective of marketing in the contemporary digital, global and competitive marketing environment. The integration between an organization's objectives, capabilities, resources and marketplace needs and opportunities is described. Examples of major topics to be covered are marketing philosophies and their corresponding strategies, technology-driven customer relationship management, branding and brand equity, services marketing, product positioning, distribution and pricing strategies, and implementation of marketing tactics in.

Prerequisites: Students must be enrolled in a Bloch School graduate program.

MKT 5539 Social and Mobile Marketing Credits: 3

The course builds around Database Marketing principles, whether supporting marketing at a distance without requiring a physical wholesale or retail intermediary; or supporting physical retail. Social and Mobile media principles, on-line measurement, digital marketing strategy, and tactics by on-line platform are discussed across a variety of media and devices. Students must demonstrate competence in SEO (Search Engine Optimization) and on-line analytics. Students learn to calculate Lifetime Value, Break-Even, PL on a Campaign, and Payback period using industry accepted methodologies.

Prerequisites: MKT 5504.

MKT 5555 International Marketing Credits: 3

This course focuses on marketing problems confronting international business managers and the ways they may be analyzed and resolved. The course content includes concepts and techniques useful in international marketing; effects of national differences on marketing practices; organization for international marketing; and strategy formulation for international markets.

Prerequisites: MKT 5504.

MKT 5560 Customer Insights and Communication Strategy Credits: 3

A review of behavioral science concepts and related academic research to help understand customer behaviors and communications targeted to them. Special emphasis is placed on applications of these concepts to problems related to strategies of product, pricing, promotion, and place or distribution.

Prerequisites: MKT 5504.

MKT 5562 Marketing Research & Data Analysis Credits: 3

This course is designed to systematically introduce you to the most commonly used tools/techniques used to arrive at major business decisions from a consumer/customer perspective. The course emphasizes analysis of data using statistical software. Students will be taught to use designated software to analyze data to address real-world marketing problems.

Prerequisites: MKT 5504 and MIS 5507.

MKT 5565 Marketing Management Credits: 2

Marketing management examines the role of marketing in driving profitable revenue growth in companies. The focus is placed on tools and approaches to analyzing and understanding customer needs- including the roles of market research and brand equity- and the development of integrated marketing plans to deliver to those needs.

Prerequisites: Admission to Executive MBA Program.

MKT 5566 Customer Data Analytics Credits: 3

This course is designed to systematically introduce you to the most commonly used tools/techniques for the analysis of customer data for managerial decision-making in a wide variety of business settings. The course emphasizes tools for predictive analytics using statistical software. Students will be taught basic concepts pertaining to regressions, choice models, classification, and segmentation techniques together with hands-on training in designated software. Recommended preparation: Graduate level course in business statistics or decision science.

Prerequisites: MKT 5504 and MIS 5507.

MKT 5575 Applied Strategic Marketing Credits: 3

This course focuses on advanced marketing skills and practical techniques for defining and meeting the needs of the chosen market. The emphasis is on key drivers of marketing effectiveness, including creating a market-oriented culture, customer-focused information systems, the relationship of various components of marketing, and the response to marketing variables. A variety of pedagogical approaches, including applied projects, may be employed.

Prerequisites: MKT 5504.

MKT 5587 Special Topics Credits: 3

Special topics in marketing.

MKT 5595 Internship Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

MKT 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

MKT 5899 Required Graduate Enrollment Credit: 1

Mathematics (MATH)

Courses

MATH 5509 General Algebra I Credits: 3

Groups, rings, modules, homology, fields and Galois theory, valuations, matrices, and multilinear algebra. Continued in MATH 5519.

Prerequisites: MATH 410, MATH 420.

MATH 5510 Complex Variables I Credits: 3

The group of linear fractional transformations, complex integration, Cauchy's theorem, the maximum modulus theorem, analytic continuation, Riemann surfaces. Continued in MATH 5520.

Prerequisites: MATH 402, MATH 407.

MATH 5513 Real Variables I Credits: 3

Theory of measure with applications to analysis. Riemann and Lebesgue integration. Continued in MATH 5523.

Prerequisites: MATH 402, MATH 412.

MATH 5514 Mathematics for Secondary Teachers: Algebra and Analysis Credits: 3

Designed for secondary-school teachers. Examine high school mathematics from a higher point of view. Real and complex numbers, functions, algebraic structures of equations, integers and polynomials, number system structures; analyses of alternate approaches, extensions and applications of mathematical ideas, discussion of historical contexts and connections between ideas that may have been studied separately in different courses, relationships of ideas studied in secondary-school to those students may encounter in later study. When taken for graduate credit as Math 5514, an extra project is required.

Prerequisites: MATH 300.

MATH 5517 Matrix Theory I Credits: 3

Unitary matrices, normal matrices, Jordan canonical form, nonnegative matrices and their applications, the symmetric eigenvalue problem.

Prerequisites: MATH 420.

MATH 5519 General Algebra II Credits: 3

Prerequisites: MATH 5509.

MATH 5520 Complex Variables II Credits: 3

Prerequisites: MATH 5510.

MATH 5521 Differential Equations Credits: 3

This course offers an introduction to the qualitative theory and applications of ordinary differential equations (ODE). The presentation of the course will be a blend of fundamental theory and examples. The basic results will be proved rigorously and more advanced results will be only illustrated by examples that demonstrate when and how they may be applied.

Prerequisites: MATH 345, MATH 412, MATH 420.

MATH 5523 Real Variables II Credits: 3

Prerequisites: MATH 5513.

MATH 5524 Mathematics for Secondary Teachers: Geometry Credits: 3

Designed for secondary-school teachers. Examine high school mathematics from a higher point of view. Congruence, distance and similarity, trigonometry, area and volume, axiomatics and Euclidean geometry; analyses of alternate approaches, extensions, and applications of mathematical ideas, discussion of historical contexts and connections between ideas that may have been studied separately in different courses, relationships of ideas studied in secondary-school to those students may encounter in later study. When taken for graduate credit as Math 5524, an extra project is required.

MATH 5527 Matrix Theory II Credits: 3

Prerequisites: MATH 5517.

MATH 5532 Advanced Numerical Analysis I Credits: 3

Error Analysis, Solving Systems of Linear Equations, Solutions of Nonlinear Equations, the Least-Squares Problems, and Approximating functions. Continued in MATH 5542.

Prerequisites: MATH 402, MATH 420.

MATH 5542 Advanced Numerical Analysis II Credits: 3

Eigenvalues and Eigenvectors, Linear Programming, Optimization, Numerical Differentiation and Integration, Numerical Solution of Ordinary and Partial Differential Equations.

Prerequisites: MATH 5532.

MATH 5545 Mathematical Methods In Science And Engineering Credits: 3

This course offers applied linear algebra and Fourier analysis which are indispensable tools in science and engineering. It is designed for beginning graduate students with moderate background in linear algebra and real analysis. Many of the results that are presented in the course will be proved rigorously from mathematical point of view.

Prerequisites: MATH 402, MATH 406, and MATH 420.

MATH 5557 Functional Analysis Credits: 3

Hilbert spaces, linear operators, compact operators, Banach spaces, the Hahn-Banach theorem, the open mapping and closed graph theorems, the principle of uniform boundedness, locally convex spaces.

Prerequisites: MATH 402 and MATH 420.

MATH 5575 Stochastic Calculus for Finance Credits: 3

This course presents the basic idea and theory of stochastic calculus with the focus on the applications to finance. Topics include Brownian motion, Ito integral, Ito formula, Black-Scholes equation and formula, risk-neutral pricing, connections with partial differential equations, exotic options, American derivative securities, and term structure models for interest rates.

Prerequisites: MATH 402 and STAT 436.

MATH 5590 Special Topics Credits: 1-3

Selected topics in various fields of mathematics. May be repeated for credit when the topic varies.

MATH 5699 Research And Thesis Credits: 1-16

Doctoral dissertation.

MATH 5899 Required Graduate Enrollment Credit: 1

Mechanical Engineering (MEC-ENGR)

Courses

MEC-ENGR 5500 Problems Credits: 1-6

Supervised investigation in mechanical engineering to be presented in the form of a report.

MEC-ENGR 5501 Advanced Topics In Mechanical Engineering Credits: 3**MEC-ENGR 5501AD Advanced Topics in Mechanical Engineering Credits: 3**

Advanced Topics in Mechanical Engineering

MEC-ENGR 5501CD Advanced Topics in Mechanical Engineering Credits: 3

Advanced Topics in Mechanical Engineering

MEC-ENGR 5501MS Advanced Topics in Mechanical Engineering Credits: 3

MEC-ENGR 5501SM Advanced Topics in Mechanical Engineering Credits: 2

This course is for high school science teachers who have attended the ASM International Second Year Teachers Camp and have demonstrated the use of camp material in the classroom.

MEC-ENGR 5501TC Advanced Topics in Mechanical Engineering Credits: 2

This course is for high school science teachers who have attended the ASM International Teachers camp and have demonstrated the use of camp material in the classroom.

MEC-ENGR 5505 Imaging Techniques in Materials Science Credits: 3

Introduction to imaging techniques, including x-rays, neutron beams, electron beams and acoustic energy, to study material properties and structure.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 5507 Advanced Dynamics and Modeling Credits: 3

Fundamental principles of advance rigid body dynamics with applications. Special mathematical techniques including Lagrangian and Hamiltonian methods.

MEC-ENGR 5511 Introduction to Biomechanics Credits: 3

This course is to provide students with an introduction to the engineering principles of biomechanics.

MEC-ENGR 5512 Biodynamics Credits: 3

Introduction to musculoskeletal biomechanics including: computational biomechanics, movement simulation, motor control and musculoskeletal tissues.

Prerequisites: MEC-ENGR 5511.

MEC-ENGR 5513 Experimental Biomechanics of Human Motion Credits: 3

The purpose of this course is to provide an opportunity for students to gain a hands-on, in-depth understanding of the experimental measurement and analysis techniques used to quantify the biomechanics of human motion.

Prerequisites: MEC-ENGR 5511.

MEC-ENGR 5514 Material Science for Advanced Application Credits: 3

Study of the physical and mechanical metallurgy of alloy systems of interest in engineering applications.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 5516 Biomedical Device Design Credits: 3

Project based course which exposes students to the entire design process from problem definition to prototype validation for biomedical device applications. Projects in the course are sponsored by real clients from the local biomedical industry, medical clinicians, and/or research labs. The course will cover the following main components: Problem Definition, Concept Generation and Evaluation, Detailed Design, Prototyping and Testing, Project Management, Regulations and Standards, and Technical Communication.

MEC-ENGR 5525 Failure Analysis Credits: 3

Organize and perform a failure investigation. In addition, the course will cover the general procedures for a failure investigation and various failure mechanisms such as ductile fracture, brittle fracture, fatigue, wear, corrosion and elevated temperature.

Prerequisites: MEC-ENGR 324, MEC-ENGR 380.

MEC-ENGR 5526 Introduction to Manufacturing Management Credits: 3

The objective of this course is to expose the student to various manufacturing management tools and techniques. Focus is on both the technical tools used in manufacturing as well as on the management tools needed to implement change in the manufacturing environment. As part of this course, students will research a successful company and present an analysis of manufacturing tools and techniques used.

MEC-ENGR 5533 Advanced Thermodynamics Credits: 3

Statistical methods of evaluating thermodynamic properties. Elements of quantum mechanics, statistical mechanics and kinetic theory applied to topics of engineering thermodynamics.

Prerequisites: MEC-ENGR 360, MEC-ENGR 399.

MEC-ENGR 5542 Introduction to Computational Fluid Dynamics and Heat Transfer Credits: 3

Introduction to the principles and development of the finite-difference approximations to the governing differential equations of viscous and inviscid fluid flow, as well as heat transfer. Introduction to discretization methods and the calculation of flow fields, convection, diffusion and conduction.

Prerequisites: MEC-ENGR 399, MEC-ENGR 441.

MEC-ENGR 5543 Industrial Refrigeration Credits: 3

Introduction to and analysis of the thermodynamic cycles and equipment used in Industrial Refrigeration. Applications of Industrial Refrigeration are also discussed.

Prerequisites: MEC-ENGR 299.

MEC-ENGR 5547 Contracts and Law for Engineers Credits: 3

This course covers a broad range of substantive legal topics giving the student a grounding in the legal implications of certain situations that they may encounter during their careers. The course includes coverage of basic contract law, environmental regulations and compliance, construction law, antitrust law, intellectual property law, civil procedure, employment law, business entities (corporate law) product liability and criminal law and procedure. The objective of the course is to provide students with a fundamental understanding of the wide range of federal and state laws governing behavior in our complicated and rule of law driven society.

MEC-ENGR 5549 Environmental Compliance, Auditing & Permitting Credits: 3

This course provides a high level overview of the most important statutes that have been enacted to protect the environment. The course covers regulation of hazardous waste, the Clean Air and Clean Water Acts, the Resource Conservation and Recovery Act, the All Appropriate Inquiry Rule and the law addressing sites contaminated with hazardous substances and the technology options employed to remediate those sites. In addition, the course provides coverage of environmental audits and emergency planning for extremely hazardous substances, the regulation of underground storage tanks, safe drinking water and the National Environmental Policy Act among other statutes.

Prerequisites: CIV-ENGR 211, MEC-ENGR 285.

MEC-ENGR 5554 Power Generation Systems Credits: 3

Fundamentals of the power industry in a format suitable for all engineering disciplines. Survey of electric power systems, including fossil and nuclear steam cycles, combustion turbines, combines cycles, and renewable such as solar and wind. Introduction to major machinery components, systems, controls, and an overview of fuels, emissions, and emission control technologies.

Prerequisites: MEC-ENGR 299.

MEC-ENGR 5557 Mechatronics System Design Credits: 3

Theory and application of mechatronic systems through course instruction, laboratory activities, and student projects.

Prerequisites: MEC-ENGR 352 and MEC-ENGR 415.

MEC-ENGR 5558 Intermediate Dynamics Credits: 3

Development of kinematics and dynamics of rigid bodies in three-dimensional space including: general theory of rotating coordinate frames, Eulers angles, Eulers equations of motion, angular momentum, work-energy principles, and Kane's method for creation and simulation of dynamic models.

Prerequisites: MEC-ENGR 285.

MEC-ENGR 5559 Robotics and Unmanned Systems Credits: 3

Students will develop, implement, and evaluate various path following (point mass, rigid body, and Dubin's) and trajectory generation (configuration spaces, roadmaps, cell decomposition, etc.) concepts on simulation and experimental platforms.

Prerequisites: MEC-ENGR 306, MEC-ENGR 457.

MEC-ENGR 5563 Engineer in Society - Construction Law Credits: 3

This course introduces professional, ethical, and legal concepts of the professional practice of engineering, and the role of the consulting engineer, specifically in the A/E/C industry during the design, procurement, and construction processes. A conceptual framework is developed for understanding the industry standard agreements (AIA, EJCDC, ConCensus) and the various participants roles and duties in project execution. The engineer's "professional standard of care" is examined and revisited throughout the semester, specifically what it means to be a "Professional Engineer". Emphasis is placed on project and contract management and the applicable law. Skills are developed in finding online resources of law, legal, and practice advice relevant to the practice of engineering and the construction industry

MEC-ENGR 5565 Project Finance Credits: 3

This class introduces students to the financial concepts faced by engineers in the businesses in which they work and for the projects to which they are assigned. Throughout the course students are reminded of the impact of two key variables – money and time – on their work. While not attempting to turn good engineers into mediocre accountants, the course includes a strong emphasis on managerial accounting. Students will learn how to read and apply financial statements and how to use these same financial concepts in developing pro formas to evaluate and support major capital investments. The effect of time on the value of money, appropriate discount factors, and the internal rate of return will be explored in the class. Students will learn to combine these financial factors with electronic spreadsheets to evaluate business opportunities and practices. All students will be required to develop a comprehensive financial model to evaluate/justify a real world capital project.

MEC-ENGR 5567 Fuel Cells and Renewable Energy Systems Credits: 3

This course will provide an overview of the fundamental phenomena that govern the design and operation of fuel cells. The thermodynamics of fuel cell systems will be explored including operation of ideal fuel cells and the physical and chemical phenomena that lead to losses within the fuel cell. The course will provide the methods and techniques required to analyze the performance of low, medium, and high temperature fuel cells within an overall energy system. The fueling of fuel cells from renewable resources will also be discussed.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 5568 Introduction to Nuclear Engineering Credits: 3

This course provides an overview of nuclear engineering for non-nuclear engineers. The course deals primarily with nuclear reactors including topics dealing with nuclear and reactor physics, reactor kinetics and controls and radiation environment. The general reactor types are covered in some detail with other topics dealing with licensing, waste management, quality assurance, balance of plant systems (turbine island), and significant nuclear accidents are also covered. Recent design innovations including small modular reactors and fusion are discussed.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 5570 Experimental Design & Analysis Credits: 3

Presentation of concepts and methods of statistical analysis and the design of experiments. Concepts, techniques, interpretation, and use of results are stressed. Focus is on experimental strategy and objectives, and the application of the methods discussed, rather than the mechanics of derivation. Major sections include: a review of hypothesis testing and basic analysis of variance techniques; single factor experiments including 2k and 3k design, confounding, and Taguchi philosophy; nested and split plot designs; analysis of covariance and an introduction to response surface methods.

MEC-ENGR 5572 Advanced Statistics Credits: 3

The objective of this course is to review the concepts and methods of undergraduate first course in statistical analysis and extend the student's understanding to cover topics typically covered in a second course in applied engineering statistics. Concepts, techniques, interpretation, and use of results are stressed. Focus is on the application of the methods discussed, rather than the mechanics of derivation.

Prerequisites: CIV-ENGR 319.

MEC-ENGR 5574 Linear Programming for Engineering Optimization Credits: 3

This course will cover techniques and applications of engineering optimization using linear programming techniques. The main topics will be the simplex algorithm, sensitivity analysis, duality, network models, and integer programming. Main applications will include transportation, shipments, and utility planning. Stochastic models, game theory, non-linear programming, and heuristic optimization techniques will be briefly mentioned, but not explored in detail. At the conclusion of the course the student should be able to formulate and solve optimization problems in several areas of engineering.

Prerequisites: MEC-ENGR 306.

MEC-ENGR 5586 Applied Finite Element Analysis Credits: 3

The study of advanced simulation techniques for the solution to engineering problems. The use of Finite Element Method toward solving mechanical, structural, vibration and potential flow problems will be explored. The use of current commercial simulation tools will be used extensively.

Prerequisites: CIV-ENGR 275, MATH 5517, MEC-ENGR 130.

MEC-ENGR 5594 Robotic System Identification Credits: 3

Students will develop, implement, and evaluate various system identification and parameter estimation techniques. Students will quantify estimation accuracy through both theoretical and experimental exercises. **Prerequisites:** MEC-ENGR 285, MEC-ENGR 306, MEC-ENGR 352.

MEC-ENGR 5595 Microscale Heat Transfer Credits: 3

Review of existing models. Concept of thermal lagging and the second-law admissibility. Applications to low temperatures, thermal processing of thin-film devices; amorphous materials; advanced composites.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 5599 Research Credits: 1-99

Independent investigation in field of mechanical engineering to be presented as a thesis.

MEC-ENGR 5601 Doctoral Topics In Mechanical Engineering Credits: 3**MEC-ENGR 5603 Directed Readings in Mechanical Engineering Credits: 1-3**

Faculty supervised readings course.

Prerequisites: Graduate standing.

MEC-ENGR 5610 Seminar Credit: 1

Review recent investigations, projects of major importance in mechanical engineering.

MEC-ENGR 5616 Theory of Plasticity Credits: 3

Plastic yield conditions and stress-strain relations. Behavior of elastic-perfectly plastic members. Plain strain in plastic members.

Prerequisites: MEC-ENGR 5621, MEC-ENGR 5622.

MEC-ENGR 5618 Multibody System Dynamics Credits: 3

Fundamental principles of advanced rigid body dynamics with applications. Special mathematical techniques including Lagrangian and Hamiltonian methods.

Prerequisites: MEC-ENGR 285.

MEC-ENGR 5621 Continuum Mechanics Credits: 3

Introductory course in the mechanics of continuous media. Basic concepts of stress, strain, constitutive relationships; conservation laws are treated using Cartesian tensor notation. Examples from both solid and fluid mechanics investigated.

Prerequisites: CIV-ENGR 276, MATH 345, MEC-ENGR 351.

MEC-ENGR 5622 Theory of Elasticity Credits: 3

Stress and strain at a point. General equations of elasticity. Plane stress, plain strain problems; torsion of prismatic bars. Energy methods.

Prerequisites: MEC-ENGR 5621.

MEC-ENGR 5623 Theory Of Plates And Shells Credits: 3

Bending of plates with various loading and boundary conditions. Deformations, stresses in thin shells.

Prerequisites: MEC-ENGR 5621.

MEC-ENGR 5624 Theory of Elastic Stability Credits: 3
Buckling of columns, beams, rings, curved bars, thin plates, shells.
Prerequisites: MEC-ENGR 5621.

MEC-ENGR 5627 Dynamics of Machinery Credits: 3
Dynamic balancing or rotating and reciprocating components of turbo-machinery and internal combustion engines. Gas torque analysis, vibration stress analysis and equivalent systems. Numerical and graphical techniques.
Prerequisites: MEC-ENGR 484.

MEC-ENGR 5630 Boundary Layer Theory Credits: 3
Fluid motion at high Reynolds Number. Derivation of Navier-Stokes equations and boundary layer equations. Methods of solution. Transition to turbulent flow. Completely developed turbulent flow.
Prerequisites: MEC-ENGR 441.

MEC-ENGR 5636 Heat Transfer-Convection Credits: 3
Concepts including fluid dynamics, conservation laws, thermal boundary layer theory, forced convection in laminar and turbulent flows, and free convection will be developed and applied.
Prerequisites: MEC-ENGR 399

MEC-ENGR 5637 Heat Transfer-Radiation Credits: 3
Advanced study of engineering radiation heat transfer. Concepts of electromagnetic theory. Development of thermal radiation laws from thermodynamic laws. Analysis of grey and non-grey systems with intervening gases. Study of recent literature.
Prerequisites: MEC-ENGR 399.

MEC-ENGR 5639 Introduction to Two Phase Flow Credits: 3
The fundamental principles of two-phase flow with applications to a variety of homogeneous mixture as well as separated liquid-liquid, gas-solid, liquid-solid, and gas-liquid flow problems, including steady or transient, laminar or turbulent conditions.
Prerequisites: MEC-ENGR 441.

MEC-ENGR 5643 Industrial Refrigeration Credits: 3
Introduction to and analysis of the thermodynamic cycles and equipment used in Industrial Refrigeration. Applications of Industrial Refrigeration are also discussed.

MEC-ENGR 5660 Combustion Credits: 3
Study of advanced topics in flames and combustion. Detonation and deflagrations, supersonic combustion, air pollution.
Prerequisites: MEC-ENGR 441.

MEC-ENGR 5679 Dynamics of Structures Credits: 3
Study of the dynamic behavior of structures. Analysis of equivalent lumped parameter systems for the design of structures in a dynamic environment.
Prerequisites: CIV-ENGR 276 (or CIV-ENGR 421), MEC-ENGR 484 (or MATH 345, MEC-ENGR 285).

MEC-ENGR 5685 Advanced Vibration Analysis Credits: 3
Advanced topics in vibration theory and its application to Mechanical systems. Topics include vibration analysis of multi-degree of freedom, distributed and nonlinear systems, random vibration analysis, and vibration control.
Prerequisites: MEC-ENGR 484.

MEC-ENGR 5699 Research And Dissertation Credits: 1-9
Doctoral dissertation research.

Medical Bioinformatics (MEDB)

Courses

MEDB 5501 Applied Biostatistics I Credits: 3
Introduction to statistical concepts and analytic methods as applied to health science. Course includes lectures and hands on computer laboratory.
Prerequisites: graduate or professional students and an advanced math course (i.e. Calculus, statistics).

MEDB 5502 Applied Biostatistics II Credits: 3
The second in the Applied Biostatistics sequence and is intended for graduate, doctoral, and professional students in the biological, clinical and medical fields, and medical education. Statistical concepts, analysis methods, and research designs commonly used in these fields are included: diagnostic testing, hypothesis testing, power analysis, analysis of variance, analysis of covariance, multivariate analysis of variance, propensity scoring, simple and multiple regression, logistic regression, and survival analysis. Familiarity with basic statistics and the statistical techniques presented in Applied Biostatistics I is required. Statistical analyses involved in this course will be performed primarily using the SPSS statistical analysis package. The course will also cover the interpretation, presentation and the write up of analytical results and graphs.
Prerequisites: MEDB 5501.

MEDB 5503 Mixed-Effects Models Credits: 3

This course will cover the computational basis of mixed-effects models and how to apply these models to analyze data. Students will learn how to graph, investigate, and model data that are not independent and identically distributed, and how to evaluate model fit.

Prerequisites: MEDB 5507, MEDB 5501, MEDB 5502.

MEDB 5505 Introduction to R Credit: 1

Provides a working familiarity with R. No advanced programming or statistical analytic skills, other than the ability to create and modify text files are needed. Basic methods for data import, data management, simple graphics, and basic statistical analysis are introduced. Provides student with a firm foundation to address these areas in advanced statistics classes or in the student's research efforts, including thesis/dissertation research. A basic understanding of statistical terminology and a working familiarity with computer-based data files (e.g., Excel) is necessary. A basic understanding of the concepts of computer coding is recommended.

MEDB 5506 Introduction to SPSS Credit: 1

Session provides a working familiarity with SPSS. Students are not expected to have advanced programming or statistical analysis skills, other than the ability to create and modify text files. Basic methods for data import, data management, simple graphics, and basic statistical analysis are introduced. This class will not cover advanced statistical methods, but will provide the student with a firm foundation to address these areas in advanced statistics classes or in the student's research efforts, including thesis/dissertation research. A basic understanding of statistical terminology and a working familiarity with computer-based data files (e.g., Excel) is necessary.

MEDB 5507 Introduction to SAS Credit: 1

Course provides a working familiarity with SAS. Students are not expected to have advanced programming or statistical analysis skills, other than the ability to create and modify text files. Basic methods for data import, data management, simple graphics, and basic statistical analysis are introduced. This class will not cover advanced statistical methods, but will provide the student with a firm foundation to address these areas in advanced statistics classes or in the student's research efforts, including thesis/dissertation research. A basic understanding of statistical terminology and a working familiarity with computer-based data files (e.g., Excel) is necessary.

MEDB 5508 Introduction to SQL Credits: 2

This course is an introduction to SQL programming. The course is designed to teach students basic skills that will prepare them to use SQL for data analysis.

MEDB 5510 Clinical Research Methodology Credits: 3

This course trains the student to contribute to research design, planning, and implementation, and to manage and interpret health-related data. This course will provide a broad overview of clinical research in terms of definition, methodology, conduct and applications. The course will explore basic elements of clinical research including the hierarchy of clinical research design and the conduct of clinical research. Application of clinical research knowledge to specific health-related issues will also be explored. Course topics include: conceiving the research question; study designs; questionnaire construction; research methodology; research ethics; human subjects requirements; the role of statistical analysis in clinical research; research proposal preparation; and research based on analysis of secondary data. Both classroom and online asynchronous sections offered.

MEDB 5511 Principles and Applications of Epidemiology Credits: 3

This course will provide an introductory overview of the principles of epidemiology and illustrate applications in specialized topic areas. Course lectures will introduce measures of effect used to study disease in human populations, epidemiological study designs, concepts of causal inference, and threats to study validity. Specialized lectures will demonstrate the application of these concepts in select health and disease conditions.

MEDB 5512 Clinical Trials Credits: 3

Clinical Trials explores the knowledge and skills required to conduct clinical trials, and implications of clinical trials on practice in medicine and allied health.

MEDB 5513 Overview of Health Services Research Credits: 3

Provides an overview of the U.S. health care and public health systems including issues about cost, access, and quality of health care. This course focuses on the role of research and information in the process of redesigning of health care delivery in the U.S. for the purpose of improving the value of health services.

Prerequisites: MEDB 5501, MEDB 5510 or MEDB 5511.

MEDB 5514 Human Genome Epidemiology Credits: 3

Designed for biological researchers and clinicians interested in studying common human diseases using state of the art genomics/genetics epidemiological approaches. Comprehensive introduction to concepts and methodologies of quantitative/statistical genetics, emerging technologies and analytical methods for genomic science, basic study design, utilization of software packages for analyses of genomic data, successful examples of using human genome epidemiology information to improve health, and ethical, legal and social issues in the design and conduct human genome epidemiology research.

MEDB 5520 Introduction to Medical Informatics Credits: 3

This course provides an overview of Biomedical and Health Informatics. It describes the use of data, information and knowledge in improving healthcare and biomedical research. This includes the use of technology and computers to store, retrieve, and process data. Topics include clinical decision making, standards and clinical terminology, natural language processing, imaging, electronic health records, patient monitoring, consumer health informatics, public health informatics, clinical decision support, bioinformatics, translational bioinformatics and clinical research informatics.

MEDB 5521 Clinical Bioinformatics Credits: 3

Clinical bioinformatics will provide the foundation required for effective communication between computational, biological and clinical experts. This class uses a series of exercises to enable participants to independently perform gene and protein-based bioinformatics queries and analyses. Throughout the course, core biological principles are explained, as are the foundational technology and computational topics. Students will become proficient with public bioinformatics resources. This course will prepare students to apply the techniques to their research or participation in interdisciplinary clinical terms.

MEDB 5525 Social Determinants of Health Credits: 3

This course will describe how social, economic and political factors affect health. It will examine strategies to address social determinants of health to reduce health inequities. Students will explore how specific social determinants like socioeconomic status, race ethnicity, and lifestyle influence health, use a "life course" approach to look at different stages of life and the effect of social determinants on specific populations.

MEDB 5530 Independent Study I Credits: 1-3

Focused readings and/or special research project in an area selected by the graduate student in consultation with the advisor.

MEDB 5531 Independent Study II Credits: 1-3

Focused readings and/or special research projects in an area selected by the graduate student in consultation with the advisor.

MEDB 5535 Quantitative Aspects of Epidemiologic Research Credits: 3

This course offers students advanced training in the analysis of epidemiological data. Topics include application of common measures of frequency and association, confounding, effect modification, bias, misclassification, and sensitivity analysis in epidemiologic and clinical data sources.

Prerequisites: MEDB 5501, MEDB 5502 and one of the following: MEDB 5510 or MEDB 5511

MEDB 5540 Multidisciplinary Graduate Seminar Credit: 1

This course will be a combination of discussion, presentations, and didactic presentations that will allow students and faculty to exchange information and explore current research across the disciplines that make up the bioinformatics degree program. The course is designed to help student develop critical skills for evaluating published research, designing research projects, and communicating research findings.

MEDB 5550 Health Outcomes Seminar Credit: 1

The course content is guided by a series of seminars presented by research researchers who are actively engaged in health outcomes studies. It explores multiple topics that are unique relevant to clinical investigators. Faculty and peer discussion forums highlight key concepts and applications.

MEDB 5560 Medical Decision Making Credits: 3

This course will introduce the concept of medical decision making under uncertainty through an examination of disease probabilities and how they are altered by the characteristics of the diagnostic test being studies or used clinically. Decision trees will be introduced as a mechanism for communicating complex medical decisions and introductory level decision analysis will be presented. The measurement of patient values for alternative outcomes will be introduced as they pertain to direct payoff values as well as modifiers to cost payoffs.

MEDB 5561 Responsible Conduct of Research Credits: 3

An interdisciplinary course which covers principles and day-to-day practicalities of research ethics, information about regulatory requirements for conducting research including safety issues and the use of humans, animals and radioactive biohazardous materials; discuss current issues in the ethical aspects of research, such as scientists' obligations with respect to public policy and advocacy.

MEDB 5573 Biostatistical Consulting Practicum Credits: 2-4

This course is designed to provide students with an opportunity for statistical consulting training. Students will work on real consulting projects that were received through the Research and Statistical Consult Service. Projects may involve sample size calculation, study design, data analysis, generating statistical reports and manuscripts. Student will be able to apply their statistical knowledge and communication skills while learning how to work with other researchers.

Prerequisites: MEDB 5501, MEDB 5502, MEDB 5507 and MEDB 5503.

MEDB 5589 Special Topics Credits: 1-3

An opportunity to explore in depth topics not included in usual course offerings. One or more topics will be announced in advance of registration.

MEDB 5591 Internship I Credits: 1-3

Opportunity to apply knowledge and skills in clinical, computational, or genomics research and gain insight into potential career options. Students develop appreciation for teamwork and commitment in professional environments.

Prerequisites: MEDB 5501, MEDB 5502, MEDB 5510, MEDB 5513.

MEDB 5592 Internship II Credits: 1-3

Opportunity to apply knowledge and skills in clinical, computational, or genomics research and gain insight into potential career options. Students develop appreciation for teamwork and commitment in professional environments. Internship II is applicable to students who have previously completed 3 hours of internship.

Prerequisites: MEDB 5501, MEDB 5502, MEDB 5510, MEDB 5513, MEDB 5591.

MEDB 5595 Capstone Experience Credits: 3

This course is designed for the non-thesis student to demonstrate that they have mastered key learning objectives expected of the graduating master's student in the Clinical Research emphasis area. After completion of the core courses in the Masters of Bioinformatics curriculum, students will apply their learning to developing, implementing and presenting results from a project that demonstrates integration of the knowledge, abilities and values emphasized in the degree program.

MEDB 5599 Research and Thesis Credits: 1-6

Research for thesis.

MEDB 5696 Pre-Dissertation Research Credits: 1-6

This course is individually directed research leading to the preparation of a doctoral dissertation.

Prerequisites: Permission of the instructor.

Co-requisites: Completion of comprehensive exam.

MEDB 5699 Research and Dissertation Credits: 1-12

Research and dissertation preparation for IPhD degree students participating in Biomedical and Health Informatics primary and co-discipline.

Prerequisites: instructor approval

MEDB 5899 Required Graduate Enrollment Credit: 1

Medicine (MEDICINE)

Courses

MEDICINE 9110 Fundamentals of Medical Practice I Credits: 5

Introduces students to professional values, attitudes and skills required to practice medicine competently. Develops student competence in basic communication, relationship-building and patient centered interviewing skills. Provides self-awareness and personal growth strategies that facilitate the acquisition of professional behavior affecting honesty and integrity, compassion and altruism, as well as the management of stress. Explores non-biological factors influencing health and the appreciation of different value systems and life styles. Promotes ethical considerations relating to professional behavior and student conduct as a forerunner to professional behavior. Emphasizes the team approach in solving medical problems through direct small group activities as part of weekly onsite docent experiences. Integrates patient interviews and examinations with sciences fundamental to clinical medicine.

MEDICINE 9115 Medical Terminology Credit: 1

1 credit hour/twice weekly each semester. Methodical introduction to the language of medicine and its usage in modern clinical documentation.

Introduces word elements in a logical, graduated sequence correlated with laboratory practice. Encourages skills in etymological analysis based on the word elements presented to facilitate interpretation of composite medical terms.

MEDICINE 9119 Learning Basic Medical Sciences Credit: 1

1 credit hour/1 hour per week. Provides students with an understanding of their own learning processes and those study strategies that promote maximum learning efficiency. Active participation in course increases achievement in both science and non-science courses, smoothes transition to college-level work, and further develops reasoning and thinking skills that apply to medical school

MEDICINE 9120 Fundamentals of Medical Practice II Credits: 5

Introduces students to professional values, attitudes and skills required to practice medicine competently. Develops student competence in basic communication, relationship-building and patient centered interviewing skills. Provides self-awareness and personal growth strategies that facilitate the acquisition of professional behavior affecting honesty and integrity, compassion and altruism, as well as the management of stress. Explores non-biological factors influencing health and the appreciation of different value systems and life styles. Promotes ethical considerations relating to professional behavior and student conduct as a forerunner to professional behavior. Emphasizes the team approach in solving medical problems through direct small group activities as part of weekly onsite docent experiences. Integrates patient interviews and examinations with sciences fundamental to clinical medicine.

MEDICINE 9210 Fundamentals Of Medical Practice III Credits: 5

5 credit hours, 3 hours per week onsite, 2 hours lecture. Reinforces important concepts in diversity and professionalism. Continues the team approach in solving medical problems through direct small group activities as part of weekly onsite docent experience.

MEDICINE 9220 Fundamentals Of Medical Practice IV Credits: 5

5 credit hours, 3 hours per week onsite, 2 hours lecture. Reinforces important concepts in diversity and professionalism. Continues the team approach in solving medical problems through direct small group activities as part of weekly onsite docent experiences. Integrates patient interviews and examinations with sciences fundamental to clinical medicine, including biochemistry, anatomy, physiology, biochemistry and social sciences. Exposes students to a series of interviews with seasoned professionals who address issues of professionalism and career development.

MEDICINE 9221 Hospital Team Experience Credit: 1

1 credit hour/2-week assignment in hospital. Teaches students to make good observations, interact appropriately with patients, family, and hospital staff, assist with non-physician duties, and perform technical skills appropriate to assigned departments. Facilitates understanding of allied health care personnel roles in patient care, communication among health care professionals and its influence on the delivery of health care and patient outcomes, and the hospital process and structure of authority within the hospital.

MEDICINE 9308 Clinical Practice of Medicine I Credits: 3

Basic communication/clinical examination skills will be taught in the classroom with skills workshops. Students will learn to enhance their communication skills with patients and their families aligned with a systems-based approach to the physical examination. Students will also begin to practice complaint-based histories and a review of systems to prepare them for their Year 3 Continuing Care Clinic Clerkship and clinical decision-making. Students will practice communication and interpersonal skills in small groups and also have the opportunity to practice examination skills in workshops, with standardized patients, and linked to their experiences in the Continuing Care Clinic clerkship.

Prerequisites: Successful completion of HSF III, and enrollment in HSF IV.

MEDICINE 9309 Clinical Practice of Medicine II Credits: 5

Advanced communication/physical examination skills will be taught in the classroom with communication skills workshops. Students will learn/practice skills to communicate/examine patients aligned with a systems-based pathophysiology approach. Students will learn/practice a complaint-based HP exam by system aligned to their objectives in the Pathology II: Pathophysiology course. Students will learn/develop skills in clinical diagnosis and decision-making by system that includes instruction/practice on more advanced physical examination skills. Students will practice communication and interpersonal skills in small groups and also have the opportunity to practice examination skills in workshops, with standardized patients, and linked to their experiences in the Continuing Care Clinic.

Prerequisites: BMS 9298.

Co-requisites: BMS 9399.

MEDICINE 9310 History of Medicine Credit: 1

In this course students will learn the ways disease has altered history and that conceptions of disease undergo constant change. Topics covered include diseases and their relationships to other medical sciences, as well as the historical and scientific developments which led to our present understanding of diseases and medicine.

MEDICINE 9312 Pathology I: General Pathology, Genetics, and Immunology Credits: 10

Students will learn and be able to apply basic science education in the clinical practice of medicine. This application includes the areas of gross and microscopic anatomy, biochemistry, genetics, pathophysiology, and immunology. Students will develop a basic understanding of laboratory tests. They will develop competency in clinical diagnosis based on pathologic findings related to anatomic pathology, laboratory medicine and pathophysiology. Course materials will also cover prevention of disease and disability, global health issues, forensic medicine and pathology, age and gender-related issues in pathology and medicine, and appropriate utilization of Pathology and Laboratory Medicine Services.

MEDICINE 9313 Pathology II: Systems-Based Pathology and Pathophysiology Credits: 11

Students will learn and apply basic science education in the clinical practice of medicine through systems-based teaching about disease. This application includes the areas of biochemistry, genetics, pathophysiology, and medical microbiology. Students will expand their understanding of basic laboratory tests with a focus on interpretation and gain familiarity with more complex or specialized laboratory tests, enhancing their abilities in test selection and interpretation. They will also begin to approach a multi-system health problem in terms of its pathogenesis, the mechanisms of systemic interactions, and consequent/subsequent potential complications. Content areas emphasized include cardiovascular, lymphatic, hematologic, gastrointestinal, renal, hepatic, and genitourinary systems.

MEDICINE 9383 Continuing Care Clinic Credits: 5

Provides ambulatory and continuous care experience in general medicine clinics. The docent teams are assigned to a clinic in which students see and follow a panel of patients on a continuous basis for up to four years, where necessary, under the supervision of docents. Provides continuity of care from inpatient hospitalization to outpatient care, allowing longitudinal experience for the student and personalized care for the patients. Allows students to observe the natural progression of disease and experience the rewards and challenges of an ongoing doctor-patient relationship.

MEDICINE 9385 Introduction to Pharmacology Credits: 2

Consists of self-paced, independent learning, computer-based instruction. Introductory principles of pharmacology are covered that provide students with basic knowledge and skills necessary for upcoming didactic and clinical curriculum. Students become familiar with drug information resources, pharmaceutical calculations, and prescription writing skills, and learn basic mechanisms of drug action, preventive therapeutics and pharmacokinetic principles.

MEDICINE 9387 Extended Clinic I Credits: 5**MEDICINE 9390 Clinical Correlations Credits: 5**

5 credit hours. Case-based discussions provided by clinicians that serve to reinforce basic science concepts provided during BMS 9296, BMS 9297, and BMS 9298.

MEDICINE 9401 Internal Medicine/Docent Instruction Yr 4 Credits: 10

Students spend this eight-week rotation on the medical wards at Truman Medical Center, each working as a integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, and Year 4 and 6 students are paired together in a junior-senior partnership. Rounds, conference and consultations.

MEDICINE 9401BR Internal Medicine/Docent Instruction Yr 4 Credits: 5

Students spend this eight-week rotation on the medical wards at Truman Medical Center, each working as a integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, and Year 4 and 6 students are paired together in a junior-senior partnership. Rounds, conference and consultations. This section is a single four-week block of the rotation.

MEDICINE 9408 Pharmacology Credits: 10

Introduces the study of the interaction of drugs with biological systems. Provides the medical student with relevant basic pharmacology of the model drugs under clinical investigation and in use today. Includes extensive small group activities.

MEDICINE 9471 Family Medicine Credits: 5

Exposes students to the unique specialty that focuses on the family. Students experience the act of medicine as well as science, working with patients in the context of their family and community. Includes care of the child, the adolescent, pregnant women, young and middle aged adults, and the elderly. Addresses ambulatory medicine, prevention and health maintenance.

MEDICINE 9472 Behavioral Science in Medicine Credits: 5

Teaches the basic taxonomy, assessment methods and treatment interventions of chemical dependence and major psychiatric disorders. Serves as preparation for the psychiatry rotation. Examines relevant ethical issues commonly faced in current medical practice. Utilizes case studies and a problem-centered approach in addition to clinical experience including home health care visits, supervised interviewing, and time on an inpatient chemical dependency unit. Challenges the student to achieve an integrated theoretical understanding of various approaches in behavioral sciences as a background for meeting patients needs. Teaches communication skills including education of older patients.

MEDICINE 9482 Patient, Physician, Society I Credits: 2

Introduces students to a 7-week unit emphasizing medical decision making. Introduces students to a 6-week unit which focuses on public health. Activities include lecture, problem sets, small group projects.

MEDICINE 9483 Continuing Care Clinic Credits: 5

Provides ambulatory and continuous care experience in general medicine clinics. The docent teams are assigned to a clinic in which students see and follow a panel of patients on a continuous basis for up to four years, where necessary, under the supervision of docents. Provides continuity of care from inpatient hospitalization to outpatient care, allowing longitudinal experience for the student and personalized care for the patients. Allows students to observe the natural progression of disease and experience the rewards and challenges of an ongoing doctor-patient relationship.

MEDICINE 9483RC Year Four Repeat Clinic Credits: 5

Prerequisites: MEDICINE 9383.

MEDICINE 9484 Patient, Physician, Society II Credits: 2

Introduces students to a unit emphasizing medical ethics and palliative care. Activities include lecture, small group sessions, and assigned readings.

MEDICINE 9485 Ambulatory Care Pharmacology Credits: 2

Consists of a self-paced, independent learning, computer-based instruction. Focuses on integration of patient-related data with basic science data. Students obtain skills in assessing patient risk or disease staging and selecting appropriate pharmacotherapy based on such information. The selected topics focus on outpatient pharmacotherapy of common disease states for which there are established treatment guidelines, such as hypertension, heart failure, diabetes mellitus, asthma, pain, and hyperlipidemia.

MEDICINE 9487 Extended Clinic II Credits: 5**MEDICINE 9501 Internal Medicine/Docent Instruction Yr 5 Credits: 10**

Students spend this eight-week rotation on the medical wards at Truman Medical Center, each working as an integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, Year 4 and 6 students are paired together in the junior-senior partnership. Rounds, conference and consultations.

MEDICINE 9501BR Internal Medicine/Docent Instruction Yr 5 Credits: 5

Students spend this eight-week rotation on the medical wards at Truman Medical Center, each working as a integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, and Year 4 and 6 students are paired together in a junior-senior partnership. Rounds, conference and consultations. This section is a single four-week block of the rotation.

MEDICINE 9503 Pediatrics Rotation Credits: 10

This eight-week rotation is designed to help students master t skills necessary in assessing normal and abnormal development and behavioral variation in the newborn, infant and child in the outpatient clinical setting. History-taking and physical examination of infants, children and adolescents are emphasized.

MEDICINE 9503BR Peds Rotation Credits: 5**MEDICINE 9505 General Surgery Rotation Credits: 10**

Introduces students to the field of general surgery. Emphasizes the indications, contraindications, types of operative management, and the mortality and morbidity of various operations. Involves the student in several different kinds of learning experiences, such as preoperative and postoperative care, work in the operating room, outpatient clinic visits, night call, student conferences and resident conferences. Covers skills in surgical scrub, putting on gown and gloves, knot tying, vena puncture, proctoscopy, and suturing of the skin. Students assist in performing skills such as insertion of CVP catheters, insertion of a chest tube, thoracentesis, paracentesis and Swan-Ganz catheters.

MEDICINE 9506 Obstetrics-Gynecology Rotation Credits: 10

Provides the student with an opportunity to gain basic competence in obstetrics and gynecology, including proficiency in the history and physical examination related to the obstetric and gynecologic patient. Emphasizes outpatient gynecology, family planning and techniques for early detection of gynecologic cancer. Provides basic information in reproductive physiology and endocrinology, infertility, gynecologic oncology, and the psychologic aspect of diseases of women. Covers concepts of prenatal care and fundamentals of normal labor and delivery, and pregnancy complications.

MEDICINE 9506BR Obset-Gynecol Rotation Credits: 5**MEDICINE 9514 Medicine, War & Bioethics Credits: 5**

This course considers the continually evolving relationship between medicine, war, and the arts, from the slaughter of the American Civil War (1861-65) to today's conflicts in Iraq. Our focus is on the extraordinary difficult medical and ethical decisions faced by physicians in times of war, and the ways in which those experiences are reflected in the arts. Topics include the effects of disease on armies, biological warfare, the development of ambulance and hospital services in the Civil War, battlefield medicine, the diagnosis and treatment of shellshock victims in WWI, chemical warfare, the pioneering of plastic surgery, triage techniques in WWII, nuclear warfare, and the personal experiences of physicians in the Vietnam and Iraq wars.

MEDICINE 9515 Medicine and Music Credits: 5

This course will explore ways in which music and medicine interact, including the following topics: therapeutic applications of music (music therapy), current research on how the brain processes music, the treatment of medical themes (including illness and disease, patients, physicians, and human experimentation) in musical works, and how certain composers' medical conditions affected their creative output.

MEDICINE 9515A1 Independent Readings Month Credits: 5

Independent Readings Month

MEDICINE 9516 Medicine and Film Credits: 5

Movies are narratives that record, instruct, motivate, entertain and transform. This course investigates the ways in which physicians, patients, and medical students have been portrayed in Hollywood films over the course of the twentieth and the early twenty-first centuries. Compassion, idealism, and heroism were common traits in early doctor movies but there was also a recurrent theme of the greedy callous doctor who valued research over patient welfare, and profits over ethics. We discuss how films reflected, changed, and molded perceptions of physicians and patients in the past, and examine what contemporary portrayals of the medical profession can tell us about the expectations and fears of patients today.

MEDICINE 9517 Medicine and Literature Credits: 5

The aim of this course is to engage students in the process of self-reflection about their roles as health care professionals through the lens of literature. Reading about the ways in which people interact with professionals, patients, and disease can enrich our understanding of cultural, economic, and social issues. Medical literature is a diverse field and it increases our awareness of the different reactions to medicine and illness. This course is intended to improve our empathy for patients and peers.

MEDICINE 9518 Medicine, Law and Bioethics Credits: 5

This course provides the basic doctrines and principles of the law that form the foundation for legally and ethically sound medical practice. It includes the comprehensive coverage of the history of legal medicine in the United States and the dynamics of law applied to the practice of medicine. Current developments in the U.S. health care delivery and in the field of bioethics are identified along with the impact on practice of medicine. Lecture, discussion, and writing about legal and ethical issues related to the practice of medicine prepares students in Year 5 and Year 6 to assume the legal and ethical responsibilities of the M.D. degree. This course fulfills the requirement for a Medical Humanities course in year 5 or year 6.

MEDICINE 9519 Medicine and Philosophy Credits: 5

The class is constructed on three premises. First, everyone is a philosopher. Second, philosophy is not passive, it is an activity. In class, we will do philosophy. Students will be given some basic philosophic tools and they will then be asked to critically examine, refine and sharpen their thinking. Third, the practice of medicine requires critical and creative thinking. Students must acquire voluminous knowledge and information. Philosophy addresses wisdom, how to apply the knowledge and information wisely.

Prerequisites: Must be a professional student in the UMKC School of Medicine.

MEDICINE 9570 Family Medicine Preceptorship Credits: 5

Provides work experience with a rural Missouri physician. Helps students understand the responsibilities and importance of family physicians in the provision of health care. Provides continuing emphasis on the need for and importance of family practice.

MEDICINE 9571 Psychiatry Rotation Credits: 5

Gives each medical student a clinical assignment that involves responsibility for patient care under supervision on the adult inpatient service and experience in the clinic. Includes seminars in psychopathology, psychiatric syndromes, mechanisms of defense, psychopharmacology, drug and alcohol abuse and specific psychosocial assessment.

MEDICINE 9578 Medicine and Art Credits: 5

Lecture, discussion.

MEDICINE 9583 Continuing Care Clinic Credits: 5

Provides ambulatory and continuous care experience in general medicine clinics. The docent teams are assigned to a clinic in which students see and follow a panel of patients on a continuous basis for up to four years, where necessary, under the supervision of docents. Provides continuity of care from inpatient hospitalization to outpatient care, allowing longitudinal experience for the student and personalized care for the patients. Allows students to observe the natural progression of disease and experience the rewards and challenges of an ongoing doctor-patient relationship.

MEDICINE 9583RC Year Five Repeat Clinic Credits: 5

Monthlong course in which students repeat or complete outstanding requirements of Year 5 Continuing Care Clinic.

MEDICINE 9585 Prescribing for Special Populations Credits: 2

Consists of a self-paced, independent learning, computer-based instruction. Teaches principles of prescribing for special populations. Students learn to recognize special patients and to assess risks and benefits and individualize drug therapy in special patient situations. The course addresses concepts of pharmacology in five commonly-encountered special populations: pediatrics, elderly, patients with liver or kidney disease, and pregnant or breast-feeding patients.

MEDICINE 9587 Extended Clinic III Credits: 5**MEDICINE 9594 Medicine and Body Image Credits: 5**

Lecture, discussion, writing about ethical issues related to death.

MEDICINE 9601 Internal Medicine/Docent Instruction Yr 6 Credits: 10

Students spend this eight-week rotation on the medical wards at Truman Medical Center, each working as an integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, and Year 4 and 6 students are paired together in a junior-senior partnership. Rounds, conference and consultations.

MEDICINE 9601BR Internal Medicine/Docent Instruction Yr 6 Credits: 5

Students spend this eight-week rotation on the medical wards at Truman Medical Center, each working as a integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, and Year 4 and 6 students are paired together in a junior-senior partnership. Rounds, conference and consultations. This section is a single four-week block of the rotation.

MEDICINE 9678 Emergency Medicine Credits: 5

Based at Truman Medical Center Hospital Hill or Saint Luke's Hospital of Kansas City, the major affiliated adult hospitals for the School of Medicine. Emphasizes principles, concepts and skills necessary for the initial evaluation and care of medical and surgical emergencies. Teaches management of simple lacerations, burns, contusions, sprains, and infections, and recognition of life threatening emergencies and initiation of emergency care in response.

MEDICINE 9683 Continuing Care Clinic Credits: 5

Provides ambulatory and continuous care experience in general medicine clinics. The docent teams are assigned to a clinic in which students see and follow a panel of patients on a continuous basis for up to four years, where necessary, under the supervision of docents. Provides continuity of care from inpatient hospitalization to outpatient care, allowing longitudinal experience for the student and personalized care for the patients. Allows students to observe the natural progression of disease and experience the rewards and challenges of an ongoing doctor-patient relationship.

MEDICINE 9685 Rational and Safe Drug Prescribing Credits: 2

Consists of self-paced, independent learning, computer-based instruction. Teaches principles of clinical pharmacology that will assist the student in responsibly prescribing medications. Students develop skills in making informed clinical decisions through studying topics such as literature evaluation, medication errors, adverse drug reactions, drug allergies, drug interactions, overdose management, alternative therapies, and therapeutic drug monitoring.

MEDICINE 9687 Extended Clinic IV Credits: 5**MEDICINE 9714A2 Academic General Year I Credit: 1****MEDICINE 9715A1 Independent Readings Month Credits: 5****MEDICINE 9716A1 Independent Study Month Credits: 5****MEDICINE 9732 Academic-Biomedical and Health Informatics Credits: 5****MEDICINE 9816C11 Family Practice Sub-Internship Credits: 5**

Sub-internship in Family Medicine

MEDICINE 9818-C11 Special Topics - Community and Family Medicine Credits: 5

Special Topics - Community and Family Medicine

MEDICINE 9818-C21 Special Topics - Internal Medicine Credits: 5

Special Topics - Internal Medicine

MEDICINE 9818-C31 Special Topics - Neurology/Psychiatry Credits: 5

Special Topics - Neurology/Psychiatry

MEDICINE 9818-C41 Special Topics-OB/GYN REI SUB-I Credits: 5

Special Topics-OB/GYN REI SUB-I

MEDICINE 9818-C51 Special Topics - Pathology Credits: 5

Special Topics - Pathology

MEDICINE 9818-C61 Special Topics - Pediatrics Credits: 5

Special Topics - Pediatrics

MEDICINE 9818-C71 Special Topics - Radiology Credits: 5

Special Topics - Radiology

MEDICINE 9818-C81 Special Topics - Surgery Credits: 5

Special Topics - Surgery

MEDICINE 9818-C91 Special Topics - Miscellaneous Credits: 5
Special Topics - Miscellaneous

MEDICINE 9818-C92 Special Topics - Miscellaneous Credits: 5
Special Topics - Miscellaneous

Prerequisites: SOM Student

MEDICINE 9842-C21 Internal Medicine Sub-Internship Credits: 5

MEDICINE 9850-C31 Neurology Sub-Internship Credits: 5

MEDICINE 9852 Neurology Intensive Care Credits: 5
Intensive care in Neurology

Prerequisites: Must be a School of Medicine student.

MEDICINE 9870-C41 Obstetrics and Gynecology - Sub-Internship Credits: 5
Obstetrics and Gynecology - Sub-Internship.

MEDICINE 9898-C61 Internal Medicine/Pediatrics-Sub-Internship Credits: 5
Internal Medicine/Pediatrics-Sub-Internship.

Prerequisites: Successful completion of the core Internal Medicine and Pediatrics clerkships.

MEDICINE 9899-C61 Internal Medicine Pediatrics Clinic Credits: 5

MEDICINE 9921-C61 Pediatrics Sub-Internship Credits: 5
Pediatrics Sub-Internship.

MEDICINE 9922-C61 Neonatal Intensive Care Sub-Internship Credits: 5

MEDICINE 9923-C61 Pediatrics-Rehabilitation Credits: 5

MEDICINE 9924-C61 Pediatrics-Dermatology Credits: 5

MEDICINE 9925-C61 Pediatrics-Ophthalmology Credits: 5

MEDICINE 9926-C61 Pediatrics-Genetics Credits: 5

MEDICINE 9927-C61 Pediatrics-Neurology Credits: 5

MEDICINE 9928-C61 Pediatrics-Child and Adolescent Psychiatry Credits: 5

MEDICINE 9929-C61 Pediatrics-Plastic Surgery Credits: 5

MEDICINE 9930-C61 Pediatrics-Orthopedic Surgery Credits: 5

MEDICINE 9940-C61 Pediatrics-Allergy and Immunology Credits: 5
Pediatrics-Allergy and Immunology.

Prerequisites: Must be a School of Medicine Student.

MEDICINE 9945-C81 Anesthesiology-Sub-Internship Credits: 5

MEDICINE 9972-C81 Surgery-General Sub-Internship Credits: 5

MEDICINE 9973-C81 Surgery Orthopedics Sub-Internship Credits: 5
Surgery Orthopedics Sub-Internship.

MEDICINE 9974-C81 Surgery Neurological Sub-Internship Credits: 5
Surgery Neurological Sub-Internship.

MEDICINE 9975-C81 Surgery-Trauma Credits: 5
Surgery-Trauma

Prerequisites: Must be an SOM student

MEDICINE 9976-C81 Surgery - Oral and Maxillofacial Surgery Credits: 5

MEDICINE 9977-C81 Surgical Oncology Credits: 5
Elective in Surgical Oncology.

MEDICINE 9985 Miscellaneous - Medical Clinical Nutrition Credits: 5

Build upon basic (biochemistry/physiology) and clinical science knowledge and skills in order to be able to perform nutrition assessments in children/adults, counsel patients and families on nutrition, order medical nutrition therapy, work with multidisciplinary teams, and appropriately refer for specialized nutrition/feeding services. The elective utilizes didactic instruction, case studies, team projects, individual assignments, and outside reading combined with clinical/community experiences to facilitate student acquisition of knowledge/skills. Gain an appreciation of nutritional therapy from both the clinician and patient/family perspective. Didactic sessions, case studies, and clinical experiences are designed to augment students' outside reading of assigned and suggested references.

Nursing (NURSE)

Courses

NURSE 5503A Comparative Weight Loss I Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Specific topics that will be addressed include risks of overweight/obesity; common psychological issues for the overweight/obese; societal perceptions and barriers for overweight/obese individuals.

NURSE 5503B Comparative Weight Loss 2 Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Common medically recommended diets and diet programs will be compared on the basis of their efficacy/risks; exercise requirements for weight loss, and weight maintenance.

Prerequisites: NURSE 5503A.

NURSE 5503C Comparative Weight Loss 3 Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long and short term implications. Compare pharmacologic weight loss options and their efficacy/risks; non-prescription medications/nutraceuticals for weight loss and their efficacy/risks; and bariatric surgeries and efficacy/risks.

Prerequisites: NURSE 5503A.

NURSE 5508 Advanced Growth and Development Credit: 1

This course is designed to provide students with advanced comprehensive knowledge regarding the physical growth and psychosocial development from birth to 21 years of age within the context of the child's family and community. Analysis and interpretation of growth and development patterns will be examined as they relate to primary health care of children, birth to 21 years of age aiding in the determination of the health status.

NURSE 5509 Technical Foundations of Advanced Practice Credit: 1

This course will provide students with the advanced informatics skills necessary to develop an evidence-based reflective practice. Self-paced progressive modules will allow students to use advanced health care technologies to develop and apply informatics skills so that they can manage and communicate advanced clinical information and knowledge.

NURSE 5515NE Role of the Nurse Educator Credits: 2-3

This course will explore the role of the nurse educator within the academic, acute care, and outpatient settings. Emphasis will be on the development, evaluation, differences and implementation of the nurse educator in the functional roles. Students are introduced to the NLN Core Competencies of Nurse Educators to evaluate their own practice. Ethical and legal issues related to practice as a nurse educator are discussed.

NURSE 5516 Curriculum Development in Nursing Credits: 3

This course prepares the nurse educator to develop, review, and evaluate nursing curricula. Emphasis will be placed on theoretical foundations, principles of program evaluation, and issues in curriculum design.

Prerequisites: NURSE 5515NE.

NURSE 5517 Teaching Strategies in Nursing Credits: 2

This course examines principles and techniques in teaching nursing. Techniques concerning classroom management, writing objectives and implementing active teaching strategies are explored. Emphasis is placed on respecting the diverse learning needs of students in the educational environment.

Prerequisites: NURSE 5515NE.

Co-requisites: NURSE 5515NE.

NURSE 5526 Health Promotion Across the Lifespan Credits: 3

This course is designed to provide students with a strong knowledge base related to concepts of health promotion and health protection for clients across the life span. Clients are conceptualized as individuals, families and populations. An application of various developmental theories for the child, adult, older adult and family will provide the basis to individualize health-care needs for various age and family groups. Core concepts for the course include: theories of health and health promotion and protection, reasoned action, health belief model, epidemiology, disease and injury prevention, health education, growth and development, nutrition, and family systems theory.

Prerequisites: NURSE 5550 (or co-requisite).

NURSE 5527 Cultural Diversity & Values Credits: 3

This course explores how each individual's life context (social, political, historical, and economic) and culture construct their individual's values, beliefs and behaviors. Applying multi-disciplinary concepts and theory, the course expands students' basic knowledge of cultural diversity, approaches to culture and cultural competency, values and ethics, theories of moral development, cultural assessment skills, and ethical decision-making models for clinical practice. Ethical dilemmas created by differing cultural values and the role of health professionals in leading ethical decision-making are explored. Core concepts for the course include: cultural awareness, cultural knowledge, cultural skill, cultural encounter, values clarification, and ethical analysis.

NURSE 5528 Healthcare Policy & Advocacy Credits: 3

This course is designed to focus on the integral relationship between health care policy and advocacy. Content will include principles and processes related to U.S. health policy and politics in relation to the overall system and issues of cost, quality and access; interrelationships between policy, political trends, and quality of care and access at the point of service; elimination of health care disparities, ethical and obligatory values related to the role of the health care professional.

NURSE 5529 Ethics in Advanced Practice & Research Credits: 3

Advanced nursing practice, ethics, and research are intricately connected. This course is designed to explore the content necessary to apply ethical principles to complex issues encountered in advanced nursing practice. Essential ethical principles include assuring the common good through the continual presence of respect for human dignity, autonomy, beneficence, and distributive justice, as those apply to the integration of advanced practice and research. Graduate prepared nurses are responsible for impacting individual care, the care of populations, and environmental health, therefore advocacy for social justice and ethical health care policy are also discussed.

NURSE 5531 Graduate Pharmacology Specialty Credits: 2

This course builds on principles of pharmacology learned in Pharmacotherapeutics for Advanced Practice Nursing. This course focuses on principles and practices necessary for safe prescribing and medication management of a specialty population (e.g., pediatrics, acute care, mental health).

Prerequisites: NURSE 5548, NURSE 5549, NURSE 5550.

Co-Requisites: NURSE 5532.

NURSE 5532 Pediatric Acute Care I Credits: 3

This is the first of two courses in which the management of complex acute, critical, and chronically ill patients with urgent and emergent conditions is explored. The focus is on alterations in pathophysiology, advanced assessment, diagnosis, and collaborative management of infants, children and adolescents with selected episodic/chronic health problems in acute/critical care.

Prerequisites: NURSE 5548, NURSE 5549, NURSE 5544 NURSE 5547.

Co-requisites: NURSE 5534 NURSE 5531.

NURSE 5533 Pediatric Acute Care II Credits: 3

This is the second of two courses in which the management of complex acute, critical, and chronically ill patients with urgent and emergent conditions is explored. The focus is on alterations in pathophysiology, advanced assessment, diagnosis, and collaborative management of infants, children and adolescents with selected episodic/chronic health problems in acute/critical care.

Prerequisites: NURSE 5532 NURSE 5534.

Co-requisites: NURSE 5535.

NURSE 5534 Advanced Practice Clinical Practicum I (Pediatric Acute Care) Credits: 4

This practicum course focuses on the clinical management of the pathological alterations presented in the Pediatric Acute Care I course. The course is designed to provide clinical experience in the development and application of the roles of the pediatric acute care nurse practitioner. The clinical setting will be used for application and evaluation of pathophysiologic and psychosocial concepts in implementing and evaluating care in the clinical settings.

Prerequisites: NURSE 5544, NURSE 5547, NURSE 5548, NURSE 5549, NURSE 5564.

Co-requisites: NURSE 5531, NURSE 5532.

NURSE 5535 Advanced Practice Clinical Practicum II (Pediatric Acute Care) Credits: 4

The emphasis of this course is on the integration of theory, assessment, and advanced therapeutics in high acuity patient care. The student will gain the necessary management skills to provide specialized patient centered care across the entire pediatric age spectrum from complex chronic illness to physiologic deterioration and life threatening instability, including palliative and end of life care, while incorporating the family as a full partner in decision making.

Prerequisites: NURSE 5532, NURSE 5534.

Co-requisites: NURSE 5533.

NURSE 5544 Advanced Health Assessment Skills Credits: 2

This course provides a systematic approach to collection and documentation of advanced health/physical assessment, including the comprehensive history, physical, and psychological assessment of signs and symptoms, pathophysiological changes, psychosocial and cultural variations of the patient. The assessment should be conducted within the context of the family and community, incorporating cultural and developmental variations, and the needs of the patient.

Prerequisites: Undergraduate Health Assessment Course.

NURSE 5546 Foundations of Family Psychiatric Nursing Advanced Practice Credits: 3

This foundational course focuses on factors impacting mental health and the development of psychiatric disorders. The scope of practice and roles of the Psychiatric Mental Health Nurse Practitioner will be introduced. Both pharmacological and nonpharmacological therapeutic modalities will be explored. Comprehensive psychiatric evaluation skills will be developed. Attention will be given to the development of therapeutic relationships, assessment considerations across the lifespan, crisis evaluation and different types of diagnostic tools and approaches. Diagnostic reasoning skills will be applied to mental illness and students will begin to integrate assessment finding into diagnoses in the Diagnostic and Statistical Manual of Mental Disorders.

Prerequisites: NURSE 5547M.

Co-requisites: NURSE 5547M.

NURSE 5547 Diagnostic Reasoning/Advanced Assessment Credits: 3

This course emphasizes utilization of advanced health/physical assessment skills, interpretation of diagnostic testing and lab values, validation, documentation and analysis of findings through diagnostic reasoning to develop and process differential diagnosis.

Prerequisites: NURSE 5544.

NURSE 5547C Diagnostic Reasoning/Advanced Assessment-Children Credits: 3

This course emphasizes utilization of advanced health/physical assessment skills, interpretation of diagnostic testing and lab values, validation, documentation and analysis of findings through diagnostic reasoning to develop and process differential diagnosis. The course consists of two hours of didactic/ discussion and one hour of clinical/lab credit (45 clock hours).

Prerequisites: NURSE 5544.

NURSE 5547N Advanced Assessment of the Neonate Credits: 3

This course is designed to provide a systematic approach to advanced assessment of physiological, psychological, socio-cultural, developmental and spiritual assessment of the fetus, the mother during the prenatal period, and the neonate. This course builds on basic health assessment skills and emphasizes advanced assessment skills, diagnostic test interpretation, validation, documentation and analysis of perinatal, genetic and embryological factors impacting neonatal health and development.

Prerequisites: Admission into the MSN NNP program.

NURSE 5547NE Health Assessment & Clinical Reasoning for Nurse Educators Credits: 4

This course is designed to provide a systematic approach to teaching physiological, psychological, sociocultural, developmental and spiritual assessment. The course builds on basic health assessment skills and emphasizes: comprehensive assessment skills, interpretation of laboratory results, validation of findings, documentation and analysis of assessment findings; and teaching strategies – teaching methodologies, clinical application, and student evaluation.

Prerequisites: NURSE 401, NURSE 5548.

NURSE 5547PM Diagnostic Reasoning/Advanced Assessment Credits: 2

2 credit hours (1 didactic; 1 lab for a minimum of 45 contact/clock hours). This course is designed to provide a systematic approach to the advanced assessment of physiological, psychological, socio-cultural, developmental and spiritual assessment of individuals. The post-MSN student will build on previous advanced assessment skills and content with emphasis on adding advanced physical assessment skills, lab work interpretation, validation, documentation and analysis of assessment findings appropriate to their desired role area. Students will meet the same outcome standards of the track in which they are currently enrolled.

Prerequisites: Free-standing Health Assessment Course.

NURSE 5547W Diagnostic Reasoning/Advanced Assessment Credits: 3

This course emphasizes utilization of advanced health/physical assessment skills, interpretation of diagnostic testing and lab values, validation, documentation and analysis of findings through diagnostic reasoning to develop and process differential diagnosis. The course consists of two hours of didactic/ discussion and one hour of clinical/lab credit (45 clock hours).

Prerequisites: NURSE 5544.

NURSE 5548 Advanced Pathophysiology Across the Lifespan Credits: 3

Advanced pathophysiology is the study of the alterations of normal physiological functioning in cellular, tissue, organ and organ systems. These alterations form the basis for understanding a variety of pathophysiological conditions and the manifestations and impact of abnormal physiological functioning on clients across the life-span. Advanced pathophysiology deals with both generalized processes and major organ system dysfunctions. This course consists of three hours of lecture/discussion per week and individual self study.

NURSE 5548N Physiology/Pathophysiology Of The Neonate Credits: 2

Concepts of embryology, neonatal physiology and pathophysiology are used to provide an in-depth study of normal functioning and alteration of normal physiological functioning in cellular, tissue, organ, and organ systems. Alterations form the basis for understanding a variety of pathophysiological conditions and the manifestations and impact of abnormal physiological functioning on neonates. Both generalized processes and major system dysfunctions are addressed.

Prerequisites: Admission to the Neonatal Nurse Practitioner Track, NURSE 5548.

NURSE 5549 Pharmacology Across the Life Span for Advanced Nursing Practice Credits: 3

This is a course in clinical pharmacotherapeutics that builds on prior knowledge of drug classification, actions, interactions and adverse drug reactions. The major focus of the course is the pharmacotherapeutic prescribing of medications for primary health care management across the life span by advanced practice nurses. The Missouri laws for advanced practice nurse prescriptive authority will be addressed. This course consists of three hours of lecture/discussion/in-class clinical module work per week.

Prerequisites: NURSE 5548, NURSE 5549R.

NURSE 5549N Pharmacology for the Neonate Credits: 3

This course is designed to provide a systematic approach to advanced assessment of physiological, psychological, socio-cultural, developmental and spiritual assessment of the fetus, the mother during the prenatal period, and the neonate. This course builds on basic health assessment skills and emphasizes advanced assessment skills, diagnostic test interpretation, validation, documentation and analysis of perinatal, genetic and embryological factors impacting neonatal health and development.

Prerequisites: Admission into the MSN NNP program.

NURSE 5549R Pharmacokinetics & Pharmacodynamics: Application for Graduate-Prepared Nurses Credit: 1

This course builds on prior knowledge of anatomy, physiology, chemistry, microbiology, pathophysiology and pharmacology. Drug classes are reviewed in preparation for advanced clinical judgment. The principles for decision-making about drug selection, use and monitoring are explored. General principles of pharmacokinetics and pharmacodynamics are discussed. Pertinent patient education concerning select pharmacotherapeutics agents is reviewed.

Prerequisites: Admission to UMKC School of Nursing and Health Studies.

NURSE 5550 Theoretical Foundations in Nursing Credits: 3

This course focuses on critical analysis of theory and the utilization of various levels of nursing and related theories as a base for nursing at the graduate level. It further examines the inter-relationship of theory, research and practice in the development of a scientific body of nursing knowledge. The student will analyze methods by which knowledge is gained and validated. Students will synthesize several different theories from which to form the basis of their practice. Relationships of theory, practice and research will be discussed.

Prerequisites: Completion of BSN.

NURSE 5551B Pharmacology for Women's Health: Common Medical Conditions Credits: 2

This course in clinical pharmacology builds on current knowledge of drug classification, actions, interactions, and adverse drug reactions. The focus is the use of medications by advanced practice providers in the management of common medical conditions in women's health. Emphasis will be placed on the evidence based pharmacological management of women with medical conditions such as cardiovascular conditions, autoimmune disorders, diabetes, gastrointestinal conditions, lower urinary tract disorders, drugs that promote mental health, dermatological conditions, and an overview of chemotherapeutics. This four-week course consists of online discussion, case studies and quizzes.

Prerequisites: NURSE 5549.

NURSE 5555 Nursing Research Credits: 3

This course is designed to prepare graduate nursing students to utilize research findings in order to provide high quality health care and improve nursing practice. This knowledge includes fundamentals of research methods, procedures for the evaluation of research and the application of research findings to clinical practice and organizational decision making.

Prerequisites: NURSE 5550, a graduate level statistics course.

NURSE 5557 Qualitative Methods in Nursing Research Credits: 3

This course is designed to provide the student with the skills necessary to the understanding and conduct of qualitative research. Various methods, including ethnographic, phenomenologic, historic, grounded theory and aesthetic inquiry are presented and discussed. Emphasis is placed upon the appropriateness of each method for different research problems. This course consists of three hours of lecture/discussion per week.

Prerequisites: NURSE 5550, NURSE 5555.

NURSE 5558 Research Design Credits: 3

This course is designed to provide the student with experience in the development of a research proposal. Research skills acquired in previous courses will be synthesized to produce the components of a proposal.

Prerequisites: NURSE 5555.

NURSE 5559 Evaluation Methods in Nursing Credits: 2

This course examines principles of assessment and evaluation in nursing education. Techniques concerning formative and summative evaluation, test writing, clinical evaluation, and test item analysis will be explored. Emphasis is placed on respecting the diverse learning needs of the students in the educational environment.

Prerequisites: NURSE 5517.

NURSE 5564A Primary Care of Adults I Credits: 5

This course is designed to prepare nurse practitioner students to manage common health problems of adults. The focus is on developmentally appropriate preventive health care and management of common acute/episodic illnesses. Students will integrate role competencies, professional standards, and legal requirements essential to the NP role. Core content includes differential diagnosis, therapeutic management, adherence, anticipatory guidance, patient/family education, legal and professional issues, standards of practice, and advanced practice role competencies.

Prerequisites: NURSE 5526, NURSE 5548, NURSE 5550, NURSE 5547A and N5555.

Co-requisites: NURSE 5549.

NURSE 5564AG Advanced Practice Clinical Practicum I Credits: 4

Advanced Practice Clinical Practicum I.

NURSE 5564C Primary Care of Children I Credits: 5

This course is designed to prepare nurse practitioner students to manage common pediatric health problems. The focus is on evidence-based developmentally appropriate preventive health care and management of common acute/episodic illnesses. Students will integrate role competencies, professional standards, and legal requirements essential to the NP role. Core content includes differential diagnosis, therapeutic management, adherence, anticipatory guidance, patient/family education, legal and professional issues, standards of practice, and advanced practice role competencies. Clinical practice and clinical seminar comprise the clinical experience.

Prerequisites: NURSE 5526, NURSE 5547C, NURSE 5548, NURSE 5550.

Co-requisites: NURSE 5549, NURSE 5555.

NURSE 5564F Primary Care of Families I Credits: 5

This course is designed to prepare nurse practitioner students to manage common health problems across the life span. The focus is on developmentally appropriate preventive health care and management of common acute/episodic illnesses. Students will integrate role competencies, professional standards, and legal requirements essential to the NP role. Core content includes differential diagnosis, therapeutic management, adherence, anticipatory guidance, patient/family education, legal and professional issues, standards of practice, and advanced practice role competencies.

Prerequisites: NURSE 5526, NURSE 5547F, NURSE 5548, NURSE 5550.

Co-requisites: NURSE 5549.

NURSE 5564M Family Psychiatric Nursing Advanced Practice I Credits: 5

This course is designed to prepare students to manage psychiatric illness in individuals. Emphasis will be given to psychiatric disorders commonly encountered such as thought disorders, mood disorders, anxiety disorders, personality disorders and substance abuse. Special attention will be given to illnesses occurring in childhood and older age. Focus will be on strengthening mental health diagnostic skills and management of psychiatric illness in individuals. Students will learn to identify and treat short term mental health issues, chronic disorders and acute exacerbations. Psychotropic medication management skills will be developed. Students will begin their clinical hours during this course with a minimum of 165 in total. Patients seen in clinical settings will be across the lifespan.

Prerequisites: NURSE 5526, NURSE 5546, NURSE 5547M, NURSE 5548, NURSE 5550.

Co-requisites: NURSE 5549.

NURSE 5564N Neonatal Nursing I Credits: 3

This course integrates the physiologic, pharmacologic, and assessment skills and principles in determining appropriate care of the ill neonate. This course covers case management of respiratory, cardiovascular and neurologic disorders. Current research and evidenced-based practices are used as the course framework. The effects of critical conditions on the growth and development of the neonate, including subsequent chronic health problems as well as the short and long term consequences to the child's family are emphasized. The use of specific interventions and diagnostic procedures are demonstrated and applied in laboratory/clinical settings.

Prerequisites: NURSE 5549N.

Co-requisites: NURSE 5566N.

NURSE 5564NE Clinical for Nurse Educators Credits: 5

This clinical course provides students an opportunity to develop advanced knowledge and clinical skills in an acute care clinical setting. Clinical practice hours will be spent in a variety of settings providing the students the opportunity to provide clinical education and advanced patient care in a specialty population. The students demonstrate their clinical development and clinical reasoning skills by evaluating the process of nursing care (assessment, intervention/management, evaluation) from an evidenced-based perspective.

Prerequisites: All required courses except NURSE 5572 and NURSE 5598.

NURSE 5564W Primary Health Care of Women Credits: 5

This course is designed to prepare the woman's health nurse practitioner student to manage the primary health care of women. The course will focus on the etiology, symptomatology, diagnosis and management of gynecologic and non-gynecologic primary health care problems throughout the lifespan. Emphasis will be placed on caring for women within a holistic, collaborative framework and recognizing how the changing roles of women in today's society can affect their lives and their health status. Concepts, theories and evidence-based practice related to health promotion and maintenance, and illness prevention are addressed.

Prerequisites: NURSE 5526, NURSE 5547W, NURSE 5548, and NURSE 5550; NURSE 5549 and NURSE 5555 (pre or co-req).

NURSE 5566A Primary Care of Adult-Gerontology II Credits: 5

This course is designed to prepare adult-gerontology nurse practitioner (NP) students in the care and management of adults with chronic health problems. The focus is on the differentiation and therapeutic management of chronic health problems encountered in various health care settings. The course enables students to develop a research and theory based practice for disease state management of health care for adults. Core concepts: theories, grief and loss, chronicity and pain; and advanced nursing skills.

Prerequisites: NURSE 5549, NURSE 5564A.

NURSE 5566C Chronic Child Health Care (Clinical II) Credits: 5

This course is designed to apply knowledge and skill to advanced evidence-based nursing care of children experiencing complex/chronic health problems. The organizing framework is case management of chronic health states. Students will apply several theoretical models to acute and chronic conditions of children at different developmental stages representing various socioeconomic and cultural groups, in primary or specialized care settings. Core concepts are stress, coping, adaptation, pain management, grief, loss, nutritional support, ethical decision-making, and symptom management.

Prerequisites: NURSE 5549 and NURSE 5564C.

NURSE 5566F Primary Care of Families II Credits: 5

This course is designed to prepare family nurse practitioner (NP) students in the care and management of families with chronic health problems. The focus is on the differentiation and therapeutic management of chronic health problems encountered in various health care settings. The course enables students to develop a research and theory based practice for disease state management of health care for families. Core concepts: theories, grief and loss, chronicity and pain; and advanced nursing skills.

Prerequisites: NURSE 5549, NURSE 5564F.

NURSE 5566M Family Psychiatric Nursing Advanced Practice II Credits: 5

In this course, management of mental health problems will expand beyond the individual to include families, groups and the greater community. This course will emphasize development of psychotherapy skills by the advanced practice nurse. Theoretical foundations and intervention approaches for individuals, group and family therapies will be explored. Unique or modified approaches for pediatric and older adult populations will be covered. Students will be exposed to the common psychotherapy modalities and will identify which approaches they will adopt and utilize in psychotherapy clinical experiences. Clinical management will also expand from outpatient settings to include crisis evaluation and inpatient care.

Prerequisites: NURSE 5549, NURSE 5546, NURSE 5564M.

NURSE 5566N Neonatal Nursing II Credits: 3

This course integrates physiologic, pharmacologic, and assessment skills and principles determining appropriate care of the ill neonate. This course covers case management of gastrointestinal, renal, endocrine, hematologic, orthopedic, ophthalmologic, dermatologic and immune disorders. Current research and evidenced-based practices are used as the course framework. The effects of critical conditions on the growth and development of the neonate, including subsequent chronic health problems as well as the short and long term consequences of the child's family are emphasized. The use of specific interventions and diagnostic procedures are demonstrated and applied in laboratory/clinical settings.

Prerequisites: NURSE 5549.

NURSE 5566W Care of the Childbearing Woman Credits: 5

This course is designed to prepare the woman's health nurse practitioner students in the care and management of the childbearing woman. The focus of the course is on the normal adaptation and pathologic alterations throughout the childbearing period. Emphasis is placed on management of women and families from preconception through the puerperium. Concepts, theories and evidence-based research related to the biopsychosocial and cultural aspects of childbearing are addressed. Core concepts include adaptation, stress and coping, grief and loss, pain and symptoms management.

Prerequisites: NURSE 5564W.

NURSE 5572 Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function in an advanced practice nursing role. The focus of this intensive clinical practicum is on the synthesis and application of previous theory and clinical courses under the guidance of a preceptor. Students will be expected to apply advanced clinical decision-making skills and evidence-based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include advanced nursing practice, functional role responsibilities, ethical, legal and health policy issues, and activities with the emphasis on their relationship to patient outcomes. The patient systems for this experience include individuals and families within the context of community.

Prerequisites: All required courses except NURSE 5598, NURSE 5599, and electives.

NURSE 5572II Preceptorship II Credits: 5

This course provides opportunities to apply knowledge and skills from advanced nursing role, theory, research and neonatal clinical courses to the advanced therapeutic management of high-risk neonates. This is the second of two preceptorship courses which builds upon acquired clinical skills of NURSE 5572NI and can be taken concurrently or in consecutive semesters. Emphasis is placed on therapeutic measures within a conceptual framework or model applying findings from research relevant to comprehensive care of neonates. The client system will be the neonate and family.

Co-requisites: NURSE 5572NI.

NURSE 5572M Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function in a psychiatric advanced practice nursing role. The focus of this intensive clinical practicum is on the synthesis and application of previous theory and clinical courses under the guidance of a preceptor. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include advanced nursing practice, functional role responsibilities, ethical, legal and health policy issues, consultation/collaboration and activities with the emphasis on their relationship to patient outcomes. A minimum of 330 clinical hours is required. Patients seen in clinical settings will be across the lifespan.

Prerequisites: All required courses except NURSE 5598.

NURSE 5572NE Synthesis Practicum for Nurse Educators Credits: 3

3 Credit Hours (3 clinical for a minimum of 180 contact/clock hours). This course provides the student a concentrated, experiential opportunity to function in the role as nurse educator. Core concepts include functional role responsibilities, teaching strategies and theory utilization. Emphasis is placed on professional role development and the concept of life-long learning.

Prerequisites: All required courses except NURSE 5598.

NURSE 5572NI Preceptorship I Credits: 5

This course provides opportunities to apply knowledge and skills from advanced nursing role, theory, research and neonatal clinical courses to the advanced therapeutic management of high-risk neonates. This is the first of two preceptorship courses. The other course, NURSE 5572II, can be taken concurrently or in consecutive semesters. Emphasis is placed on therapeutic measures within a conceptual framework or model applying findings from research relevant to comprehensive care of neonates. The client system will be the neonate and family.

Prerequisites: NURSE 5564N, NURSE 5566N.

NURSE 5581A Simulation in Healthcare-State of the Science, Ethical, and Theoretical Foundations Credit: 1

This course provides an introduction to principles, ethics, and theory guiding simulation education in healthcare. Emphasis is on analysis of the evidenced-based research related to simulation, and regulatory processes through interprofessional discussions.

NURSE 5581B Simulation in Healthcare-Development and Curricular Integration Credit: 1

This course introduces students to simulation center design, scenario development, and curriculum integration. Through inter-professional collaboration, students will examine the process of developing simulations and developing realistic, measurable objectives.

NURSE 5581C Simulation in Healthcare-Debriefing and Evaluation Methods Credit: 1

This course prepares students to evaluate learning in the simulation environment and facilitate debriefing. Evaluation methods based on simulation learning domains and objectives are explored.

NURSE 5583A Accreditation in Nursing Education –Procedural Overview and Accreditation Credit: 1

The course provides a foundational understanding of the accreditation process for the Accreditation Commission for Education in Nursing (ACEN) and Commission on Collegiate Nursing Education (CCNE). Procedural overview includes discussion on the accreditation self-study process, standards, on-site evaluation, and the accreditation decision-making process and accreditation. Emphasis will be placed on guidelines for assessment of student learning outcomes and preparation for continuing review.

NURSE 5583B Accreditation in Nursing Education –Accreditation Commission for Education in Nursing (ACEN) Credit: 1

This course builds upon foundational principles of accreditation by exploring the process as related to the Accreditation Commission for Education in Nursing (ACEN). Emphasis is placed on how to implement the accreditation process to successfully complete a self-study report.

Prerequisites: NURSE 5583A.

NURSE 5583C Accreditation in Nursing Education –Commission on Collegiate Nursing Education (CCNE) Credit: 1

This course builds upon foundational principles of accreditation by exploring the process as related to the Commission on Collegiate Nursing Education (CCNE). Emphasis is placed on how to implement the accreditation process to successfully complete a self-study report.

Prerequisites: NURSE 5583A.

NURSE 5587 Research Utilization in Nursing Credits: 3

This course will prepare nurses to implement a research utilization model to validate practice. The theoretical basis for research utilization and practical instances of its application in nursing will be examined. Opportunities will be provided to develop a research utilization plan to address a clinical area of practice.

Prerequisites: NURSE 5550, NURSE 5555.

NURSE 5590 Directed Scholarly Activity Credits: 1-2

This course provides individualized experiences to prepare the student for their comprehensive examination.

Prerequisites: Permission of the instructor.

Co-requisites: Completion of core course requirements.

NURSE 5597A Independent Study in Nursing/Patient Care-Elective Credits: 1-6

Guided study of selected topics and/or areas in nursing and/or patient care.

Prerequisites: NURSE 5550.

NURSE 5597AHA Independent Study in Nursing Credits: 1-6

NURSE 5597AS Independent Study In Nursing Credits: 1-6

Independent Study In Nursing

NURSE 5597B Independent Study in Nursing/Patient Care-Equivalent Credits: 1-6

Guided study of selected topics and/or areas in nursing and/or patient care.

Prerequisites: NURSE 5550.

NURSE 5597EPR Independent Study in Nursing Credits: 1-6

NURSE 5597HA Independent Study in Nursing Credits: 1-6

NURSE 5597LS Independent Study In Nursing Credits: 1-6

NURSE 5597P1 Independent Study in Nursing Credits: 1-6

NURSE 5597P2 Independent Study in Nursing Credits: 1-6

NURSE 5597PCF Independent Study In Nursing Credits: 1-6

NURSE 5597PF Independent Study In Nursing Credits: 1-6

NURSE 5597PN Independent Study Nursing Credits: 1-6

NURSE 5597ST Independent Study In Nursing Credits: 1-6

NURSE 5597WLA Indep Study in Nursing Credits: 1-6

Indep Study in Nursing

NURSE 5597WLB Indep Study in Nursing Credits: 1-6

Indep Study in Nursing

NURSE 5597WLC Indep Study in Nursing Credits: 1-6

Indep Study in Nursing

NURSE 5598 Directed Research Credits: 1-6

Individual research project for students to utilize beginning research skills in designing and conducting independent studies under the direction of the faculty.

Prerequisites: NURSE 5550, NURSE 5555.

NURSE 5599 Research Thesis Credits: 1-9

Individual study under the direction of a member of the faculty leading to the preparation and oral defense of a thesis.

Prerequisites: NURSE 5550, NURSE 5555.

NURSE 5601 Clinical Institute I Credit: 1

1 credit hour (1 didactic) This course provides an introduction to the knowledge and skills essential to becoming a graduate student. Students utilize theory, evidence based practice/research, and clinical expertise to become expert practitioners in their population foci. Content includes relevant UMKC policies and procedures, technology utilization to conduct library literature searches, access to course content on electronic platforms, and planning for success in graduate school. The literature review search progresses to application of the content, through written and verbal communication. Techniques building on critical thinking skills to start clinical diagnostic reasoning skills are introduced along with graduate school expectations and outcomes.

Prerequisites: Admission to the MSN or DNP programs.

NURSE 5602 Healthcare Systems & Leadership Credits: 3

This course focuses on the DNP as leader within the complex health care industry. Utilizing information technology, an in-depth study of the socio-political, economic, cultural and historical background of the American health care system the system of health professions will form the foundation for exploration of leadership needs the DNP leadership role.

Prerequisites: Admission to the DNP program.

NURSE 5603 Research Institute I Credits: 2

This course will provide a hands-on introduction to the process of becoming a research scientist. Content will include the responsible conduct of research, its core element, the emerging guideline, relevant UMKC policies and procedures, and the impact to the Researcher in his/her day-to-day activities. This course also includes literature reviews, scholarly writing, technology in the Research process, developing a program of scholarship and effective time management.

Prerequisites: Admission to the PhD program at the School of Nursing and Health Studies.

NURSE 5604 Research Institute II Credits: 2

This course will provide interactive sessions to develop skills necessary for the synthesis of research findings, the identification of funding sources and the initiation of the grant writing process. Also included will be the opportunity to develop and present research findings in multiple venues.

Prerequisites: NURSE 5603, Completion of 6 credit hours of PhD coursework.

NURSE 5607NA Health Care Policy and Leadership for the Nurse Anesthetist Credits: 2

This course provides an in-depth study of the health care policy process, emphasizing ways that Doctor of Nursing Practice (DNP) prepared Certified Registered Nurse Anesthetists (CRNAs) can incorporate health policy advocacy into their practice. The content prepares DNP CRNAs to be effective, innovative leaders in nurse anesthesia and health care. Students will participate in a leadership experience in one of four areas: education, research, administration, or politics.

Prerequisites: Active status in both UMKC SoNHS BSN-DNP NA program and the TMC School of Nurse Anesthesia.

NURSE 5608 Theory Development I Credits: 3

The philosophical underpinnings of nursing and the theoretical development of nursing science will be explored in this course. The discipline of nursing and the relationship between nursing theory, research, and practice will be discussed. Students will analyze nursing and non-nursing theories for research or clinical questions. Students will identify a theoretical framework to guide their research or evidence-based practice project.

Prerequisites: Twelve credit hours of graduate level course work, including NURSE 5550 and NURSE 5555, or their equivalents.

NURSE 5610 Theory Development in Nursing II Credits: 3

Nursing and non-nursing models, frameworks and theories will be analyzed and critically evaluated. Philosophical tenants will be debated. Students will identify the range of applicable theories for their area of research. Appropriate application of theories to independent and dependent variables, mediators and moderators, cofactors, correlates and outcomes will be explored. Students will develop concepts, hypotheses, and research goals that utilize an identified theory for nursing research.

Prerequisites: NURSE 5608.

NURSE 5611 Healthcare Economics & Quality Credits: 3

This course focuses on the principles of, and complex relationship between, cost and efficiency and effectiveness and health care quality outcomes. Economic perspectives and needs from industry, organizations, providers and consumers will all be examined. Throughout the course, issues regarding the inextricable link between cost and quality within the complex healthcare environment will be examined and addressed, with emphasis on DNP nurse intervention and leadership.

Prerequisites: Admission to the DNP program.

NURSE 5612 Statistics I Credits: 3

This graduate statistics online course is designed for students in the graduate programs. The course provides a comprehensive understanding of: describing data, logic of sampling, and test statistics; hypothesis testing, type 1 and type 2 errors; power; one-way ANOVA (analysis of variance); planned comparison, post-hoc tests and trend analysis; factorial ANOVA; repeated measures designs and mixed randomized repeated designs; simple and multiple regression; and ANCOVA (analysis of co-variance).

Prerequisites: Upper division undergraduate statistics course.

NURSE 5613 Application of Evidence-based Practice I Credits: 3

This course is designed to provide an analytic and systematic approach to evaluate evidence-based research and guidelines used in clinical practice. The course builds on methods of evidence-based practice (EBP), theoretical foundations, ethical principles, research design, and statistical analyses. The student will develop an evidence-based approach to address a clinical question and to construct an integrative literature review. In the course, an EPB project is designed to provide quality health care. The project plan incorporates the integrative literature review, scientific methods, outcome measurement, and data analysis.

Prerequisites: NURSE 5555, NURSE 5608.

NURSE 5614 Health Policy & Ethics Credits: 2

This course examines health policy and ethics as they intersect with other public policies. Legal, financial, and ethical issues associated with policy development and evaluation are critically examined.

Prerequisites: Admission into the Ph.D. in Nursing Program.

NURSE 5615NA Chemistry and Physics for the Nurse Anesthetist Credits: 3

This course is designed to provide the nurse anesthesia student a foundational knowledge needed for the provision of anesthesia. This course will review elements of general, organic, and biochemistry pertinent to understanding structure, characteristics and basic mechanisms of metabolic pathways and pharmacology routinely administered during the anesthetic period. Pertinent laws and principles of physics will be presented. The student will be prepared to apply pertinent laws and principles of physics to the provision of anesthesia services.

Prerequisites: Acceptance into School of Nurse Anesthesia Program.

NURSE 5616NA Anesthesia Crisis Resource Management Credit: 1

This course is designed for the graduate nurse anesthesia student to optimize their expert clinical judgement during low-frequency, high-acuity anesthesia crisis events. The history, importance, and theory of patient safety during dynamic anesthetic situations will be discussed, as well as specific skills and practices that improve performance. The goal of this course is for the student to develop knowledge and skills of Anesthesia Crisis Resource Management (ACRM) prior to graduation.

Prerequisites: NURSE 5619NA3.

NURSE 5617 Application of Evidence-based Practice II Credits: 3

This course is designed to provide an analytic and systematic approach to incorporation of evidence-based research into clinical practice. The course builds on the underpinnings of evidence-based practice (EBP) including theoretical foundations, ethical and cultural principles, quality, policy and economic considerations, design and methods, and statistical analysis of outcomes. In this course, the student will use the integrated literature review and principles of human subject protection to develop an evidence-based practice project proposal and submit the proposal for approval. Support for the EBP improvement plan includes technology and information systems.

Prerequisites: NURSE 5613.

NURSE 5617B Application of Evidence-based Practice II Credits: 3

In this course, the student will use the integrated literature review and principles of human subject protection to develop an evidence-based practice (EBP) project proposal. Students will collaborate with a site in preparation for the project. Support for the EBP improvement plan includes technology and information systems.

Prerequisites: NURSE 5617.

NURSE 5619NA1 Principles of Nurse Anesthesia Practice I Credits: 2

This course introduces the nurse anesthesia student to concepts necessary to plan and execute safe individualized anesthetics. Content includes assessment of co-morbid conditions and patient populations in anesthesia, appropriate plans of care, anesthetic techniques, prevention of complications, fluid management, monitoring and utilization of anesthesia equipment. Fundamental concepts and techniques essential to clinical anesthesia practice focus on theoretical, practical and professional considerations involved in the administration of general anesthesia, conscious sedation and regional anesthesia, inside and outside the operating room. Content includes evidence based student led conferences, anesthetic literature, morbidity and mortality, inter-disciplinary and intra-disciplinary conferences and use of informatics systems.

Prerequisites: NURSE 5619NAB.

NURSE 5619NA2 Principles of Nurse Anesthesia II Credits: 3

This course is designed to provide the nurse anesthesia student a broad knowledge base in multiple concepts, topics and techniques. This course builds on concepts learned in Principles I and delineates techniques of anesthesia management that are considered more situation specific with specialized diagnostic and anesthetic procedures. Primarily focused on patients and existing co-morbidities, the course intensively covers more advanced concepts and principles of anesthetic management including neurosurgical, thoracic, vascular and trauma procedures. Content includes evidence based student led morbidity and mortality conferences, inter-disciplinary and intra-disciplinary conferences, use of informatics systems and simulation based learning.

Prerequisites: NURSE 5619NA1.

NURSE 5619NA3 Principles of Nurse Anesthesia Practice III Credits: 3

The course covers advanced concepts and principles of anesthetic management with emphasis on cardio-thoracic anesthesia and anesthetic emergencies. The course builds on Principles I and II and focuses more on critical thinking, skill development, specific procedures utilized in anesthetic practice including advanced airway techniques and placement of invasive monitoring modalities as well as crisis management in anesthesia. Content includes evidence based student led conferences, utilization of anesthetic literature, morbidity and mortality, inter-disciplinary and intra-disciplinary conferences, use of medical informatics systems and simulation based learning.

Prerequisites: NURSE 5619NA2.

NURSE 5619NAB Basic Principles of Nurse Anesthesia Practice Credits: 2

This course is designed to build on topics introduced in orientation and provides the student with the knowledge needed to begin the delivery of anesthesia. This course encompasses a variety of topics including pharmacology and equipment utilized in the provision of anesthesia, airway anatomy and management, commonly administered fluid, colloids, non-colloids, and blood products and an overview of anesthesia and trauma. Lecture topics will be assimilated into high fidelity simulation scenarios to prepare the student for clinical residency courses.

Prerequisites: NURSE 5619NAO.

NURSE 5619NAO Orientation to Nurse Anesthesia Practice Credits: 2

This course is designed to give the first year nurse anesthesia student a broad field orientation to anesthesia topics. The course will provide a foundation of knowledge for the safe practice of anesthesia. This will be an initial introduction to the art and science of anesthesia. The course content will include: patient assessment of cardiac status for anesthesia, anesthetic equipment and workplace safety. The anesthesia machine is incorporated into the learning process to reinforce principles introduced in class. Institutional policies/procedures will be reviewed along with interprofessional communication skills. Education regarding personal wellness and substance abuse risks will be discussed.

Prerequisites: Admission into the DNP-NA program.

NURSE 5620 Advanced Practice V - DNP Clinical Credits: 5

This course is designed to increase the clinical expertise of the student by fostering the development of a specific area of focus. It allows the student to investigate specific procedures, skills or clinical knowledge that will be later utilized in the DNP practicum course. The course is designed to be self-directed allowing the student to focus on her/his own specific clinical interests and/or area of expertise. This five credit hour course consists of one credit hour of didactic and four credit hours of clinical (120 hours).

Prerequisites: All DNP coursework except NURSE 5624.

NURSE 5621A Clinical III Credits: 4

This course will provide students with the opportunity to apply knowledge from previous graduate courses to advanced primary care nursing of adults and geriatrics. The focus is to demonstrate refined advanced assessment, diagnosis, and treatment skills in clinical practice as appropriate in areas of specialization related to multiple disease processes associated in the care of adults and geriatrics. This practice will be based on the application of evidence in the biophysical, psychosocial, behavioral, sociopolitical, cultural, economic, interprofessional practice and nursing science arenas.

Prerequisites: NURSE 5564A- Ambulatory Care Of Adults

NURSE 5621C Clinical III Credits: 4

This course will provide students with the opportunity to apply knowledge from previous graduate courses to advanced primary care nursing of children. The focus is to demonstrate refined advanced assessment, diagnosis, and treatment skills in clinical practice as appropriate in areas of specialization related to multiple disease processes associated in the care of children. This practice will be based on the application of evidence in the biophysical, psychosocial, behavioral, sociopolitical, cultural, economic, interprofessional practice and nursing science arenas.

Prerequisites: NURSE 5566C.

Co-requisites: NURSE 5617B.

NURSE 5621F Clinical III Credits: 4

This course will provide students with the opportunity to apply knowledge from previous graduate courses to advanced primary care nursing of individuals and families. The focus is to demonstrate refined advanced assessment, diagnosis, and treatment skills in clinical practice as appropriate in areas of specialization related to multiple disease processes associated in the care of individuals and families. This practice will be based on the application of evidence in the biophysical, psychosocial, behavioral, sociopolitical, cultural, economic, interprofessional practice and nursing science arenas.

Prerequisites: NURSE 5566F.

Co-requisites: NURSE 5617B.

NURSE 5621W Clinical III Credits: 4

This course will provide students with the opportunity to apply knowledge from previous graduate courses to advanced primary care nursing of women. The focus is to demonstrate refined advanced assessment, diagnosis, and treatment skills in clinical practice as appropriate in areas of specialization related to multiple disease processes associated in the care of women. This practice will be based on the application of evidence in the biophysical, psychosocial, behavioral, sociopolitical, cultural, economic, interprofessional practice and nursing science arenas.

Prerequisites: NURSE 5566W.

Co-requisites: NURSE 5617B.

NURSE 5622 Statistics II Credits: 3

This graduate statistics on-line course is designed to provide a conceptual understanding of the statistical procedures associated with: advanced multiple regression; moderators and mediators in multiple regression; path analysis; logistic regression; factor analysis; MANCOVA; MANOVA; cluster analysis; and canonical correlation.

Prerequisites: NURSE 5612.

NURSE 5623A Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function at the highest level of advanced nursing practice. The focus is on the synthesis and application of previous theory, primary care, and specialty clinical courses. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include integrated nursing science with knowledge of ethical, legal, and health policy issues.

Prerequisites: NURSE 5621A.

Co-requisites: NURSE 5629.

NURSE 5623C Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function at the highest level of advanced nursing practice. The focus is on the synthesis and application of previous theory, primary care, and specialty clinical courses. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include integrated nursing science with knowledge of ethical, legal, and health policy issues.

Prerequisites: NURSE 5621C.

Co-requisites: NURSE 5629.

NURSE 5623F Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function at the highest level of advanced nursing practice. The focus is on the synthesis and application of previous theory, primary care, and specialty clinical courses. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include integrated nursing science with knowledge of ethical, legal, and health policy issues.

Prerequisites: NURSE 5621F.

Co-requisites: NURSE 5629.

NURSE 5623M Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function at the highest level of advanced nursing practice. The focus is on the synthesis and application of previous theory, mental health care, and specialty clinical courses. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include integrated nursing science with knowledge of ethical, legal, and health policy issues.

Prerequisites: NURSE 5621M.

Co-requisites: NURSE 5629.

NURSE 5623W Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function at the highest level of advanced nursing practice. The focus is on the synthesis and application of previous theory, primary care, and specialty clinical courses. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include integrated nursing science with knowledge of ethical, legal, and health policy issues.

Prerequisites: NURSE 5621W.

Co-requisites: NURSE 5629.

NURSE 5624 Advanced Practice VI-DNP Practicum Credits: 5

This course is designed to synthesize all previous coursework through the implementation and evaluation of a "tangible and deliverable academic product that is derived from the practice immersion experience" (DNP essentials, p.20). Individual student work may take a variety of forms, but will include the elements of evidence evaluation and utilization, systems analysis, and dissemination of best practice information.

Prerequisites: NURSE 5620.

NURSE 5627NA Regional Anesthesia Credit: 1

This course is designed for graduate nurse anesthesia students to review anatomy, pharmacodynamics, pharmacokinetics and physiological effects of local anesthetics and to learn techniques to administer various types of regional anesthesia.

Prerequisites: NURSE 5619NAB.

NURSE 5628NA1 Advanced Physical Health Assessment for the Nurse Anesthetist I Credits: 2

This is the first of a two course series that will present the various elements required to perform a systematic assessment with an emphasis on the patient preparing to undergo anesthesia throughout the lifespan. Integration of in-depth health history, physical and psychological signs and symptoms, diagnostic testing, pathophysiologic changes, psychosocial, and cultural characteristics of the individual are emphasized. Professional documentation and communication of findings will be practiced. The student will integrate knowledge and advanced assessment skills to perform a comprehensive pre-anesthesia assessment.

Prerequisites: NURSE 5619NA0.

Co-requisites: NURSE 5619NAB.

NURSE 5628NA2 Advanced Physical Health Assessment for the Nurse Anesthetist II Credit: 1

This is the second of a two course series. This course will integrate the student's knowledge and skills to work effectively and efficiently within the healthcare team to formulate an anesthesia plan of care which takes into consideration assessment findings related to underlying pathology, life circumstance, culture, and ethnicity. Content will include advanced diagnostic testing pertinent to the patient preparing for anesthesia. Assessment skills and critical thinking will be refined through clinical experiences. This course consists of 0.5 credit hours of didactic and 0.5 credit hours of clinical (45 hours).

Prerequisites: NURSE 5628NA1.

NURSE 5629 Clinical Institute III Credits: 3

This course is designed to synthesize all previous course work. The students will utilize education, knowledge and experiences to complete their final DNP project data collection and evaluation of a “tangible and deliverable academic product that is derived from the practice immersion experience” (AACN Essentials 2006, p. 20). Individual student work may take a variety of forms, but will include the multi-faceted elements required of evidence evaluation and utilization, systematic analysis, and dissemination of project data to support best practice.

Prerequisites: NURSE 5617B, NURSE 5621.

Co-requisites: NURSE 5623.

NURSE 5630 Health Care Systems Credits: 3

This course is a guided, in-depth exploration, analysis and evaluation of selected health care systems literature. Other nursing literature will be reviewed as appropriate.

Prerequisites: Admission into Ph.D. in Nursing program.

NURSE 5631 State of the Science Credits: 3

This course is a guided in-depth exploration of literature on a selected focus area. Appropriate contextual system literature will be reviewed as appropriate. Scholarly writing for a variety of contexts will be presented.

Prerequisites: Admission into a doctoral program and completion of a doctoral level theory course or permission of instructor

NURSE 5632 Health Restoration & Support Credits: 3

This course is a guided, in-depth exploration, analysis and evaluation of selected health restoration support literature. Other nursing literature will be reviewed as appropriate.

Prerequisites: Admission into Ph.D. in Nursing program.

NURSE 5636NA Obstetrical Anesthesia Credit: 1

This course is designed to provide the graduate nurse anesthesia student with a broad knowledge base in the field of obstetrical anesthesia. Anatomy and physiology of pregnancy, co-morbidities in the pregnant patient and anesthesia procedures for the pregnant patient will be presented. Lecture topics will be assimilated into high fidelity simulation scenarios to prepare the student for clinical residency courses.

Prerequisites: NURSE 5619NA1.

Co-requisites: NURSE 5619NA2.

NURSE 5637 Healthcare Outcomes and Epidemiology Credits: 2-3

This course is an application of basic epidemiologic principles. This course provides the foundation for assessment and evaluation of health outcomes in a variety of populations, clinical settings, and systems. Concepts introduced include fundamentals of epidemiology, determinants of health, screening, outbreak investigation, and disease surveillance. The course includes content on descriptive and analytic epidemiology. CRNA students enroll for 2-credits; all other DNP students are required to enroll for 3-credits.

Prerequisites: NURSE 5612 or equivalent.

NURSE 5638NA1 Pharmacology of Anesthesia I Credit: 1

The course is the first in a two semester sequence designed to provide the graduate nurse anesthesia student with the knowledge of pharmacology and the human physiologic responses to pharmacologic agents when administered to the patient perioperatively.

Prerequisites: NURSE 5619NA3.

NURSE 5638NA2 Pharmacology of Anesthesia II Credits: 2

This course is the second in a two semester sequence designed to provide the graduate nurse anesthesia student with the knowledge of pharmacology and the human physiologic responses to pharmacologic agents when administered to the patient perioperatively.

Prerequisites: NURSE 5638NA1.

NURSE 5640NA Pediatric Anesthesia Credit: 1

This course is designed for the graduate nurse anesthesia student to learn anatomy and physiology specific to the pediatric patient. The most common pathophysiologic states found in the pediatric surgical patient will be discussed as well as fluid management and pharmacology as it relates to the pediatric patient. The goal of this pediatric course is to give the student the basic knowledge of pediatric anesthesia as a foundation, prior to their pediatric clinical rotation.

Prerequisites: NURSE 5619NA2.

Co-requisites: NURSE 5619NA3.

NURSE 5641NA Acute and Chronic Pain Management Credits: 2

The student will develop a basic understanding of pain management as it relates to the field of anesthesia. Relevant anatomy, physiology, and pharmacology will be reviewed to evaluate the risks, benefits, and options of various pain management approaches. Students will be required to demonstrate proficiency in regional anesthesia techniques and management of pain in patients of all ages and varying stages of wellness.

Prerequisites: Nurse 5619NA1, Nurse 5619NA2.

NURSE 5642NA Comprehensive Review Credit: 1

This is a comprehensive review course that covers all areas of anesthesia, as well as all anesthesia techniques. This course will discuss normal physiology and pathophysiology of all organ systems and how various anesthesia techniques and pharmacology affect these systems. The student will be equipped with the knowledge of how to choose appropriate anesthetic techniques for various disease states and surgical procedures.

Prerequisites: NURSE 5619NA2.

Co-requisites: NURSE 5619NA3.

NURSE 5643NA Professional Practice for the Nurse Anesthetist Credits: 2

This course is designed to explore a range of non-clinical issues in nurse anesthesia practice. Students will gain an appreciation of the professional ideals of the Doctor of Nursing Practice (DNP) prepared Certified Registered Nurse Anesthetist (CRNA) through both online and on-site group discussion. In addition, students will attend professional meetings including: Student Registered Nurse Anesthetist (SRNA) Leadership Luncheon, Missouri Association of Nurse Anesthetists (MoANA) Lobby Day; Wellness in the Workplace, an event highlighting the risks of chemical dependency in nurse anesthesia practice; and one additional state or national professional meeting.

Prerequisites: Active status in both the UMKC SONHS DNP-NA Track and TMC School of Nurse Anesthesia.

NURSE 5650NA1 Clinical Anesthesia I Credits: 0

The first of three clinical anesthesia practicums designed to provide the nurse anesthesia student simulated learning and complete hands on, supervised clinical practice on adult patients. The foci are skill development and safe anesthetic practice throughout the perioperative period. Students are assigned day experiences and call shifts at Truman Medical Center. Experiences progress in acuity and include, but are not limited to, general, gynecological, orthopedic, oral maxillary facial, urologic, dental, ophthalmic and endoscopic procedures. Core content includes formulation and management of perianesthesia plan of care, utilization of technology, application of EBP, technical skill development and advanced practice role competencies.

Prerequisites: NURSE 5650NA0, NURSE 5619NAB.

NURSE 5650NA2 Clinical Anesthesia II Credits: 0

The second of three clinical anesthesia practicums designed to provide the nurse anesthesia student simulated learning and complete hands on, supervised clinical practice on adult patients. The foci are skill development and safe anesthetic practice throughout the perioperative period. Students are assigned day experiences and call shifts at Truman Medical Center. Experiences progress in acuity and include, but are not limited to, general, gynecological, orthopedic, oral maxillary facial, urologic, dental, ophthalmic and endoscopic procedures. Core content includes formulation and management of perianesthesia plan of care, utilization of technology, application of EBP, technical skill development and advanced practice role competencies.

Prerequisites: NURSE 5650NA1.

NURSE 5650NA3 Clinical Anesthesia III Credits: 0

The third of three clinical anesthesia practicums designed to provide the nurse anesthesia student simulated learning and complete hands on, supervised clinical practice on adult patients. The foci are skill development and safe anesthetic practice throughout the perioperative period. Students are assigned day experiences and call shifts at Truman Medical Center. Experiences progress in acuity and include, but are not limited to, general, gynecological, orthopedic, oral maxillary facial, urologic, dental, ophthalmic and endoscopic procedures. Core content includes formulation and management of perianesthesia plan of care, utilization of technology, application of EBP, technical skill development and advanced practice role competencies.

Prerequisites: NURSE 5650NA2.

NURSE 5650NA4 Clinical Anesthesia IV Credits: 0

This course is the first of a three semester nurse anesthesia residency/practicum designed to provide concentrated, experiential, supervised, high acuity, perioperative experiences. The focus is on the synthesis and application of all previous courses. Students will be expected to apply advance clinical decision-making skills and evidence-based practice guidelines to the assessment, management and evaluation of complex procedures and patients across the lifespan. Students attend specialty rotations at up to 9 different sites. Core concepts include nurse anesthesia practice, technical skill development, integration of technology and evidence based practice to the patient and/or healthcare system, and ethical, legal and professional issues.

Prerequisites: NURSE 5619NA3 and NURSE 5650NA3.

NURSE 5650NA5 Clinical Anesthesia V Credits: 0

This course is the second of a three semester nurse anesthesia residency/practicum designed to provide concentrated, experiential, supervised, high acuity, perioperative experiences. The focus is on the synthesis and application of all previous courses. Students will be expected to apply advance clinical decision-making skills and evidence-based practice guidelines to the assessment, management and evaluation of complex procedures and patients across the lifespan. Students attend specialty rotations at up to 9 different sites. Core concepts include nurse anesthesia practice, technical skill development, integration of technology and evidence based practice to the patient and/or healthcare system, and ethical, legal and professional issues.

Prerequisites: NURSE 5650NA4.

NURSE 5650NA6 Clinical Anesthesia VI Credits: 0

This course is the third of a three semester nurse anesthesia residency/practicum designed to provide concentrated, experiential, supervised, high acuity, perioperative experiences. The focus is on the synthesis and application of all previous courses. Students will be expected to apply advance clinical decision-making skills and evidence-based practice guidelines to the assessment, management and evaluation of complex procedures and patients across the lifespan. Students attend specialty rotations at up to 9 different sites. Core concepts include nurse anesthesia practice, technical skill development, integration of technology and evidence based practice to the patient and/or healthcare system, and ethical, legal and professional issues.

Prerequisites: NURSE 5650NA5.

NURSE 5650NAO Clinical Anesthesia Orientation Credits: 0

Orientation to clinical practice during which students participate in hands on, supervised clinical practices and simulated clinical learning experiences. Students orient to the Hospital, OR, and Anesthesia department. Clinical education focus is on safe anesthetic practice and skill development throughout the entire perioperative period. Experiences include basic airway management, equipment procurement, anesthesia assessment process, induction and emergence from anesthesia. Clinical orientation experiences include multiple patient populations, ages and sub specialties within anesthesia practice.

Prerequisites: NURSE 5619NAO.

Co-requisites: NURSE 5619NAB.

NURSE 5659NA Health Systems, Economics and Quality in Nurse Anesthesia Practice Credits: 2

This course is designed to introduce the nurse anesthesia student to the fundamental principles of healthcare economics and healthcare systems. The effects of economics will be discussed from a broad viewpoint and from the various perspectives of anesthesia care delivery models. This course will also discuss the impact of quality indicators on anesthesia practice. The course will begin with a leadership summit and continue with online content and discussion forums.

Prerequisites: NURSE 5674NA1.

NURSE 5661NA1 Anesthesia & Co-Existing Diseases I Credits: 2

This course is the first in a two semester series designed to provide senior nurse anesthesia students with the knowledge of pathophysiology of various disease states and their anesthesia implications.

Prerequisites: NURSE 5619NA3.

NURSE 5661NA2 Anesthesia & Co-Existing Diseases II Credit: 1

This course is the second in a two semester series designed to provide senior nurse anesthesia students with the knowledge of pathophysiology of various disease states and their anesthesia implications.

Prerequisites: NURSE 5661NA1.

NURSE 5662 Psychometrics Credits: 3

This course focuses on application of psychometric theories and practices related to instrumentation in nursing research. The basic methodologies and techniques for constructing, testing, and evaluating instruments will be discussed and applied by students. Content will focus on theoretical foundations of measurement, item construction, instrument design, item analysis, validity and reliability assessment. Criteria for evaluating existing instruments will also be discussed.

Prerequisites: NURSE 5612; NURSE 5622; NURSE 5668.

NURSE 5666 Designing Nursing Research Credits: 3

This doctoral level course directs the student to develop research writing skills necessary for developing their dissertation and future program of research. Critical analyses of methodologies and design are accomplished. The strengths and weakness of various research designs (non-experimental, quasi-experimental, experimental and randomized clinical trial) are evaluated via in-depth discussions.

Prerequisites: NURSE 5610, NURSE 5612, NURSE 5622, NURSE 5662, NURSE 5668, NURSE 5670.

NURSE 5668 Quantitative Research Credits: 3

Quantitative research methods used to build nursing's body of knowledge are explored. Experimental, quasi-experimental, and correlational designs and clinical trials are analyzed. Emphasis is placed on design, data generation, analysis, and dissemination of findings. Issues pertaining to the use of quantitative methods will also be explored.

Prerequisites: NURSE 5610, PSYCH 5516.

NURSE 5670 Qualitative Research Methods Credits: 3

Qualitative research methods used to build nursing's body of knowledge are explored in this seminar course. Emphasis is placed on design, data generation and analysis, and dissemination of findings. Issues regarding qualitative research are identified and analyzed.

Prerequisites: Admission to the Nursing Ph.D. program.

NURSE 5671 Advanced Qualitative Research and Mixed Methods Credits: 3

This graduate level course is designed for students who have had an introduction to qualitative research methods and want to pursue more in-depth study of these methodologies, with emphasis on a chosen methodology that they hope to use in their own research. Appropriateness of methodological choice in relation to research question, application of theory, rhetorical style and author presence, and criteria for judging quality will be among the topics explored for various methodologies and data generation (collection) and data analysis skills will be practiced. The course will also acquaint students with the growing literature on mixed methods research.

Prerequisites: Admission to the Nursing Ph.D. program, an introductory qualitative research course.

NURSE 5674NA1 Scholarly Project in Nurse Anesthesia I Credits: 3

This is the first in a series of four courses that culminate in a scholarly project in nurse anesthesia that demonstrates the scholarship of integration and application. This is a distance education course. The student will identify a complex problem in their area of interest and expertise, design, implement, and evaluate an innovative solution to this problem. The student will use the breadth of knowledge and scholarship skills gained through their program of study to improve practice and/or patient outcomes. It validates the student's ability to translate research evidence into practice. This project lays the foundation for future scholarship.

Prerequisites: NURSE 5555.

NURSE 5674NA2 Scholarly Project in Nurse Anesthesia II Credits: 2

This is the second in a series of four courses that culminate in a scholarly project in nurse anesthesia that demonstrates the scholarship of integration and application. This is a distance education course. The student will identify a complex problem in their area of interest and expertise, design, implement, and evaluate an innovative solution to this problem. The student will use the breadth of knowledge and scholarship skills gained through their program of study to improve practice and/or patient outcomes. It validates the student's ability to translate research evidence into practice. This project lays the foundation for future scholarship.

Prerequisites: NURSE 5674NA1.

NURSE 5674NA3 Scholarly Project in Nurse Anesthesia III Credits: 2

This is the third in a series of four courses that culminate in a scholarly project in nurse anesthesia that demonstrates the scholarship of integration and application. This course is a face-to-face course. The student will identify a complex problem in their area of interest and expertise, design, implement, and evaluate an innovative solution to this problem. The student will use the breadth of knowledge and scholarship skills gained through their program of study to improve practice and/or patient outcomes. It validates the student's ability to translate research evidence into practice. This project lays the foundation for future scholarship.

Prerequisites: NURSE 5674NA2.

NURSE 5674NA4 Scholarly Project in Nurse Anesthetist IV Credits: 2

This is the fourth in a series of four courses that culminate in a scholarly project in nurse anesthesia that demonstrates the scholarship of integration and application. This course is a face-to-face course. The student will identify a complex problem in their area of interest and expertise, design, implement, and evaluate an innovative solution to this problem. The student will use the breadth of knowledge and scholarship skills gained through their program of study to improve practice and/or patient outcomes. It validates the student's ability to translate research evidence into practice. This project lays the foundation for future scholarship.

Prerequisites: NURSE 5674NA3.

NURSE 5696 Pre-Dissertation Credits: 1-2

This course is individually directed research leading to the preparation of a doctoral dissertation.

Prerequisites: Permission of the instructor.

Co-requisites: Completion of the comprehensive examination.

NURSE 5697A Special Topics Nursing Elective Credits: 1-6

This course consists of the guided study of special topics in areas of nursing theory and/or research.

Prerequisite: Admission into PhD in Nursing Program

NURSE 5697APP Special Topics Nursing Credits: 1-6**NURSE 5697AR Special Topics Nursing Credits: 1-6****NURSE 5697B Special Topics Nursing-Equivalent Credits: 1-6**

This course will cover guided study of course equivalent topics in areas of nursing theory and/or research.

Prerequisites: Admission into Ph.D. in Nursing program.

NURSE 5697CI Special Topics Nursing Credits: 1-6**NURSE 5697CP Special Topics Nursing Credits: 1-6****NURSE 5697CR Special Topics Credits: 1-6**

This course will cover guided study of course equivalent topics in areas of nursing theory and/or research.

Prerequisites: Admission into Ph.D. in Nursing program.

NURSE 5697DP Special Topics Nursing Credits: 1-6

NURSE 5697HER Special Topics in Nursing Credits: 1-6

NURSE 5697RD Special Topics Nursing Credits: 1-6

NURSE 5697SHA Special Topics-Nursing Credits: 1-6
Special Topics-Nursing

NURSE 5697SHB Special Topics Nursing Credits: 1-6
Special Topics Nursing

NURSE 5697SHC Special Topics Nursing Credits: 1-6
Special Topics Nursing

NURSE 5697WLA Special Topics in Nursing Credits: 1-6
Special Topics in Nursing

NURSE 5697WLB Special Topics in Nursing Credits: 1-6
Special Topics in Nursing

NURSE 5697WLC Special Topics in Nursing Credits: 1-6
Special Topics in Nursing

NURSE 5699 Dissertation Research Credits: 1-12

Individual directed research leading to preparation and completion of doctoral dissertation.

NURSE 5899 Required Graduate Enrollment Credit: 1

Oboe (OBOE)

Courses

OBOE 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

OBOE 5500A Graduate Oboe-Secondary Credits: 2

OBOE 5500B Special Applied Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

OBOE 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

OBOE 5501 Graduate Oboe-Master Performance Credits: 4

OBOE 5601 Graduate Oboe - Doctoral Performance Credits: 4

Oral & Craniofacial Sciences (OR-BIO)

Courses

OR-BIO 5699 Dissertation Research Credits: 1-12

Ph.D. dissertation research.

OR-BIO 5702 Biomechanics of Mineralized Tissue Credits: 3

The physical principles underlying mineralized tissue biomechanics will be presented at multiple hierarchies. Details of bone, tooth and joint (with a special emphasis on the TMJ) anatomy and function will be outlined as related to mechanical loading.

Organ (ORGAN)

Orthodontics (ORTHOD)

Courses

ORTHOD 5704 Orthodontics And Dentofacial Orthopedics I Credits: 1-6

Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

ORTHOD 5705 Orthodontic and Dentofacial Orthopedics II Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5704.

ORTHOD 5706 Orthodontics and Dentofacial Orthopedics III Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5705.

ORTHOD 5707 Orthodontics and Dentofacial Orthopedics IV Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5706.

ORTHOD 5708 Orthodontic and Dentofacial Orthopedics V Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5707.

ORTHOD 5709 Orthodontic and Dentofacial Orthopedics VI Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5708.

ORTHOD 5710 Orthodontic and Dentofacial Orthopedics VII Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5709.

ORTHOD 5711 Orthodontics and Dentofacial Orthopedics VIII Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5710.

ORTHOD 5726 Cephalometric I Credits: 2

An introductory lecture and laboratory course in the principles of radiographic cephalometry and integrated cephalometric analysis.

ORTHOD 5727 Cephalometric II Credits: 2

An advanced lecture and laboratory course with emphasis on the use of a computer in cephalometric analysis.

Percussion (PERCSN)

Courses

PERCSN 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

PERCSN 5500A Graduate Percussion-Secondary Credits: 2**PERCSN 5500B Special Applied Studies Credits: 2**

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

PERCSN 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

PERCSN 5500JA Graduate Applied Jazz Studies Credits: 2

One-hour lesson weekly. Jury examination is required.

Prerequisites: Graduate standing.

PERCSN 5500JB Special Applied Jazz Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.

Prerequisites: Graduate standing.

PERCSN 5500JC Applied Jazz Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied jazz study in an area other than, and in addition to, their primary performance study.

Prerequisites: Graduate standing.

PERCSN 5501 Graduate Percussion - Masters Performance Credits: 4

PERCSN 5601 Graduate Percussion - Doctoral Performance Credits: 4

Periodontics (PERIO)

Courses

PERIO 5701 Periodontal Residency I Credits: 1-6

Clinical Periodontics with Related Didactics and Seminar. This first year course introduces the incoming advanced education student to the principles and techniques in the field of advanced periodontics.

PERIO 5702 Periodontal Residency II Credits: 1-6

Clinical Periodontics with Related Didactic and Seminar. This first year course continues the instruction of the advanced education student to the principles and techniques in the field of advanced periodontics.

Prerequisites: PERIO 5701.

PERIO 5703 Periodontal Residency III Credits: 1-6

Clinical periodontics, with related didactics and seminar. This first year course continues the instruction of the advanced education student to the principles and techniques in the field of advanced periodontics, and builds upon the material taught in previous courses as well as introduces new information.

PERIO 5704 Periodontal Residency IV Credits: 1-6

Clinical periodontics with related didactics and seminar. This second year course is designed to transition the first year student into a second year advanced education student and builds upon the material taught in previous courses as well as introducing new information.

Prerequisites: PERIO 5701, PERIO 5702, PERIO 5703.

PERIO 5705 Periodontal Residency V Credits: 1-6

Clinical Periodontics with Related Didactics and Seminar. This second year course continues the instruction of the advanced education student to the principles and techniques in the field of advanced periodontics, and builds upon the material taught in previous courses as well as introducing new information.

Prerequisites: PERIO 5704.

PERIO 5706 Periodontal Residency VI Credits: 1-6

Clinical Periodontics with Related Didactics and Seminar. This second year course is designed to build upon the In-depth knowledge base of the advanced education student, as well as introducing new information, transitioning the student into a more proficient student in advanced periodontics.

Prerequisites: PERIO 5705.

PERIO 5707 Periodontal Residency VII Credits: 1-6

Clinical Periodontics with Related Didactics and Seminar. This third year course serves to transition the student into a clinician who by repeated action exhibits in depth levels of knowledge and skill. It builds upon material previously taught.

Prerequisites: PERIO 5706.

PERIO 5708 Periodontal Residency VIII Credits: 1-6

Clinical Periodontics with Related Didactics and Seminar. This third year course builds upon information previously taught and completes the transition of the student into a proficient specialist in Periodontology.

Prerequisites: PERIO 5707.

PERIO 5709 Periodontal Residency IX Credits: 1-6

Clinical Periodontics with Related Didactics and Seminar. This third year course is designed to build upon the in-depth information and knowledge base previously taught and completes the transition of the student into a proficient specialist in periodontology.

Prerequisites: PERIO 5708.

PERIO 5719 Implantology Credits: 2

This 2 credit hour seminar is designed for a student in the Advanced Education Program in Periodontology to develop in-depth knowledge of the concepts and theories of implant dentistry as they relate to periodontist. It will provide basic and advanced information and guidance which will serve to complement course work in PERIO 5702 through PERIO 5709, and the clinical implant dentistry experience offered in the program, at a minimum to a level of competency.

PERIO 5720 General Anesthesia Credit: 1

A rotation to the Department of Anesthesiology of K.C. Veterans Administration Medical Center. Students become familiar with operating room procedures, medical emergencies, venipuncture, airway maintenance and pharmacophysiology of sedative, analgesic and anesthetic agents as well as drug interactions.

PERIO 5799 Research And Thesis Credits: 1-6

PERIO 5899 Required Graduate Enrollment Credit: 1

Pharmacy (PHARM)

Courses

PHARM 5507 Basic Pharmacology Credits: 3

Basic pharmacological concepts and important classes of pharmacologic agents.

Prerequisites: BIOLOGY 218, LS-PHYS 217.

PHARM 5508 Medicinal Chemistry of Drug Classes Credits: 3

This course will focus on major drug classes, both natural and synthetic, with emphasis on their chemical properties, their mode of action, their structure-activity relationships, and their metabolic fate. Structure-activity relationships and the influence of organic functional groups on physicochemical properties of drugs and their pharmacological activities will be emphasized. Drug metabolism will also be covered, with a focus on organic functional group transformations.

PHARM 5509 Toxicology Credits: 3

Principles of general toxicology and toxicology of industrial and household chemicals, agricultural agents, social poisons, and selected therapeutic agents.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 5519 Pharmacology I Credits: 2

Basic pharmacological principles of drug absorption, distribution, metabolism and elimination; concept of drug-receptor interactions; dose-response relationships and mechanism of action; and signaling mechanisms.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 5520 Pharmacology II Credits: 4

Principles of and advances in chemotherapy, biology, mechanism of action; clinical applications and adverse effects of various drug groups.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 5521 Advanced Organic Medicinal Chemistry Credits: 3

The focus of this course is an examination of the physical-chemical basis of drug action, particularly focusing on the formation of drug-target complexes. This includes the mathematical description of this binding, as well as an advanced description of the physical forces responsible for binding. In addition we will examine the energetic and entropic factors that contribute to complex stability, examining real world examples when possible.

PHARM 5527 Analytical Methods Credits: 3

A detailed study of the methods used to detect, identify, and quantitate drugs, small molecules, enzymes, proteins, and biological molecules. The statistical foundation, core concepts, and practical implementation of analytical methods are areas of emphasis. State-of-the-art instrumentation and recent technological developments are also presented, including biotechnology based methods such as proteomics methods and quantitative PCR.

PHARM 5530 Pharmacology III Credits: 4

Mechanism of action; therapeutic uses; and adverse effects of drugs affecting different organ systems.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 5531 Physical Pharmacy Equilibria Credits: 3

Advanced principles of aqueous solutions, acid-base equilibria, solubility and complexation. Mathematical solutions and state-of-the-art research applications.

Prerequisites: B.S. in pharmacy.

PHARM 5533 Advanced Pharmacokinetics and Biopharmaceutics Credits: 3

This course involves the study of the rates at which drug absorption, distribution, metabolism, and excretion occur in the body following medication administration. The student will be expected to kinetically model a given physiological process associated with the disposition of a drug in any tissue, write a series of equations, and then solve those equations to produce a final set of equations that can be used to predict the concentrations of drug in the biological matrix of interest. Knowledge of derivation of equations is expected, along with real-world application of resulting equations.

Prerequisites: PHARM 7303 and MATH 345 (both with a grade of B or better).

PHARM 5550 Stability of Pharmaceuticals Credits: 3

The course provides instruction in the processes responsible for instability of pharmaceuticals. Course content includes, but is not limited to, instability due to light, oxygen, and metal ions; the effect of temperature on the rate of drug decomposition; the effect of dielectric constant and ionic strength on degradation; and physical and chemical instability of newer polypeptide drugs. In addition, practical strategies to prevent instability of the active compound and excipients used in pharmaceutical formulations is provided.

Prerequisites: MATH 210, PHARM 7202, PHARM 7203.

PHARM 5555 Religion, Culture and Health Credits: 3

This course addresses the impact of religious beliefs on the culture practices of contemporary society, and aims at examining the relationship between these beliefs, modern sciences and health.

PHARM 5560 Discussions in Pharmacology Credit: 1

Discussions in Pharmacology (also called Pharmacology Journal Club), is a graduate course. It is designed to provide graduate student the opportunity to read, interpret and present literature to fellow peers, post-docs and faculty. The Journal Club presentations promote active and lively discussion and exchange of ideas. The class is a mandatory requirement for all graduate students in the Division of Pharmacology Toxicology.

Prerequisites: B.S. (or equivalent) in biology, chemistry, pharmacy or related biomedical sciences.

PHARM 5580A Seminar in Pharmaceutical Sciences Credit: 1

Enrollment and participation required of all graduate students in the School of Pharmacy during each semester of graduate study.

PHARM 5580C Seminar in Pharmacology/Toxicology Credit: 1

Enrollment and participation required of all graduate students in the School of Pharmacy during each semester of graduate study.

PHARM 5588 Biotechnology Credits: 3

In this graduate course, the principle theories, techniques and strategies to conduct experiments using common biotechnology/molecular biology techniques will be discussed. The course material has been designed to provide up to date information on techniques in biotechnology. Knowledge on these basic biotechnology/molecular biology techniques will be useful in diverse fields like biochemistry and pharmaceutical sciences to work with nucleic acid and proteins (or equivalent) in biology, chemistry, pharmacy or related discipline.

PHARM 5590A Special Topics Pharmacy Credits: 1-3**PHARM 5599A Research And Thesis Pharmacy Credits: 1-9****PHARM 5599C Research And Thesis Pharmacology Credits: 1-9****PHARM 5605 Fundamentals of Pharmaceutical Sciences Credits: 3**

This is an entry-level graduate course for all incoming graduate students who select Pharmaceutical Sciences either as the primary discipline or co-discipline. The course will teach the fundamentals of the Pharmaceutical Science discipline. The fundamentals include drug discovery, drug absorption and metabolism, formulation development, physical pharmacy, pharmaceuticals, drug delivery, molecular biology, cell biology, medicinal chemistry, and pharmacokinetics.

PHARM 5615 Methods In Pharmacology And Toxicology Credits: 3

Exposure to some of the techniques employed in research in pharmacology and toxicology. There are eight one-hour introductory lectures for the course, followed by six hours of laboratory per week.

PHARM 5630 Cytochrome P450: Drug Metabolism, Bioavailability, Interactions and Toxicity Credits: 3

This course is designed to provide students up-to-date scientific facts on drug metabolism, bioavailability interactions, and toxicity (DMBIT) in perspective of cytochrome P450 (CYP) and the factors that affect DMBIT. The course will also include prospects of CYP applications for various purposes in reference to drug metabolism. The course will include lectures, lab experience, and student seminar/report.

Prerequisites: B.S. (or equivalent) in chemistry, biology, pharmacy, or related subject.

PHARM 5631 Pharmaceutical Formulations I Credits: 3

Advanced theory and practice of Pharmaceutical formulations, including classical and current research. This course will introduce the principles of biomaterial based drug delivery systems and unify knowledge from the fields of biology, materials science, and pharmaceuticals.

Prerequisites: B.S. in Pharmacy.

PHARM 5632 Novel Drug Delivery Systems Credits: 3

The course offers up-to-date information about drug transport mechanisms and drug absorption processes across various absorptive membranes ie., buccal, nasal, dermal, corneal, pulmonary, and oral mucosae. The course material has been designed to provide current ideas and thinking about gene delivery, drug targeting to tumor cells and lipid and carrier mediated drug delivery. It provides unique information about cell culture models as a predictor of drug delivery as well as physical chemistry of surfaces in various microparticulates and lipid emulsion systems.

PHARM 5633 Receptor Pharmacology and Signal Transduction Credits: 3

Molecular characterization of drug receptors involving quantitative description of functional studies with agonists and antagonists and binding of ligands to receptors; the molecular structure of receptors and the signaling systems that couple receptors to their pharmacologic functions.

Prerequisites: LS-BIOC 370, PHARM 5519, PHARM 5520, PHARM 5530.

PHARM 5634 Protein and Nucleic Acid Drug Delivery Credits: 3

In the graduate course, the principle theories, techniques and strategies in developing protein and nucleic acid drugs will be discussed. The course material has been designed to provide up to date information in protein and nuclear acid drug delivery. It offers unique information on how to combine knowledge of chemistry, molecular biology and pharmaceutical sciences to achieve successful therapeutic application of protein and nucleic acid.

Prerequisites: B.S. in bioengineering, biology, chemistry, pharmacology, or pharmacy.

PHARM 5640 Biochemical and Molecular Toxicology Credits: 3

This course will provide students with a comprehensive mechanistic understanding of various molecular events that lead to and/or are associated with chemically/environmentally induced degenerative or proliferative diseases. The course will include lectures student presentations of recent advances in biochemical and molecular toxicology and student report on a topic of interest as it pertains to the subject being taught. The title of the report has to be approved by the course coordinator.

Prerequisites: B.S. (or equivalent) in biochemistry, biology, chemistry, or molecular biology.

PHARM 5645 Cancer Biotechnology I Credits: 3

This course is designed to provide a basic understanding of tumor progression, molecular events and signaling mechanisms underlying tumor formation. Epidemiological approaches, etiology, and current methods of detection and diagnosis of cancer will be discussed. Current pharmacological management strategies of cancer and future therapeutic interventions will also be reviewed.

Prerequisites: BIOLOGY 202 (or equivalent).

PHARM 5690BB Special Topics Toxicology Credits: 1-3**PHARM 5690C Special Topics Pharmacology Credits: 1-3****PHARM 5690PCII Special Topics Pharmacy Credits: 1-3**
Special Topics Pharmacy**PHARM 5699 Research and Dissertation Credits: 1-16**

Available for Doctorate program with the following emphasis areas: (A) Pharmacy, (B) Pharmaceutical Chemistry, (C) Pharmacology, (AA) Pharmacy Administration, and (BB) Toxicology.

PHARM 5699A Research And Dissertation - Pharmacy Credits: 1-16**PHARM 5699B Research And Dissertation Pharmaceutical Chemistry Credits: 1-16****PHARM 5699BB Research And Dissertation Toxicology Credits: 1-16****PHARM 5699C Research And Dissertation Pharmacology Credits: 1-16****PHARM 5899 Required Graduate Enrollment Credit: 1****PHARM 7100A Introductory Topics in Pharmacy I Credit: 1**

These courses include presentations and discussions on the profession of pharmacy including: the roles and responsibilities of the pharmacist, educational requirements to obtain the degree, career opportunities, student life, legal and ethical issues, and study skills development.

PHARM 7101 Introduction to the Professional Degree Program and Pharmacy Practice Credits: 2

This course introduces students to the profession of pharmacy by communicating drug names, defining drug-related problems and discussing professional responsibilities and roles of a pharmacist. Students will examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth following completion of various self-assessments. This course also assists students to assume responsibility for their own learning. One 2-hour class session is held per week.

Prerequisites: Admission to the Pharm.D. Program.

PHARM 7110 Professional Skills II: Pharmacy Calculations Credits: 2

This course provides instruction in performing and applying the necessary calculations involved in pharmacy practice and the dispensing, manufacturing and preparation of dosage forms. Topics covered include but are not limited to: fundamentals of pharmaceutical calculations, exponents, ratios, percentages, proportions and fractions); International System of Units; pharmaceutical measurements; interpretations of medication orders and prescriptions; density, specific gravity and specific volume; patient specific parameters involved in dosing (surface area, weight and age); isotonicity and buffer solutions; milliequivalents, millimoles and milliosmoles; dilution, concentration and allegation; and reduction/enlargement of formulas. Students must have an understanding of mathematical principles to include algebra and calculus.

Prerequisites: MATH 210.

PHARM 7151 Introduction to Pharmacy Law Credit: 1

This course will examine the federal laws that pertain to the practice of pharmacy.

PHARM 7199 Pharmacy Grand Rounds Credits: 0.25

The School of Pharmacy offers Grand Rounds seminars for the student body regarding timely and important topics and issues facing the profession of the School.

PHARM 7202 Pharmaceutics I Credits: 3

Overall, in this course, the principles of chemistry, physics and mathematics are applied to the pharmaceutical sciences. Elements of mathematics, states of matter, acid-base chemistry, solubility, partitioning, isotonicity, interfacial phenomena, rheology, reaction kinetics, incompatibilities, and stabilization of pharmaceutical formulations and dispersed systems will be considered.

Prerequisites: MATH 210, PHYSICS 210, CHEM 322R, PHARM 7110.

PHARM 7203 Pharmaceutics II Credits: 3

Discussion of pharmaceutical processes, equipment and material used in drug delivery systems and the preparation and evaluation of various drug delivery systems and formulations.

Prerequisites: PHARM 7202.

PHARM 7203L Pharmaceutics II Lab Credit: 1

In this lab course, students will perform hands-on pharmaceutical processes, use manufacturing equipment, and prepare formulations in which selected dosage forms are manufactured and evaluated. This is a professional elective option for Pharm.D. students.

Prerequisites: PHARM 7202.

Co-requisites: PHARM 7203.

PHARM 7223 Rural Health and Agricultural Medicine Credits: 2

Intended to introduce inter-professional health professions students to agricultural health and rural medicine in order to prepare them to serve rural populations. Provided in collaboration with the Great Plains Center for Agricultural Health Safety, this course will provide a solid foundation in prevention strategies for safety and health in production agriculture. Students will recognize relevant demographic, socioeconomic and social determinants of health. Participants will be equipped with resources and tools that can support them in their future service to rural communities and emphasize the importance of interdisciplinary collaboration among health professions in order to reduce risks and optimize health.

Prerequisites: Students must be enrolled in health professions coursework.

PHARM 7224 Introduction to Cannabis Medicine Credit: 1

The course will serve as an introduction to the endogenous cannabinoid system and explore the clinical potential and the clinical, social, and legal problems associated with medicinal use of cannabis and cannabinoid medicines.

PHARM 7231 Drug Development and Pharmaceutical Career Opportunities Credits: 2

An introduction to the drug development industry and the process by which a new drug is brought to market. Students will use knowledge gained in previous coursework to deepen their understanding of how the biopharma and pharmaceutical industry functions. There will be an overview of discovery, preclinical, clinical, regulatory, drug safety, marketing, and medical affairs functions within the pharmaceutical industry. Opportunities that exist for Doctor of Pharmacy graduates to develop careers in these areas will also be discussed.

Prerequisites: PHARM 7101 or PHARM 7489.

PHARM 7233 U.S. Health Care System and Marketing Credits: 3

U.S. Health Care System and Marketing is a required course for the Doctor of Pharmacy degree program at The University of Missouri -Kansas City School of Pharmacy. It consists of two modules: U.S. Health Care System and Medication Safety (Module I) , and Health Care Marketing (Module 2). The learning objectives of the course are to (1) characterize components of the U.S. health care system at the macro level, including public health programs; (2) discuss medication errors and management within the U.S. health care system; (3) manage patients' health care needs using technological resources to optimize safety and efficacy of medication use systems; and (4) analyze the marketing process for health care projects and services, including business ethics in marketing activities. This course provides the context and builds the knowledge base for future required courses in economic, social, and administrative sciences.

PHARM 7244 Introduction to Drugs of Abuse Credits: 2

As a health professional in training, it is important to know the mental and behavioral effects of abusing both prescription and illicit substances. This knowledge will help the health professional to be more understanding of their patients who may be suffering with a substance abuse problem. Introduction to Drugs of Abuse will focus on both the physical and psychological effects of substances such as hallucinogens, amphetamines, alcohol, and nicotine among others. The course will also be discussing important topics such as behavioral modification, the controversies of treatment, and the role of the pharmacist in the treatment of substance abuse. A substantial focus will also be placed on patient experiences and the psycho-social aspects of substance abuse.

Prerequisites: BIOLOGY 218, BIOLOGY 218L.

Co-requisites: LS-PHYS 399, LS-PHYS 400.

PHARM 7245 Top Drugs I Credit: 1

This 1.0 hour course is designed as an introduction to up to 300 of the most commonly prescribed medications. This course will provide students with the opportunity to learn basic drug knowledge including brand (trade) and generic names, narcotic class, therapeutic class, common dosage forms, and FDA approved indications, dosing, pharmacology/pharmacokinetics, drug interactions, contraindications/precautions, and adverse effects.

Prerequisites: Successful completion of the P1 year in the Pharm.D. Program

PHARM 7266 Medical & Medication Error Evaluation & Management Credit: 1

A course designed to discuss the current body of evidence with respect to medical quality, medication errors, and strategies used to improve quality minimize error rates. At the completion of the course, the student should be able to (1) review and synthesize evidence within the literature; (2) describe the policy framework designed to improve health care quality; (3) describe characteristics and factors that enable encourage providers to improve the quality of care; (4) describe common causes of medication errors; (5) differentiate strategies to prevent errors; (6) correlate medication errors and specific disease states.

PHARM 7275 The Pharmacists' Role in Global Health Credits: 2

This course is designed to introduce students to the global context of public health. "Global Health" is defined as the application of principles of public health to health issues and challenges that transcend geopolitical boundaries, and to the complex array of global and local forces that affect these health issues.

PHARM 7277 Zoonotic Illnesses Credit: 1

A zoonotic illness is a disease that can be transmitted from animals to humans – over 60% of all human infections are zoonotic. The purpose of this course is to increase student knowledge relative to infectious diseases caused by zoonotic transmission/pathogens. Topic discussion will include background evolution of the disease, diagnostic considerations, management, monitoring and reporting of the infectious diseases to the local health department. This course will serve to reinforce the principles of infectious diseases pharmacotherapy and further expose students to diseases encountered in rural Missouri (i.e. tick bites, farm animals). Classes are didactic in nature.

Prerequisites: Microbiology course from any accredited college or university.

PHARM 7289 Introduction to Complementary and Alternative Medicine Credit: 1

An elective course designed to introduce a variety of the most common complementary and alternative medicine (CAM) modalities. Each modality will be defined and explained and any clinical evidence for or against will be discussed. An important emphasis will be on how patient use of these therapies may affect their needs for medication therapy management and counseling. For example, patients who see a naturopathic physician may be more likely to use herbal therapies that may interact with their prescription medications.

Prerequisites: Good standing in the P2 Doctor of Pharmacy year; P1 students may enroll with instructor approval.

PHARM 7303 Pharmacokinetics and Biopharmaceutics Credits: 3

This course involves the study of the rates at which drug absorption, distribution, metabolism, and excretion occur in the body following medication administration. The student will be taught to calculate pharmacokinetic parameters, and then utilize those values to optimize pharmacotherapy in his/her patient. So as to promote inter-professional healthcare dialogue, this course will demonstrate how to make informed recommendations associated with both drug administration and monitoring to medical and nursing healthcare providers. Recommendations include, but are not limited to, suggesting changes in the dose, dosing frequency, infusion rate, steady-state plasma drug concentrations, 'peak' and 'trough' plasma drug concentrations, drug/drug interactions, drug/food interactions, and dosing adjustment in the context of diminished kidney or liver function.

PHARM 7307 Advanced Pathophysiology Credits: 4

Advanced pathophysiology I is the study of the alterations of normal physiological functioning in cellular, tissue, organ, and organ systems. These alterations form the basis for understanding a variety of pathophysiological conditions and the manifestations and impact of abnormal physiological functioning on patients across the life span. Advanced pathophysiology I deals with both generalized disease processes and major organ system dysfunction. Students will have the opportunity to identify clinical signs and symptoms for various disease states and associate those symptoms with pathophysiological changes. The focus of this course is not on the pharmacologic management of disease, though medication management categories may be briefly introduced as it relates to mechanism of action and the physiologic abnormality contributing to the disease state.

Prerequisites: LS-BIOC 370, LS-PHYS 400.

Co-requisites: PHARM 7362, PHARM 7245.

PHARM 7308 Advanced Pathophysiology II Credits: 3

Advanced pathophysiology II is the study of the alterations of normal physiological functioning in cellular, tissue, organ, and organ systems. These alterations form the basis for understanding a variety of pathophysiological conditions and the manifestations and impact of abnormal physiological functioning on patients across the life span. Advanced pathophysiology II deals with both generalized disease processes and major organ system dysfunction. Students will have the opportunity to identify clinical signs and symptoms for various disease states and associate those symptoms with pathophysiological changes.

Prerequisites: LS-BIOC 370, LS-PHYS 400, PHARM 7307.

Co-requisites: PHARM 7363, PHARM 7345.

PHARM 7310 Academic Service Learning I Credit: 1

Academic Service Learning is a professional elective course where students are assigned to either an area clinic in Kansas City or the MedZou program in Columbia. A minimum of 30 contact hours must be completed during the assigned semester. Health education will be the primary focus.

PHARM 7311 Pharmacy in the 21st Century Technology Credits: 2

This course allows students to develop the skills to evaluate and use Health Care Information Technology (HCIT) in contemporary pharmacy practice. The elective course is offered in the winter semester only.

Prerequisites: Third year status or higher in the Pharm. D. program.

PHARM 7313 Career Planning Credit: 1

This course enables students to engage in the study of career opportunities in the areas of industry, hospital/clinic practice, retail and managed care settings. Pharmacy opportunities are explored through lecture and discussion, guest speakers in the various areas and student exploration with business contacts and research. Topics include understanding career opportunities, achieving one's professional goals, compensation packages and negotiations, and designing a path to accomplish career objectives.

PHARM 7316 Introduction to Pharmaceutical Policy Analysis Credits: 2

This course addresses multiple key influential pharmaceutical policy areas shaping pharmacy practice, and will teach critical thinking skills required to measure both federal and state level policy impact in patient safety and access to medications.

Prerequisites: PHARM 7151, PHARM 7325.

PHARM 7317 Drug Induced Diseases Credits: 2

Drug-induced disease is an unintended effect if a drug that results in mortality or morbidity with symptoms sufficient to prompt a patient to seek medical attention and/or require hospitalization. This course will aid students in the identification, management, and prevention of drug-induced diseases.

Prerequisites: PHARM 5519, PHARM 7307.

PHARM 7318 Introduction to Critical Care Medicine Credits: 2

Critical Care is a multidisciplinary healthcare specialty that cares for patients with acute, life-threatening illness or injury. The management of these patients requires advanced knowledge in various disease states, pathophysiological changes as a result of the illness or injury, as well as the pharmacologic agents used in their treatment. The course will serve as an introduction to Critical Care medicine and will allow students to gain exposure to all that encompasses caring for the critically ill. It will not only focus on specific disease states, but also delve into the negative outcomes associated with such illnesses and provide an introduction to both medical and pharmacologic management of them. The course is not meant to provide students with a comprehensive review but rather provide a glimpse into the specialty of Critical Care Medicine.

Prerequisites: Successful completion of all pharmacy didactic and experiential courses through semester four.

PHARM 7324 Medication Management in Transitions of Care Credit: 1

Transitions of care is an important aspect of patient care in all pharmacy practice settings. The pharmacist plays a crucial role in medication management during the transitions of care process. The purpose of this course is to increase student knowledge and skills relative to the pharmacist's role in transitions of care. Students will learn strategies to effectively develop and implement pharmacy-led transitions of care services in various healthcare settings.

Prerequisites: PHARM 7414. PHARM 7414L.

PHARM 7325 Patient Assessment and Professional Communication Credits: 2

In this course, students will continue developing necessary skills to provide patient-centered care. Students will be introduced to health informatics and an electronic medical record. Students will be taught the four components of a SOAP note, a method of documentation used by healthcare providers. Students will learn how to physically assess patients and document findings in SOAP format in a patient's record. Students will also learn how to effectively communicate with other healthcare professionals and document the interactions.

Prerequisites: PHARM 7101, PHARM 7414.

Co-requisites: PHARM 7325L.

PHARM 7325L Applied Skills Lab: Patient Assessment and Professional Communication Credits: 0.5

This applied skills lab is associated with the Patient Assessment and Professional Communication course. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge in a simulated environment. Students are expected to perform physical assessments on each other while under supervision and document patient information accurately and periodically within the electronic medical record system. Student achievement of core abilities will be assessed through an Objective Structured Clinical Examination. One 2-hour lab session is held every other week or weekly but no more than 10 sessions per semester.

Prerequisites: PHARM 7101, PHARM 7414.

Co-requisites: PHARM 7325.

PHARM 7326 Evidence Based Medicine Credits: 4

Pharmacists, if they are to assume the role of "medication expert," must learn how to evaluate the reliability of information relevant to healthcare options and choices. A pharmacist then can develop a clinical recommendation with justifications based on this evidence. Students will be taught a rigorous 5-Step systematic methodology assisting them with integrating this process into multidisciplinary healthcare decision-making for improved patient care.

Prerequisites: PHARM 7325, PHARM 7405.

Co-requisites: PHARM 7420.

PHARM 7331 Aseptic Technique & Compounded Sterile Preparations Credit: 1

In 7331, students will gain knowledge necessary to prepare sterile compounds including review of environmental requirements, proper aseptic technique, and dose calculations as well as legal and regulatory issues.

Prerequisites: Successful completion of all prior professional Pharm.D. program coursework through semester three and OSHA Bloodborne Pathogen Safety Training.

Co-requisites: PHARM 7331L.

PHARM 7331L Applied Skills Lab: Aseptic Technique & Compounded Sterile Preparations Credits: 0.5

The learning activities in 7331L are designed to complement didactic instruction and allow students to apply knowledge in a simulated environment. In 7331L, students will also demonstrate proper aseptic technique skills to compound and label, sterile preparations for safe and effective use.

Prerequisites: Successful completion of prior professional program coursework and OSHA Bloodborne Pathogen Safety Training.

Co-requisites: PHARM 7331.

PHARM 7334 Pharmacy Based Immunization Delivery Credit: 1

Pharmacy-based Immunization Delivery is an interactive training program that teaches student pharmacists the skills necessary to become a primary source for vaccine information and administration. The program teaches the basics of immunology and focuses on practice implementation, administration technique and legal/regulatory issues.

Prerequisites: PHARM 7307, PHARM 7361.

PHARM 7339 Business Plan and Entrepreneurship in Community Pharmacy Credits: 2

Business Plan and Entrepreneurship in Community Pharmacy course is designed to provide an opportunity for students enrolled in the School of Pharmacy to further explore business plan development and entrepreneurship in the community pharmacy setting. Upon course completion, the student will be able to understand and complete the necessary components of a full business plan and proposal that involves innovation and creativity in pharmacy practice. Students are expected to participate in a team approach to delegate all aspects of the business plan, as well as participate in classroom activities and discussions of innovative practice.

Prerequisites: PHARM 7101, PHARM 7151, PHARM 7233, PHARM 7414, PHARM 7414L, PHARM 7465.

PHARM 7341 Medicinal Chemistry I Credits: 3

This course is the study of medicinally active substances, both natural and synthetic, which describes their chemical properties, their mode of action, their structure-activity relationships and their metabolic rate. Starting with their origin, it is shown how drugs in a series are developed by chemical modification, quantitative structure activity relationships and receptor theory. The chemical properties of a drug are described and explained. The mode of action of the drug is explained on a biochemical basis whenever possible. Once a drug has had its medicinal effect, it is excreted or metabolized. Reasons for excretion or metabolism are explained.

Prerequisites: CHEM 322R.

PHARM 7344 Medicinal Chemistry II Credits: 3

This course is a continuation of PHARM 7341. This course will focus on major drug classes, both natural and synthetic, including their chemical properties, their mode of action, their structure-activity relationships and their metabolic fate. Structure-activity relationships and the influence of organic functional groups on physicochemical properties of drugs and their pharmacological activities will be emphasized. Drug metabolism will also be covered, with a focus on organic functional group transformations.

Prerequisites: PHARM 7341.

PHARM 7345 Top Drugs II Credit: 1

This 1.0 hour course is designed as an introduction to up to 300 of the most commonly prescribed medications. This course will provide students with the opportunity to learn basic drug knowledge including brand (trade) and generic names, narcotic class, therapeutic class, common dosage forms, and FDA approved indications, dosing, pharmacology/pharmacokinetics, drug interactions, contraindications/precautions, and adverse effects.

PHARM 7353 Investigative Toxicology Credits: 2

The science of investigative toxicology is an emerging science that plays a central role in forensic toxicology and pathology regarding conditions of and for exposure of many different kinds of environmental, biological, chemical, or physical agents. Investigative toxicology may include criminal or civil legal matters. The duties of an investigative toxicologist include the qualitative and quantitative analysis of drugs or poisons in biological systems and other physical evidence collected at the scene of the investigation. This also includes the interpretation of the exposure scene evidence and findings in regard to the physiologic and behavioral effect of those exposed to the detected/suspected chemical(s) at time of exposure. The complete investigation of the cause or causes of sudden or chronic chemical exposure and its potential aftermath is an important civic responsibility. The use of toxicologic information in investigation assessment requires careful field and laboratory analysis, evaluation of data.

PHARM 7361 Pharmacology I Credits: 2

Basic pharmacological principles of drug absorption, distribution, metabolism and elimination; concept of drug-receptor interactions; dose-response relationships and mechanism of action; and signaling mechanisms.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 7362 Pharmacology II Credits: 4

Principles of and advances in chemotherapy, biology, mechanism of action; clinical applications and adverse effects of various drug groups.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 7363 Pharmacology III Credits: 4

Mechanism of action; therapeutic uses; and adverse effects of drugs affecting different organ systems.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 7364 Concepts of Epidemiology and Statistics In Research Credits: 3

This course introduces students to study design, principles, concepts, and application of epidemiological and statistical methods in research. First part of the course will cover understanding the epidemiological principle, measuring the occurrence of disease, measures of disease association, and types of study designs, interpretation and evaluation of epidemiologic research. Second part will provide hands-on experience for students on developing skills to analyze research data using appropriate statistical methods by means of statistical software to calculate the measures of disease association. This course will help students to evaluate health care studies with respect to study design, statistical analysis, interpretation, and evidences of association. During this course students will develop an epidemiologic study proposal. Students will learn to analyze and interpret the output of these analyses using the Statistical Package for the Social Science (SPSS).

Prerequisites: STAT 436.

PHARM 7366 Oncology and Hematology Pharmacotherapy Credits: 3

This course provides disease-oriented and pharmacy-oriented insight into the pathophysiology, diagnosis, and rational drug treatment of malignancy. The pharmacist's role in selecting drug products, individualizing dosages, supportive care, and monitoring patients is emphasized, with additional emphasis on safety and handling.

Prerequisites: PHARM 7361, PHARM 7420.

PHARM 7369 Advanced Psychiatry Credits: 2

This course aims to expand student pharmacist knowledge in regards to psychiatric pharmacy practice. Students will develop skills in patient assessment, treatment plan development, and professional communication. Course content and projects are aimed at expanding the students' understanding of a wide range of psychiatric disorders and developing their ability to discuss and analyze these disorders and their implications for patients and society as a whole.

Prerequisites: Successful completion of all pharmacy coursework through semester five.

Co-requisites: PHARM 7485P, PHARM 7485L.

PHARM 7377 Principles of Nutrition Support Credits: 2

Clinical nutrition, a multidisciplinary field, has become an important practice area for the hospital pharmacist. Its growth has been the result of an awareness of the high incidence of malnutrition among hospitalized patients and its effects on morbidity and mortality. Nutrition support is an important therapy provided to patients in the acute care, homecare and long term care settings. This course will introduce the student to the fundamentals of nutrition support and prepare him/her for future involvement in this important practice area.

PHARM 7378 Introduction to Community Pharmacy Practice Credits: 3

This course is a required Introductory Pharmacy Practice Experience (IPPE) in which students will spend three weeks during the summer after their first year providing patient-centered care in a community pharmacy practice setting. The experience will emphasize application of knowledge gained in didactic coursework at the student's level in the curriculum. This IPPE provides a blend of activities that focus on both the delivery of care to patients as well as the dispensing of medications. The Introductory Pharmacy Practice Experiences seek to establish a solid practice foundation on which students will continually build as they progress through the Doctor of Pharmacy curriculum.

Prerequisites: Successful completion of all professional program coursework through semester two. Proof of current pharmacy non-credit requirements and immunization documentation.

PHARM 7379 Introduction to Health Systems Pharmacy Practice Credits: 3

This course is a required Introductory Pharmacy Practice Experience (IPPE) in which Pharm.D. students will spend three weeks during the summer after their second year providing patient-centered care in a health systems pharmacy practice setting. The experience will emphasize application of knowledge gained in didactic coursework at the student's level in the curriculum. Activities focus on understanding the medication use system and delivering care to patients in a hospital setting. The Introductory Pharmacy Practice Experiences seek to establish a solid practice foundation on which students will continually build as they progress through the Doctor of Pharmacy curriculum.

Prerequisites: Successful completion of all professional program coursework through semester four. Proof of current pharmacy non-credit requirements and immunization documentation.

PHARM 7389 Advances In Drug Therapy Credits: 2

This course provides the fundamentals of recent advances in drug delivery and therapy. Concepts covered include advanced and novel drug delivery systems, modern drug analysis tools, the role of efflux proteins in drug kinetics, and transporter/receptor mediated drug delivery.

Prerequisites: PHARM 7303.

PHARM 7397 Home Health Care Credits: 2

Anything a patient does in the home concerning their healthcare is considered Home Health Care. All aspects of Home Health Care are covered in this class. Diabetic Ostomy products care, Durable Medical Equipment (Wheelchair, cane, crutches, etc.), home Renal Dialysis, Wound Care, Respiratory Therapy, IV accesses, Home Infusion Therapy, Hospice Care, and Enteral Nutrition are presented and discussed. Reimbursement issues are not discussed due to constantly changing regulations. This is a "hands-on" class with participation in, for example, ostomy fitting, crutches fitting, enteral nutrition taste testing, and a tour of a Home Infusion Pharmacy.

Prerequisites: PHARM 7362, PHARM 7405.

Co-requisites: PHARM 7420.

PHARM 7398 Comprehensive Diabetes Management Credits: 4

The purpose of the course is to provide the student with a multidisciplinary foundation in the principles of diabetes management. The student will develop his/her knowledge and ability to assess, manage, educate and monitor patients with diabetes. The faculty are comprised of a multidisciplinary team of experts for the online lectures. The in-class discussion will be led by a faculty member who specializes in diabetes management.

Prerequisites: PHARM 7303.

PHARM 7399 Required Enrollment Credit: 1

Required enrollment for international students in pharmacy training sites.

PHARM 7405 Pharmacotherapy I: Emphasis on Self-Care and Nonprescription Medications Credits: 4

Pharmacotherapy I integrates the fundamentals of pathophysiology and pharmacology to help develop the student's ability to provide patient-centered care. Upon course completion, students will be able to assess and provide pharmaceutical care for patients with illnesses commonly encountered in community pharmacy practice utilizing the QuEST/SCHOLAR MACS process to assess a patient's condition systematically and completely, as well as following the Pharmacist Patient Care Process (PPCP). Students are expected to identify medical and medication-related problems, recommend nonprescription drug therapy, prescription drug therapy when appropriate, and monitor for safe and effective drug use. Students are also expected to provide accurate medication counseling. In general, three hours per week are devoted for traditional didactic, classroom based instruction, teaching and learning and two hours for case recitation.

Prerequisites: PHARM 7279, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7414.

Co-requisites: PHARM 7405L.

PHARM 7405L Applied Skills Lab Pharmacotherapy I: Emphasis on Self-Care and Nonprescription Medications Credits: 0.5

Students enrolled in this applied pharmacotherapy lab will gain skills necessary to provide care for patients with illnesses commonly encountered in community practice. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge in a simulated environment. Students will be afforded opportunities to provide patient-centered care utilizing the QuEST/SCHOLAR MACS process. Student achievement of core abilities will be assessed through an Objective Structured Clinical Examination.

Prerequisites: PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7414.

Co-requisites: PHARM 7405.

PHARM 7406P IPPE: General Medicine I Credits: 2

This course is a required Introductory Pharmacy Practice Experience (IPPE) which provides a continuum of patient care activities throughout the third professional year. The student will spend one academic year (Fall and Spring Semesters) in a patient care setting with a minimum of 90 contact hours (45 contact hours each semester). The Pharmacist's Patient Care Process will be emphasized in the care of patients with commonly seen illnesses. Students are expected to become involved in the provision of direct patient care collaborating with other healthcare professionals and improving rational drug therapy in a practice environment. Students will take part in rounds, conferences, consultations and other activities as determined by the supervising faculty. General Medicine I practice site time allows maximum time and opportunity to engage IPPE students in patient care activities; interactions with patients, caregivers, and other health care professionals; and to apply their patient care knowledge and skills in authentic practice settings.

Prerequisites: PHARM 7420, PHARM 7485P.

PHARM 7407P APPE Patient Care Selective Credits: 4

The student will spend one month actively participating in the delivery of direct patient care in an interprofessional practice setting where there are ongoing clinical pharmacy services. Students will take part in rounds, conferences, consultations and other activities as directed by the faculty preceptor. Faculty preceptors may add site-specific objectives as indicated.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7409P APPE Health Systems Credits: 4

The student will spend one month assigned to a health system site. Emphasis of study will be on the pharmacy systems of hospital/health systems, medication safety and quality, and professional practice. Clinical applications will be maintained throughout the rotation. Students will take part in department activities to enhance understanding of the integration of all aspects of patient-centered care within the department and other services in the facility/health system. Faculty preceptors may add site-specific objectives as indicated.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7410P APPE Ambulatory Patient Care Credits: 4

The student will spend one month actively participating in the delivery of direct patient care in an interprofessional ambulatory patient care practice setting where there is an ongoing program of clinical pharmacy services. Students will take part in rounds, conferences, consultations and other activities as directed by the faculty preceptor. Faculty preceptors may add site-specific objectives as indicated.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential coursework through semester six.

PHARM 7412P APPE Advanced Community Pharmacy Credits: 4

The student will spend one month in a progressive community pharmacy setting. Emphasis of study will be on the clinical aspects of providing comprehensive patient care services to diverse patient populations in a community practice. Patient-centered care activities will be emphasized throughout the rotation. Students will take part in all aspects of patient care within the practice. Faculty preceptors may add site-specific objectives as indicated.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7414 Patient-Centered Care and Ethical Practice Credits: 2

Students will understand the concept as well as the pharmacist's role in providing patient-centered care. Students will learn how to build relationships through consideration of the patient's personal values, preferences and beliefs. Students will learn how to effectively communicate with patients to obtain health and medication histories and to counsel for medication adherence. Drug knowledge for the most commonly prescribed medications will be learned, assessed and applied throughout this course and the associated applied skills lab (7414L). One 2-hour class session is held per week.

Prerequisites: PHARM 7101.

Co-requisites: PHARM 7414L.

PHARM 7414L Applied Skills Lab: Patient-Centered Care and Ethical Practice Credits: 0.5

This applied skills lab is associated with Patient-Centered Care and Ethical Practice course. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge to patient care in a structured lab environment. Student achievement of core abilities will be assessed through completion of assigned activities and an Objective Structured Clinical Examination (OSCE). One 2-hour lab session is held on designated weeks as outlined in the course schedule.

Prerequisites: PHARM 7101.

Co-requisites: PHARM 7414.

PHARM 7418P APPE Elective I Credits: 4

Elective experiences give students the opportunity to mature professionally, secure the breadth and depth of experiences needed to achieve curricular outcomes, and explore various sectors of practice. Students may repeat required rotations as electives if space is available or may approach a preceptor to tailor an elective experience to develop an area of interest. Faculty preceptors may add site-specific objectives as indicated. Electives may include a maximum of two experiences without a patient care focus.

Prerequisites: Successful completion of all pharmacy required non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7419P APPE Acute Patient Care Credits: 4

The student will spend one month actively participating in the delivery of direct patient care in an interprofessional acute practice setting where there are ongoing clinical pharmacy services. Students will take part in rounds, conferences, consultations and other activities as directed by the faculty preceptor. Faculty preceptors may add site-specific objectives as indicated.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7420 Pharmacotherapy II Credits: 7

Pharmacotherapy II is designed to develop the student's ability to assess patients and provide pharmaceutical care. The course focuses on developing and applying problem-solving strategies for complex illnesses commonly encountered in pharmacy practice. Students are expected to identify medical and medication-related problems, recommend drug therapy and monitor for safe and effective drug use. Students are also expected to provide medication counseling. Throughout the semester, students are expected to retrieve and utilize relevant patient data from an electronic medical record system to make patient care decisions. Six hours of large group and two hours of small group discussions occur weekly.

Prerequisites: PHARM 7279, PHARM 7280, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7362, PHARM 7405, PHARM 7414.

Co-requisites: PHARM 7420L, PHARM 7406P.

PHARM 7420L Applied Skills Lab: Pharmacotherapy II Credits: 0.5

Students enrolled in this applied pharmacotherapy lab will gain skills necessary to provide care for patients with illnesses commonly encountered in pharmacy practice. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge in a simulated environment. Students will be afforded opportunities to utilize home monitoring tests, conduct medication reviews, and therapeutically manage patients at a distance (telepharmacy). Student achievement of core abilities will be assessed through an Objective Structured Clinical Examination (OSCE).

Prerequisites: PHARM 7279, PHARM 7280, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7362, PHARM 7405, PHARM 7414.

Co-requisites: PHARM 7420, PHARM 7406P.

PHARM 7420P APPE Elective II Credits: 4

Elective experiences give students the opportunity to mature professionally, secure the breadth and depth of experiences needed to achieve curricular outcomes, and explore various sectors of practice. Students may repeat required rotations as electives if space is available or may approach a preceptor to tailor an elective experience to develop an area of interest. Faculty preceptors may add site-specific objectives as indicated. Electives may include a maximum of two experiences without a patient care focus.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7421P APPE Elective III Credits: 4

Elective experiences give students the opportunity to mature professionally, secure the breadth and depth of experiences needed to achieve curricular outcomes, and explore various sectors of practice. Students may repeat required rotations as electives if space is available or may approach a preceptor to tailor an elective experience to develop an area of interest. Faculty preceptors may add site-specific objectives as indicated. Electives may include a maximum of two experiences without a patient care focus.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7422P APPE Elective IV Credits: 4

Elective experiences give students the opportunity to mature professionally, secure the breadth and depth of experiences needed to achieve curricular outcomes, and explore various sectors of practice. Students may repeat required rotations as electives if space is available or may approach a preceptor to tailor an elective experience to develop an area of interest. Faculty preceptors may add site-specific objectives as indicated. Electives may include a maximum of two experiences without a patient care focus.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7424 Introduction To Dietary Supplement Therapeutics Credits: 2

This course is intended to provide students with an awareness of important issues about dietary supplements to consider when providing pharmaceutical care to patients. Students will become familiar with regulations for dietary supplements, learn communication skills specific to discussing supplement use with patients, and the skills to retrieve and interpret reliable information to be able to make decisions about new or unfamiliar supplements.

Prerequisites: PHARM 7361.

PHARM 7427 Hospital Pharmacy Credits: 2

This course in Hospital Pharmacy is designed to expose students to the daily operation of a typical hospital pharmacy, integration of informatics and automation, and understanding of historical concepts in hospital pharmacy management. The course consists of one, two-hour lecture per week. The course will be delivered via traditional didactic lecture format and interactive group discussions.

PHARM 7434 Pharmacy Preparations: Compounding Credit: 1

In the Pharmacy Preparations: Compounding Course, students will gain knowledge and skills necessary to compound extemporaneous non-sterile preparations. The course will cover regulations governing pharmaceutical compounding in Missouri, ethical considerations applicable to compounds, various dosage forms including advantages and disadvantages of each, techniques used in preparing compounds, and the counseling information to be included for each type of dosage form covered in the course. Students will utilize their knowledge of pharmaceutical calculations in the preparation of the formulations such as calculating doses and ingredient quantities.

Prerequisites: PHARM 7110.

Co-requisites: PHARM 7434L.

PHARM 7434L Applied Skills Lab: Pharmacy Preparations: Compounding Credit: 1

Students enrolled in this compounding lab will apply knowledge gained in the associated course necessary to compound extemporaneous non-sterile preparations. Students are expected to accurately prepare, dispense, and label a variety of the most commonly prescribed extemporaneous formulations, including liquid, solid, semi-solid, and topical preparations.

Prerequisites: PHARM 7110.

Co-requisites: PHARM 7434.

PHARM 7439 Pediatric Pharmacotherapy Credits: 3

Pediatric Pharmacotherapy provides disease-oriented and pharmacy-oriented insight into the pathophysiology, diagnosis, and rational drug treatment of diseases primarily encountered in the pediatric population. The pharmacist's role in selecting drug products, individualizing dosages, and monitoring patients is emphasized.

Prerequisites: PHARM 7361, PHARM 7362, PHARM 7420.

PHARM 7451 Pharmacy Law Credit: 1

State laws impacting pharmacy practice.

Prerequisites: PHARM 7151.

PHARM 7463 Basic and Clinical Toxicology Credits: 2

Fundamentals of toxicology, including discussion of the general classes of poisonous substances, their physiological effects, and methods of treatment.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 7465 Health Economics and Medicine Credits: 3

This course introduces major economic dimensions of healthcare system and public health practices. Covers concepts necessary to understand provider and consumer behavior, health care market structure, government involvement in health care, reimbursement strategy, determinants of health, distribution channels for biopharmaceuticals, pharmacovigilance, economic evaluation of healthcare services, and comparative-effectiveness research.

Prerequisites: PHARM 7233.

PHARM 7466 Pharmacy Practice Leadership, Management, and Innovation Credits: 3

Pharmacy Practice Leadership, Management, and Innovation is a required course for the Doctor of Pharmacy degree program. The goals of the course are to teach basic leadership and management principles and apply them to pharmacy practice in a variety of situations and settings. Leadership principles are related to broad personal and organizational missions and visions. Management principles are related to operational details of managing human resources, inventory, and finances. In order to achieve these goals, this course will review specific topics, including but not limited to, leadership and professional development, entrepreneurship, operations management, application of reimbursement mechanisms, pay-for-performance, and innovative pharmacist services. Pharmacists need to understand these principles and applications as a means of providing optimum care for patients, especially when pharmacists emerge as important contributors to the future of the U.S. health care system.

Prerequisites: PHARM 7465.

PHARM 7467 Religion, Culture and Health Credits: 3

This course addresses the impact of religious beliefs, education, and cultural practices on health and healthcare issues pertinent to various segments of our society.

PHARM 7484P Pharmacy Seminar Credit: 1

Pharm. D. Student Seminar course is designed to provide students with examples and reasoning behind the fundamentals of seminar preparation and delivery and opportunity to utilize their knowledge by presenting a seminar. This experience will be achieved through identification of a topic, development and presentation of a seminar. The student is expected to complete two 40-minute seminars over two semesters.

Prerequisites: PHARM 7485P.

PHARM 7485L Applied Skills Lab: Pharmacotherapy III Credits: 0.5

Students enrolled in this applied pharmacotherapy lab will gain skills necessary to provide care for patients with illnesses commonly encountered in pharmacy practice. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge in a simulated environment. Students will be afforded opportunities to provide pharmacy services, including but not limited to, Medication Therapy Management, therapeutic Drug Utilization Review, Patient Centered Medical Home and telepharmacy. Multiple activities will incorporate concepts of interprofessional team-based care. Student achievement of core abilities will be assessed through an Objective Structured Clinical Examination.

Prerequisites: PHARM 7279, PHARM 7280, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7362, PHARM 7405, PHARM 7414, PHARM 7420.

Co-requisites: PHARM 7485P, PHARM 7406P.

PHARM 7485P Pharmacotherapy III Credits: 7

Pharmacotherapy III is designed to develop the student's ability to assess patients and provide pharmaceutical care. The course focuses on developing and applying problem-solving strategies for complex illnesses commonly encountered in pharmacy practice. Students are expected to identify medical and medication-related problems, recommend drug therapy and monitor for safe and effective drug use. **Prerequisites:** PHARM 7279, PHARM 7280, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7362, PHARM 7405, PHARM 7414, PHARM 7420, 7420L.

Co-requisites: PHARM 7485L, PHARM 7406P.

PHARM 7489AB Introduction to Nuclear Pharmacy & Nuclear Medicine Credits: 2

Nuclear pharmacy employs the safe and effective use of radiopharmaceuticals and other drugs with the purpose of improving patient health. The purpose of this course is to educate students regarding the diagnostic and therapeutic roles of radiopharmaceuticals in healthcare and teach the proper procedures and techniques that go into safely compounding and handling these products. Students will visit Cardinal Health Nuclear Pharmacy where they will be able to demonstrate the techniques they have learned. Students will attend four two-hour lectures and have the opportunity to witness the utilization of a radiopharmaceutical during a diagnostic scan at Truman Medical Center.

PHARM 7489CC Special Topics-Pharmacy Credits: 1-5

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489CE Special Topics in Pharmacy Credits: 1-5

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489RB Special Topics Pharmacy Credits: 1-5

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective

PHARM 7489SI Special Topics in Pharmacy Credits: 1-5

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7497E Directed Individual Study-Clinical Pharmacy Credits: 1-4

Study in areas of special interest under individual faculty direction. Elective. Not to exceed five semester credits.

Philosophy (PHILOS)

Courses

PHILOS 5521 Managerial And Administrative Decision Making And Ethical Values Credits: 3

Methods of problem definition and decision making in ethics are presented with the goal of providing the student with a matrix for case review. A series of cases is offered that serve to integrate approaches to ethical reflection with management and administrative decision making. Cases are chosen on the basis of topical, curricular and conceptual relevance.

PHILOS 5540 Seminar On Philosophy And Law Credits: 2

An examination from a philosophical perspective of the historical and conceptual relationships present in the evolution, development and analysis of law. Among the systems of analysis examined will be natural law theory, legal positivism and legal realism. Ordinarily the seminar will focus on a specific area of controversy in the law.

PHILOS 5546 Ethics And Government Credits: 3

An examination of ethical issues related to government, with the primary focus on national and local governmental bodies in the United States. Ethics in the executive, legislative and judicial branches are examined. Ethical standards for elected officials and appointed public servants are reviewed. Attempts to "legislate morality" are considered. The course includes a historical review of ethics and government and an analysis of the legal implications of legislation regarding ethics in the executive branch.

PHILOS 5620 Descartes To Hume Credits: 3**PHILOS 5625 Aesthetics Credits: 3****PHILOS 5638 Philosophy Of Biology Credits: 3****PHILOS 5640 Philosophy Of Law Credits: 3****PHILOS 5690 Research In Selected Fields: Graduate Studies Credits: 3**

Intensive research in an area selected by the student in consultation with the instructor. By permission only. May be repeated for credit when the topic varies.

Physical Education (PHYS-ED)

Courses

PHYS-ED 5530 Organization And Administration Of Athletics Credits: 3

Organization and management of a program of competitive athletics for schools and colleges.

PHYS-ED 5561 Social-Cultural Aspects of Sport and Physical Activity Credits: 3

The social significance of sport in modern societies. Research on the social structure, social relations and social problems of sport from several subcultural perspectives will be reviewed.

PHYS-ED 5570 Sport Psychology Credits: 3

Analysis of research and theory focused on the psychological aspects associated with participation in sport and physical activity.

Prerequisites: PHYS-ED 370.

Physician Assistant Program (MEDPA)

Courses

MEDPA 5501 Anatomy for the Physician Assistant Credits: 3

This course studies the anatomy of the human body and its correlation and relationship of anatomic configuration to diagnosis of clinical problems.

Prerequisites: MMSPA student.

MEDPA 5502 Foundations in Basic Medical Science Credits: 4

This course introduces the basic principles of biochemistry, microbiology, immunology, and pharmacology which prepares the student for Science and Practice of Medicine I - IV.

Prerequisites: MMSPA student.

MEDPA 5503 Research Applications in Medicine Credit: 1

This course introduces the student to clinical research in medicine and its application to clinical decision making through the concepts and principles of evidence-based medicine.

MEDPA 5504 Ethics, Law and Policy Credit: 1

This course examines ethical rules, principles, and theories as they relate to health care.

MEDPA 5505 Clinical Assessment for the PA Credits: 2

This course will focus on developing foundational physical exam and history taking skills for the physician assistant.

MEDPA 5511 Clinical Practicum I Credit: 1

The Clinical Practicum course series will develop professional behaviors, reinforce effective communication with classmates, patients and preceptors, introduce patient safety concepts and give the student clinical experience under preceptor supervision to develop and apply the skills learned in the curriculum.

MEDPA 5512 Clinical Practicum II Credit: 1

This course will consist of a variety of activities including lectures, clinical exposure, interprofessional education activities, service learning, and community health experiences. Emphasis will be on developing communication skills, exhibiting professional behaviors, recognizing diversity and needs of the community, and identifying attributes of a health care team.

Prerequisites: MEDPA 5511.

MEDPA 5513 Clinical Practicum III Credit: 1

This course will consist of a variety of activities including lectures, clinical exposure, interprofessional education activities, service learning, and community health experiences. Emphasis will be on developing communication skills, exhibiting professional behaviors, recognizing diversity and needs of the community, and identifying attributes of a health care team.

Prerequisites: MEDPA 5512.

MEDPA 5514 Clinical Practicum IV Credit: 1

This course will consist of a variety of activities including lectures, clinical exposure, interprofessional education activities, service learning, and community health experiences. Emphasis will be on developing communication skills, exhibiting professional behaviors, recognizing diversity and needs of the community, and identifying attributes of a health care team.

Prerequisites: MEDPA 5513.

MEDPA 5521 PA Professions I Credit: 1

This course in the PA Professions series that will focus on the history of the PA profession including the social, regulatory, ethical and professional aspects. Instruction will also be provided in clinical management practices and procedures including coding systems for diagnosis and reimbursement, quality assurance and risk management.

MEDPA 5522 PA Professions II Credit: 1

This course focuses on the impact of racial, ethnic and socioeconomic health disparities on health care delivery. The student will become aware of differing health beliefs, values and expectations of patients and other health care professionals that can affect communication, decision-making, compliance and health outcomes.

MEDPA 5523 PA Professions III Credit: 1

This course in the PA Professions series will provide basic doctrines and principles of the law to serve as a foundation for legally and ethically sound medical practice. It will include a comprehensive coverage of the history of legal medicine in the United States, the dynamics of the law applied to medical issues and the recent developments in health care delivery and biomedical issues. The legal and ethical issues of narrative medicine in medical practice and its practical applications will be explored and discussed.

MEDPA 5524 PA Professions IV Credit: 1

This course in the PA Professions will give students knowledge of the evolution of the health care industry's components and describe the technical, economic, political and social forces that shaped their development. Principles of health policy and public health will be discussed so the student will have a systematic way of thinking about health care in the United States, its problems and the alternatives for managing these problems.

MEDPA 5531 Science and Practice of Medicine I Credits: 9

This is a first of four series course that will address the physiology, pathophysiology, basic medical science, clinical presentation, pharmacotherapeutics, physical exam and clinical skills of disease processes presented in a systems format.

MEDPA 5532 Science and Practice of Medicine II Credits: 12

This is the second of a four series course that will address the physiology, pathophysiology, basic medical science, clinical presentation, pharmacotherapeutics, physical exam and clinical skills of disease processes presented in a systems format.

Prerequisites: MEDPA 5531.

MEDPA 5533 Science and Practice of Medicine III Credits: 20

This is the third of a four series course that will address the physiology, pathophysiology, basic medical science, clinical presentation, pharmacotherapeutics, physical exam and clinical skills of disease processes presented in a systems format.

Prerequisites: MEDPA 5532.

MEDPA 5534 Science and Practice of Medicine IV Credits: 19

This is the fourth in a four series course that will address the physiology, pathophysiology, basic medical science, clinical presentation, pharmacotherapeutics, physical exam and clinical skills of disease processes presented in a systems format.

Prerequisites: MEDPA 5533.

MEDPA 5580 Senior Seminar Credit: 1

This course will focus on discussion, study, and review of previously covered health topics in preparation for the Physician Assistant National Certification Exam (PANCE).

MEDPA 5581 Professional Development for the PA Credits: 0.5

This course focuses on professional development topics for the graduating PA students. Students attend and participate in seminars and discussions pertinent to employment and practice as a PA. Students enroll in the course each of the three semesters that make up the program clinical phase (semesters 5, 6, and 7).

Prerequisite: Must be a student in the MMS Physician Assistant program.

MEDPA 5589 Special Topics Credits: 1-3

An opportunity to explore in depth topics not included in usual course offerings. One or more topics will be announced in advance of registration.

MEDPA 5595 Capstone Credit: 1

This course will align didactic, clinical and professional instruction as well as Graduate Learning Competencies into a project that will have lasting impact for patients, clinical practice, PA education and/or the PA profession.

MEDPA 5610 Family Medicine I Rotation Credits: 4

This is a required 4-week rotation in an ambulatory family medicine setting.

MEDPA 5611 Family Medicine II Rotation Credits: 4

This is a required 4-week rotation in an ambulatory family medicine setting.

MEDPA 5612 Elective Family Medicine Rotation - 4 week Credits: 4

This is an elective 4-week rotation in an ambulatory family medicine setting.

MEDPA 5613 Elective Family Medicine Rotation II - 4 week Credits: 4

This is an elective 4-week rotation in an ambulatory family medicine setting.

MEDPA 5614 Elective Family Medicine Rotation I-2 week Credits: 2

This is an elective 2-week rotation in an ambulatory family medicine setting.

MEDPA 5615 Elective Family Medicine Rotation II - 2 week Credits: 2

This is an elective 2-week rotation in an ambulatory family medicine setting.

MEDPA 5620 Internal Medicine Rotation I Credits: 4

This is a required 4-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5621 Internal Medicine Rotation II Credits: 4

This is a required 4-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5622 Elective Internal Medicine Rotation I Credits: 4

This is an elective 4-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5623 Elective Internal Medicine Rotation II Credits: 4

This is an elective 4-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5624 Elective Internal Medicine Rotation I - 2 week Credits: 2

This is an elective 2-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5625 Elective Internal Medicine Rotation II - 2 week Credits: 2

This is an elective 2-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5630 Emergency Medicine Rotation Credits: 4

This is a required 4-week rotation in an emergency medicine setting.

MEDPA 5632 Elective Emergency Medicine I - 4 week Credits: 4

This is an elective 4-week rotation in the emergency medicine setting.

MEDPA 5633 Elective Emergency Medicine II - 4 week Credits: 4

This is an elective 4-week rotation in the emergency medicine setting.

MEDPA 5634 Elective Emergency Medicine I - 2 week Credits: 2

This is an elective 2-week rotation in the emergency medicine setting.

MEDPA 5635 Elective Emergency Medicine II - 2 week Credits: 2

This is an elective 2-week rotation in the emergency medicine setting.

MEDPA 5640 Women's Health Rotation Credits: 4

This is a required 4-week rotation in a women's health setting.

MEDPA 5642 Elective Women's Health Rotation I - 4 week Credits: 4
This is an elective 4-week rotation in a women's health setting.

MEDPA 5643 Elective Women's Health Rotation II - 4 week Credits: 4
This is an elective 4-week rotation in a women's health setting.

MEDPA 5644 Elective Women's Health I - 2 week Credits: 2
This is an elective 2-week rotation in a women's health setting.

MEDPA 5645 Elective Women's Health II - 2 week Credits: 2
This is an elective 2-week rotation in a women's health setting.

MEDPA 5650 Pediatrics Rotation Credits: 4
This is a required 4-week rotation in a pediatric medicine setting.

MEDPA 5652 Elective Pediatrics Rotation I Credits: 4
This is an elective 4-week rotation in a pediatric medicine setting.

MEDPA 5653 Elective Pediatrics Rotation II Credits: 4
This is an elective 4-week rotation in a pediatric medicine setting.

MEDPA 5654 Elective Pediatrics Rotation I - 2 week Credits: 2
This is an elective 2-week rotation in a pediatric medicine setting.

MEDPA 5656 Elective Pediatrics Rotation II 2 week Credits: 2
This is an elective 2-week rotation in a pediatric medicine setting.

MEDPA 5660 General Surgery Rotation Credits: 4
This is a required 4-week rotation in a general surgery setting.

MEDPA 5662 Elective Surgery Rotation I Credits: 4
This is an elective 4-week rotation in a surgery setting.

MEDPA 5663 Elective Surgery Rotation II Credits: 4
This is an elective 4-week rotation in a surgery setting.

MEDPA 5664 Elective Surgery Rotation I - 2 week Credits: 2
This is an elective 2-week rotation in a surgery setting.

MEDPA 5665 Elective Surgery Rotation II - 2 week Credits: 2
This is an elective 2-week rotation in a surgery setting.

MEDPA 5670 Behavioral Medicine Rotation Credits: 4
This is a required 4-week rotation in a behavioral health setting.

MEDPA 5671 Behavioral Medicine Rotation - 2 week Credits: 2
This is a required 2-week rotation in a behavioral health setting.

MEDPA 5672 Elective Behavioral Medicine I Credits: 4
This is an elective 4-week rotation in the behavioral medicine setting.

MEDPA 5673 Elective Behavioral Medicine II Credits: 4
This is an elective 4-week rotation in the behavioral medicine setting.

MEDPA 5674 Elective Behavioral Medicine I - 2 week Credits: 2
This is an elective 2-week rotation in the behavioral medicine setting.

MEDPA 5675 Elective Behavioral Medicine II - 2 week Credits: 2
This is an elective 2-week rotation in the behavioral medicine setting.

MEDPA 5680 Geriatrics Rotation Credits: 4
This is a required 4-week rotation in a geriatric specialty care setting.

MEDPA 5681 Geriatrics Rotation - 2 week Credits: 2
This is a required 2-week rotation in a geriatric specialty care setting.

MEDPA 5682 Elective Geriatrics Rotation I Credits: 4
This is an elective 4-week rotation in the geriatric medicine setting.

MEDPA 5683 Elective Geriatrics Rotation II Credits: 4
This is an elective 4-week rotation in the geriatric medicine setting.

MEDPA 5684 Elective Geriatrics Rotation I - 2 weeks Credits: 2
This is an elective 2-week rotation in the geriatric medicine setting.

MEDPA 5685 Elective Geriatrics Rotation II - 2 weeks Credits: 2
This is an elective 2-week rotation in the geriatric medicine setting.

MEDPA 5690 Elective Clinical Rotation I Credits: 4

This is a 4-week clinical rotation experience in a new setting or an established area that students wish to gain additional experience.

MEDPA 5691 Elective Clinical Rotation II Credits: 4

This is a 4-week rotation in a newly or recently established clinical setting.

MEDPA 5692 Elective Clinical Rotation I - 2 week Credits: 2

This is a 2-week clinical rotation experience in a new setting or an established area that students wish to gain additional experience.

MEDPA 5693 Elective Clinical Rotation II - 2 week Credits: 2

This is a 2-week clinical rotation experience in a new setting or an established area that students wish to gain additional experience

MEDPA 5899 Required Graduate Enrollment Credit: 1

Required Graduate Enrollment.

Physics (PHYSICS)

Courses

PHYSICS 5500 Methods Of Mathematical Physics I Credits: 3

Intended to provide the student with the advanced mathematical techniques needed for beginning graduate studies in the physical sciences. Content includes real variables, infinite series, complex analysis, linear algebra and partial differential equations.

PHYSICS 5501 Methods Of Mathematical Physics II Credits: 3

A continuation of Physics 500 which includes Sturm-Liouville operators, special functions, Fourier transforms, distributions and Green functions, Laplace transforms, linear groups and tensor analysis.

PHYSICS 5505 Survey Of Recent Development In Physics Credits: 3

Specifically designed to help high school and junior college science teachers keep pace with current developments in various subdivisions of physics and their impact on society and technology. (Not applicable for graduate degree in Physics).

Prerequisite: Baccalaureate degree and one year science teaching experience.

PHYSICS 5510 Theoretical Mechanics I Credits: 3

A review of undergraduate mechanics precedes the study of generalized classical mechanics in this course. Topics include variational principles, Lagrangian and Hamilton methods, conservation laws and Hamilton-Jacobi theory.

PHYSICS 5511 Theoretical Mechanics II Credits: 3

A continuation of PHYSICS 5510, this course covers topics such as normal coordinates, small oscillations, continuum mechanics and special/general relativity.

PHYSICS 5520 Electromagnetic Theory And Applications I Credits: 3

Electrostatics, magnetostatics and various approaches in solving boundary value problems of electromagnetism, Green's functions, conformal transformations and polynomial expansions, Maxwell's equations and waves.

PHYSICS 5521 Electromagnetic Theory And Applications II Credits: 3

Waveguides, fiber optics, radiation systems and antenna for wireless communications, scattering and diffraction of electromagnetic waves, multipole fields, special relativity and relativistic particle dynamics and radiation.

PHYSICS 5530 Quantum Mechanics I Credits: 3

Review of elementary methods, formal preliminaries, axioms, commuting operators, angular momentum, static perturbation theory, Wigner-Eckart theorem.

PHYSICS 5531 Quantum Mechanics II Credits: 3

Time dependent perturbation theory, scattering, applications to atoms, molecules and nuclei, reactions, relativistic methods.

PHYSICS 5535 Optical Properties Of Matter Credits: 3

Maxwell's equations and the dielectric function, absorption and dispersion, free-electron metals, interband transitions, dispersion relations and sum rules, self-consistent field approximation, current-current correlations and the fluctuation-dissipation theorem, plasmons and characteristic energy loss.

Prerequisites: PHYSICS 450, PHYSICS 460, PHYSICS 461, PHYSICS 472, PHYSICS 5500.

PHYSICS 5537 Particle Physics Credits: 3

Essential aspects of modern particle physics are examined in a historical context, and also in terms of the standard model describing concisely the fundamental interactions among particles. Conservation laws are discussed, and recent developments such as String Theory are considered.

Prerequisites: (for undergraduates) PHYSICS 240, PHYSICS 250, and PHYSICS 350 or PHYSICS 472.

PHYSICS 5540 Statistical Physics I Credits: 3

Statistical mechanics as a basis for thermodynamics; classical distribution functions; quantum statistical mechanics, kinetic theory, transport phenomena; application to systems of interacting particles.

Prerequisites: PHYSICS 410, PHYSICS 472.

PHYSICS 5541 Statistical Physics II Credits: 3

Special topics in advanced statistical physics including: second quantization, modern many body theory, interacting Fermi and Bose systems, superfluidity and superconductivity, renormalization group and computer simulation techniques.

Prerequisites: PHYSICS 5540.

PHYSICS 5550 Atomic And Molecular Structure Credits: 3

Experimental results and theoretical models by quantum mechanics. Special emphasis on the interaction between radiation and matter.

PHYSICS 5553 Practical Astronomy Credits: 3

A practical overview of the basic methods of observational astronomy research, including the principles of telescopes, detectors and measurement theory, as well as hands-on experience with data reduction and analysis. This course is open to graduate students from all majors.

PHYSICS 5555 Stellar Astrophysics Credits: 3

A mathematical and conceptual overview of the observed properties of stars and the fundamental astrophysics of radiative transfer, hydrostatic equilibrium, atomic processes and thermonuclear energy production that govern their structure, atmospheres and remnants.

PHYSICS 5556 Galaxies Credits: 3

A mathematical and conceptual overview of the observed properties and astrophysics of galaxies highlighting star formation and evolution, the interstellar medium, the Milky Way, galaxy populations and demographics, active galactic nuclei, and galaxy formation and evolution.

PHYSICS 5560 Nuclear Physics Credits: 3

Fundamental properties of the atomic nucleus discussed in terms of experimental results and theoretical models. Quantum and statistical mechanics are used where appropriate.

PHYSICS 5565 Cosmology Credits: 3

This course provides a foundation in both physical and observational cosmology. Students will acquire both a mathematical and conceptual understanding of the formation and dynamics of the Universe.

PHYSICS 5570 Quantum Theory Of Solids I Credits: 3

Lattice dynamics and thermal conductivity. Neutron scattering. Symmetry principles in crystals and consequences. Point group, space group and irreducible representations. Energy band theory and methods of band calculation. Elementary Theory of Magnetism. Spin wave theory.

PHYSICS 5571 Quantum Theory Of Solids II Credits: 3

Topics will include crystal imperfections, impurities and defects, optical properties of metals and semiconductors, electron-lattice interaction and transport theory, superconductivity and theory of disordered systems.

PHYSICS 5580 Physics Seminar Credit: 1

Contemporary publications and research.

PHYSICS 5585 Physics of Electronics Credits: 3

An introduction to the solid state physics of basic electronic components and their operation through both theory and practical lab work.

PHYSICS 5590 Topics In Physics Credits: 1-3

Contemporary publications and research.

PHYSICS 5590A Topics In Physics Credits: 1-3

Contemporary publications and research.

PHYSICS 5590B Special Topics Credits: 1-3**PHYSICS 5590R Topics in Physics Credits: 1-3**

Contemporary publications and research.

PHYSICS 5595L Computer Interfacing Laboratory Credits: 3

An introduction to computer interfacing through the use of serial and parallel ports and digital-to-analog and analog-to-digital converters. The course also introduces digital filtering techniques, data analysis techniques, and graphical presentation of data. The programming techniques are taught using high level programming languages currently used in research and development labs.

PHYSICS 5599 Research And Thesis Credits: 1-9

Research for thesis in partial fulfillment of the master's degree in physics.

PHYSICS 5680 Research Seminar Credits: 1-2

Seminars on current research topics of research programs in the department and those of external distinguished scientists. (Must be taken by Physics Ph.D. students).

PHYSICS 5690 Special Research Topics Credits: 1-3

A lecture course presenting advanced research-level topics.

Prerequisites: Ph.D. candidacy. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

PHYSICS 5696 Dissertation Research Credits: 1-3

This course is individually directed research leading to the fulfillment of the Comprehensive Exam requirements of the Department of Physics and Astronomy. These include (i) completion of an NSF-style research proposal and (ii) successful oral defense of it before the student's research advisory committee.

Prerequisites: Completion of at least 80% of coursework hours, as per the student's Plan of Study and Permission of the instructor.

PHYSICS 5699 Research And Dissertation Credits: 1-9

Research for dissertation in partial fulfillment of the Ph.D. degree requirements in physics.

PHYSICS 5899 Required Graduate Enrollment Credit: 1

Piano (PIANO)

Courses

PIANO 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

PIANO 5500A Graduate Piano-Secondary Credits: 2**PIANO 5500B Special Applied Studies Credits: 2**

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

PIANO 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

PIANO 5500JA Graduate Applied Jazz Studies Credits: 2

One-hour lesson weekly. Jury examination is required.

Prerequisites: Graduate standing.

PIANO 5500JB Special Applied Jazz Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.

Prerequisites: Graduate standing.

PIANO 5500JC Applied Jazz Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied jazz study in an area other than, and in addition to, their primary performance study.

Prerequisites: Graduate standing.

PIANO 5501 Graduate Piano - Masters Performance Credits: 4**PIANO 5601 Graduate Piano - Doctoral Performance Credits: 4**

Political Science (POL-SCI)

Courses

POL-SCI 5501 Seminar in American Government Credits: 3

A seminar involving intense examination of the foundations, development, and structure of American national government through study of a broad range of classic materials and current research findings; course will prepare a political science graduate student to teach an introductory college course in American government.

Prerequisites: Graduate Standing.

POL-SCI 5506 Research Design and Analysis Credits: 3

This course focuses on methods of data gathering, management, and analysis used in political science research. Students gain an understanding of different types of data including surveys, experiments, and archival records. The curriculum will also include ways that these data are managed and analyzed, and how the results are presented in a useful manner.

POL-SCI 5513 Seminar in Comparative Politics Credits: 3

A survey of the major research in comparative politics including state building, democracy, economic development, and political violence.

POL-SCI 5522 Seminar In The Presidency Credits: 3

Critical examination of the American presidency, with in-depth research into selected themes and presidents.

Prerequisites: POL-SCI 406.

POL-SCI 5530 Seminar in International Relations Credits: 3

This course examines major schools of thought and contemporary research in international relations. Topics discussed include international systems, the causes of war and peace, collective security, and international political economy.

POL-SCI 5541 American Political Thought Credits: 3

This course will focus on intellectual reactions to the major periods in American history (the movement for independence, the writing of the constitution, the Jacksonian period, the civil war debate, the growth of big business, the rise of the positive state and contemporary America). Contemporary theorists will be included along with Jefferson, Madison, Hamilton and Marshall.

POL-SCI 5570 The Politics Of Social Security Credits: 3

This course will concentrate upon the principles of social insurance in general, and of the American Social Security system in particular. It will consider the system in relation to the history and traditions of American society. It will analyze popular misconceptions and will pay special attention to the political, economic, and demographic issues relevant to Social Security's current operation and to the program's future.

POL-SCI 5575 Political Ideologies Credits: 3

Consideration of political ideologies and their effects, with in-depth research into selected topics.

POL-SCI 5580 Government And Politics Seminar Credits: 3

Offered as a special seminar in the individual faculty member's area of research specialization. The seminar may be repeated for credit when the topic varies. The topic and instructor will be announced in advance.

POL-SCI 5590 Directed Studies And Research Credits: 1-6

Under the direction of the instructor, students in this course will produce a major research paper: a self-contained thesis chapter, an article for publication or the equivalent. May be repeated for credit.

POL-SCI 5599 Thesis Credits: 1-6

Directed specialized research.

POL-SCI 5688 Doctoral Research Seminar Credits: 3

Students will produce a major research paper under the direction of the instructor. The research project will consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

POL-SCI 5697 Doctoral-Level Independent Readings Credits: 3

Individual readings under the supervision of members of the Political Science Graduate or Doctoral Faculty in the specified topic or topics. May be repeated. May not be taken during an academic year in which a graduate course or seminar is offered on the topic.

POL-SCI 5699 Research And Dissertation Credits: 1-12

Directed specialized research.

POL-SCI 5899 Required Graduate Enrollment Credit: 1

Psychology (PSYCH)

Courses

PSYCH 5504 Contemporary Issues In Learning Credits: 3

A discussion and analysis of recent research and theoretical papers in learning. The student will have to demonstrate undergraduate competence in learning in the first few weeks of this course in order to remain enrolled.

PSYCH 5505 Motivation Credits: 3

The definition of the concept of motivation is explored. Emphasis is placed upon integration of the concept of motivation into comprehensive theoretical explanations of phenomena. Students should have in their background a foundation in Learning Theory (or at least Theory Construction) and Experimental (Scientific Method). Previous laboratory experiences are desired.

PSYCH 5507 Cognitive Psychology Credits: 3

An advanced study in the intersection of cognition and emotion, focusing on the topics of attention, memory, and executive function, and how these abilities influence and are influenced by emotional processes and by individual difference variables such as health, mental health, age, gender, and ethnicity.

PSYCH 5509 Assessment 1: Intellectual And Cognitive Assessment Credits: 3

This course is designed to provide students with a foundation in the use of intellectual and cognitive assessment instruments in clinical evaluation. The course covers theoretical issues pertinent to intellectual and cognitive assessment, as well as basic assessment skills including administration, scoring, interpretation, and communication of results for commonly used measures.

PSYCH 5510 Assessment Methods In Professional Counseling Credits: 3

This course provides an understanding of assessment process and assessment techniques. Skills and practice in selection, administration, and interpretation of representative assessment instruments. Two semester hours lecture, two semester hours lab experience per week.

Prerequisites: Course on assessment of intellectual functioning.

PSYCH 5511 Principles Of Assessment In Psychology Credits: 3

This will be a field practicum course in which test batteries will be used to assess and evaluate the intelligence, personality, and aptitude of the individual.

Prerequisites: PSYCH 5510.

PSYCH 5512 Contemporary Issues In Social Psychology Credits: 3

A critical survey of the recent literature in social psychology with emphasis on experimental investigations.

PSYCH 5515 Advanced Systems And History Of Psychology Credits: 3

In depth review of the major theoretical systems of psychology in terms of historical assumptions, methodologies and developments with the goal of enabling the student to better evaluate current theories and assumptions in psychology.

PSYCH 5516 Quant Analysis I: Regression And Analysis Of Variance Credits: 3

This graduate level statistics course for students in education and the behavioral sciences provides a strong conceptual understanding of two major statistical procedures with the context of the general linear model: multiple regression and numerous analysis of variance (ANOVA) models. Students will learn to select appropriate statistical techniques, tests the assumptions of the techniques, analyze data using statistical software, and report the results of their analyses in the format of the American Psychological Association (APA, 2002).

Prerequisites: EDUC-R&P 5505, PSYCH 316.

PSYCH 5517 Quantitative Analysis II: Advanced Topics In Regression And Mda Credits: 3

This graduate level statistics course for students in the behavioral sciences and education provides a strong conceptual understanding of advanced topics in regression (interaction effects, logistic regression, path analysis) and various multivariate techniques (MANOVA, canonical correlation, factor analysis). Students will complete a series of data based projects that allow them to demonstrate their skills in analysis, reporting and interpretation of findings.

Prerequisites: EDUC-R&P 5605 / PSYCH 5516 and EDUC-R&P 5505.

PSYCH 5518 Advanced Biopsychology Credits: 3

This course assumes that the student has mastered the basics of biopsychology, and deals with this topic in greater depth and scope than PSYCH 418. It will begin with a brief review and update of basic materials of neuroanatomy, neuronal conduction, and synaptic transmission but will quickly turn to an emphasis on biological influences on human psychology, in particular those biological factors that are of practical significance in the lives of patient and non-patient populations.

Prerequisites: PSYCH 418 (or equivalent).

PSYCH 5521 Advanced Social Psychology Credits: 3

The study of the individual in a social context. How social structure and interaction influence the behavior of an individual. Several contemporary systematic positions will be compared.

PSYCH 5522 Contemporary Issues In Developmental Psychology Credits: 3

A discussion of recent research literature in developmental psychology leading to an individual research project in this area.

PSYCH 5523 Seminar Personality Theory And Methodology Credits: 3

A study of the social-cultural, trait, learning, perceptual, motivational, and field theories of personality with special emphasis on research studies and the methodology of personality research.

Prerequisites: PSYCH 323.

PSYCH 5530 Addressing Health Disparities through Community-based Participatory Research Credits: 3

The purpose of this course is to familiarize students with the principles of community-based participatory research as a strategy to reduce health disparities. Students will learn how CBPR principles are applied across the research continuum for developing new community partnerships, conducting needs assessments, developing culturally-appropriate health promotion interventions in collaboration with community-based organizations, and packaging health interventions for dissemination in minority communities. This class is organized with a service learning component which will require students to work with a local community-based organization on a health issue for which there is joint interest.

PSYCH 5533 Psychopathology Credits: 3

A review of the experimental-clinical literature concerning the behavior disorders with special reference to their classification and etiology. Course generally will be restricted to students enrolled in license-eligible specialties who have had an undergraduate course in abnormal psychology.

PSYCH 5538 Development And Evaluation Of Assessment Tools Credits: 3

This survey course examines test theories, construction, and measurement theories. Within the context of a variety of conceptual frameworks and examples, students become knowledgeable about the various purposes, approaches, and computer software tools for measurement.

Prerequisites: PSYCH 5516 and PSYCH 5517.

PSYCH 5540 The Psychology Of Aging Credits: 3

This course will identify major issues concerning psychology related to aging. The major influences on the behavior, cognitive functioning and emotions of older adults will be examined. Consideration will be given to individual, group and environmental influences. Possible interventions will be identified. Cross-sectional and longitudinal research will be reviewed in order to examine the changes in individuals due to aging and the differences between cohort groups. Three major areas of information will be the focus: concepts, theory and methods in psychology of aging; biological and social influences on behavior; and behavioral processes. There will be a review of current literature.

PSYCH 5543 Adult Development And Aging Credits: 3

This course will identify major themes and issues of mid-life and older adults. It will examine major developmental theories of adult development and aging. A contextual approach is stressed, including research and theory on the impact of cohort, gender, race/ethnicity, socioeconomic status, and culture on development. Application to real life is integrated throughout the course. There will be a review of current literature.

PSYCH 5550 Field Practicum Credits: 4

Provides supervised experience working in community agencies/ organizations which address various human and social problems. Students receive training in community service oriented skills and approaches, e.g., advocacy, community organizing, program assessment, development and evaluation, outreach, and applied research. Ten hours per week at practicum site and class attendance are required.

PSYCH 5575 Professional Issues And Ethics In Psychology Credits: 3

Ethical and legal problems of research and practice will be discussed. Professional organizations in psychology and their publications will be reviewed.

PSYCH 5575A Professional Issues & Ethics Credits: 3**PSYCH 5580 Special Topics Credits: 1-3****PSYCH 5580AD Special Topics Credits: 1-3****PSYCH 5580SM Special Topics Credits: 1-3****PSYCH 5582 Community Mental Health Credits: 3**

A review of current theory and research. The emphasis is on prevention rather than treatment of mental health problems. The assets and liabilities of neighborhood communities for mental health problems will be discussed. Recent methods in crisis intervention are reviewed. Each student will be required to become familiar with a neighborhood with a high incidence of application for mental health care.

PSYCH 5586 Theory, Research And Practice Of Consultation Credits: 3

Theory and research on community, mental health, organizational and agency consultation. Entry, process, outcome and ethical issues surrounding each model of intervention will be explored. Each student will be expected to conduct and report on a consultation project.

PSYCH 5590 Directed Research Credits: 1-6**PSYCH 5597 Directed Readings In Psychology Credits: 3**

Intensive readings in areas of joint interest to the enrolled student and the cooperating faculty.

PSYCH 5599 Research And Thesis Credits: 1-9**PSYCH 5601 Experimental Methods In Design And Analysis I Credits: 3**

An examination of multifactor and multilevel designs and interactions. Topics covered will include randomized block designs. Latin square designs, complex trend analysis designs, covariance designs and multiple comparison of treatment means.

PSYCH 5604 Field Practicum In Community Psychology Credits: 3

Supervised experience in health care, social welfare, correctional, political, ethnic, and neighborhood agencies. May be repeated six times for up to 18 credit hours.

PSYCH 5610 Structural Equation Modeling Credits: 3

Students will learn core techniques in structural equation modeling, including path analysis, confirmatory factor analysis, structural regression models; and be introduced to advanced topics such as multi-group SEM and latent growth models. There will be multiple lab sessions using appropriate computer applications.

Prerequisites: PSYCH 5517 (or EDUC-R&P 5606) and PSYCH 5538 (or EDUC-R&P 5609).

PSYCH 5611 Theories & Methods Of Assessment & Intervention/Community Psych Credits: 3

Review of the assessment and intervention literature in social situations will be conducted. Students will design and carry out an assessment and an intervention project.

PSYCH 5612 Program Evaluation And Research Dissemination Credits: 3

A study of the area of applied research in which process and outcome characteristics of programs are related explicitly to a set of values, such as program goals, objectives and costs.

PSYCH 5614 Prevention Science I: Theories, Principles And Methods Credits: 3

Course provides a comprehensive overview of the field of prevention emphasizing basic concepts, conceptual models, and approaches associated with prevention in the field of psychology. The goal is to provide knowledge that will allow students to critically evaluate prevention programs in their communities. Students apply their learning by conducting a critical analysis of an existing community prevention and/or health promotion initiative.

PSYCH 5615 Prevention Science II: Applications Credits: 3

This advanced seminar is the follow-up course to Prevention Science I. Emphasis is placed on the application of prevention science to specific content areas (e. g., substance abuse, violence in schools physical or sexual abuse, AIDS/HIV infection, infant mortality, cardiovascular disease, promoting social competence.) A semester project involves an in-depth review of prevention efforts in the chosen area of interest, resulting in a comprehensive research proposal and/or public policy analysis.

Prerequisites: PSYCH 5614.

PSYCH 5620 Hierarchical Linear Models Credits: 3

Students will be introduced to hierarchical linear modeling techniques. Foundational topics include the rationale for using hierarchical linear models, issues related to assumptions and data screening, and a dissection of the components of a two-level organizational effects hierarchical linear model. Special topics to be discussed include growth modeling, three-level models, dyadic models, and models with categorical outcome variables (i.e., hierarchical generalized linear models). Multiple class sessions will be devoted toward use of software to build and analyze these models.

Prerequisites: PSYCH 5517 (or EDUC-R&P 5606) and PSYCH 5538 (or EDUC-R&P 5609).

PSYCH 5622 Theoretical And Ethical Issues In Professional Psychology Credits: 3

This course is designed to introduce first year doctoral students to the fundamental concepts and methods of psychology conceived as the application of scientific and ethical reasoning to human problems. It will provide an in-depth examination of the American Psychological Association code of ethics and its application to the conduct of psychologists. Critical and analytical thinking will be emphasized in all aspects of the course. The course will cover broad models of clinical and counseling psychology and their historical and scientific foundations, issues in diagnosis, cross-cultural applications and professional problems in light of ethical principles, professional standards, scientific data multicultural contexts.

PSYCH 5623 Methods Of Counseling In Professional Psychology Credits: 3

This course is designed to introduce students to the fundamental concepts and methods of counseling in professional psychology. Students will apply ethical and multicultural principles to the helping relationship while learning the basic methods of humanistic, psychodynamic, and cognitive behavioral approaches as they related to the helping process. A main focus of this course is the acquisition of basic helping skills. Students will also become familiar with counseling outcome research and will increase their level of counselor self-awareness.

Prerequisites: PSYCH 5622.

PSYCH 5625 Health Research Methods: Intro To Epidemiology & Clinical Trials Credits: 3

This course will introduce graduate students in health-related disciplines to research methods utilized in understanding disease and health risk in humans and conducting intervention trials. Students will learn about how epidemiology contributes to: 1) identifying factors that cause diseases; 2) assessing the public health importance of diseases; 3) describing the natural history of diseases; and 4) evaluating procedures for preventing or treating diseases. After completing this course, students should be able to read and summarize epidemiological research papers and answer questions about a study's purpose, design, methods of procedure, results, and major strengths and weaknesses.

Prerequisites: graduate standing; PSYCH 5601.

PSYCH 5631 Theoretical Foundations Of Health Psychology Credits: 3

This course will introduce students to the theoretical foundations of health psychology, including the Biopsychosocial model, individual and systems level theories of behavior change, stress and coping, disease prevention and health promotion, as well as adherence and relapse models. Upon completion of this course students will possess a broad understanding of how cognitive, behavioral, and social factors interact with biological parameters in influencing morbidity and mortality. In addition, students will become familiar with several substantive areas (e.g., chronic pain, HIV/AIDS, cancer, sleep disorders, cardiovascular risk reduction), research methods, and multicultural and ethical issues in health psychology.

PSYCH 5632 Health Psychology Interventions Credits: 3

This course will introduce students to a wide range of psychological assessment and intervention strategies that can be used in health care settings. Individual, group, community and policy interventions will be discussed. This course may be used for credit in the Health Psychology Discipline of the Interdisciplinary Ph.D. Program.

Prerequisites: PSYCH 5631.

PSYCH 5638 Seminar In Health Care Leadership Credits: 3

This course is designed to offer an educational experience that fosters both the knowledge and skills needed for leaders of healthcare in the future. The instructors will guide students through the process of generating new thinking, creating new knowledge, and enhancing interpersonal and professional effectiveness. Course topics will include what creates health and quality of life, social capital and health, healthcare policy, collaborative problem-solving, and transformational leadership and systems thinking.

PSYCH 5650 Clinical Practicum Credits: 1-6

Advanced supervised assessment and psychotherapy with individuals and groups in applied settings. Preregistration by application to instructor at least 60 days prior to the beginning of the semester. Approval by Psychology Director of Clinical training required.

Prerequisites: PSYCH 5623.

PSYCH 5660 Clinical Health Psychology Internship Credits: 1-6

Planned sequence of training experiences in an organized program designed to prepare students for the practice of professional psychology.

PSYCH 5696 Pre-Dissertation Credits: 1-12

Individualized research experiences to prepare students for the conduct of the dissertation.

PSYCH 5699 Research And Dissertation Credits: 1-16**PSYCH 5899 Required Graduate Enrollment Credit: 1**

Public Administration (PUB-ADM)

Courses

PUB-ADM 5507 Management in Context Credits: 3

This course introduces students to management in business, public, and nonprofit organizations, with an emphasis on the political, legal, regulatory, social, and global contexts. Students will take this course at the beginning of their M.B.A. program and will learn to integrate the course content into their other courses. They will apply theories and concepts to organizational issues, legal, and ethical problems. They will be exposed to the major differences between U.S. and international approaches regarding many management issues.

Prerequisites: Students must be enrolled in a Bloch School graduate program.

PUB-ADM 5510 Research Methods in Public Administration Credits: 3

This introductory course focuses on quantitative empirical research design and statistical analyses in relation to public administration issues and concerns.

PUB-ADM 5523 Public Policy and Industry Credits: 3

Private sector organizations are subject to the public policy process and decisions from executive agencies of the government. Public policy and industry enables students to build business acumen, cultivating an understanding of how public sector decisions impact strategic objectives. Specific attention will be devoted to the impact economic policies have on private sector organizations.

Prerequisites: Admission to the Executive MBA program.

PUB-ADM 5525 Financial Accountability And Policy Development Credits: 3

Modern fiscal policy and its administrative implications to planning, budgeting, revenue administration, accounting and appraisal, and the process for assuring accountability in the development, timing, and execution of public programs.

Prerequisites: PUB-ADM 5510.

PUB-ADM 5526 The Politics of Administration Credits: 3

This course will introduce the subject of public administration from a political perspective. Special attention will be given to an examination of the administrative branch of government. More specifically, the course will focus on the demands directed to administrators from various sectors of the political system, the ways in which administrators respond to those demands, and methods available for the analysis of public policies that help us assess the impacts that flow from administrators' actions.

PUB-ADM 5528 Supervision, Performance Leadership, & Human Resource Management Credits: 3

Focuses on the public service leader as a catalyst in developing and sustaining high-performance, outcome-based cultures and as a human resource strategist in marshaling the workforce. Geared to the work of nonprofit, health care, and government executives and managers, the course addresses strategies for developing, organizing, and mobilizing the workforce to accomplish the organization's mission. Topics include recruiting, engaging and retaining talent, including volunteers; developing and coaching subordinates; appraising and rewarding performance; delegation; and legal dimensions of HR, including anti-discrimination law.

Prerequisites: PUB-ADM 5548.

PUB-ADM 5529 Social Responsibility and Social Entrepreneurship Credits: 2

Using the social enterprise concept, students learn the theory that major companies can move social responsibility from a cost center to a profit center. In this evolving landscape, social entrepreneurs are at the vanguard of creating new business models for neglected markets that corporations can emulate, partner with or acquire to take to scale. As the traditional lines blur among nonprofits, government and business, it is critical that business students understand the opportunities and challenges in this new landscape.

PUB-ADM 5530 Capstone Seminar in Public Administration Credits: 3

This course examines theories of public organizational design, structure and change, including various issues in the administration of public organizations. Questions of professional ethics and management in the public interest are also considered. This is the final course in the MPA core curriculum.

Prerequisites: PUB-ADM 5525, PUB-ADM 5526, PUB-ADM 5544, PUB-ADM 5548 (or equivalents), or concurrent enrollment. Health-services students can substitute HLTH-ADM 5571 for PUB-ADM 5525, and HLTH-ADM 5578 for PUB-ADM 5544.

PUB-ADM 5535 Urban Policy and Administration Credits: 3

An examination of contemporary problems and issues found in urban environments. This includes exploration of the historical, political, economic, and social foundations of contemporary urban problems. Students will use general knowledge of public policy processes to develop skills, strategies, and knowledge necessary to analyze urban problems and develop policy solutions. An explicitly multi-sector focus will inform urban policy analysis and solutions.

PUB-ADM 5536 Managing Urban Economic Development Credits: 3

This course explores what managers in the public, nonprofit and private sectors need to know about urban economic development. Topics include (a) theories of urban economic development, (b) varying forms of development (e.g., attraction of new industries, central business district development, neighborhood economic development), (c) policy managerial tools for stimulating development, and (d) issues of equity in economic development.

PUB-ADM 5538 Comparative Urban Administration Credits: 3

An analysis of urban administration and planning in different comparative political, economic, and cultural settings. Analytical techniques will be applied to case studies of selected urban administrative processes involving American and other cities.

PUB-ADM 5539 Urban Planning for Public Administrators Credits: 3

This course is designed to provide students in urban administration with a comprehensive overview of the planning process. Course topics include a review of planning and the problems of effective planning implementation.

PUB-ADM 5540 Local Government Management Credits: 3

An examination of the challenges encountered in the local government management function and its role. Topics covered include political and organizational structure, service delivery, finance, personnel policies, intergovernmental relations, urban development, and leadership. The course includes presentations by practicing professionals, an emphasis on the case study method, and opportunities to analyze real-world issues and prepare recommendations for addressing them.

PUB-ADM 5541 Public Policy Development and Analysis Credits: 3

Public, nonprofit, and health organizations must navigate dense systems of complementary and contradictory public policies. These policies assign value to the actions of citizens, and are designed through a process of negotiation and analysis. In this course students will develop the frameworks and analytical methods necessary to understand the process of policy creation as well as the costs and benefits associated with any given policy, including the economic foundations for policy and the impact of policy on management decisions.

PUB-ADM 5544 Program Evaluation Credits: 3

Survey of the tools and procedures for evaluating and analyzing policies and programs in the public sector, including nonprofit and human services organizations. Consideration of such topics as definition of goals, developing measures of effectiveness, evaluation research designs, benefit-cost analysis, and the special problems of rational analysis in a political environment.

Prerequisites: PUB-ADM 5510.

PUB-ADM 5546 Socially Responsible Management and Ethics Credits: 2

An introduction to the context of management in business, public, and nonprofit organizations with a specific emphasis on the political, regulatory, social, natural and global environment of management. Students gain an understanding of organizations and management that can be used in day-to-day work environments, apply theories and concepts to identify organizational issues, problems, and/or ethical considerations. Working individually and in groups, students explain in written and oral formats, and in general and specific terms, what an organization is, how it works, and how it relates to them, to other organizations, and the environment.

PUB-ADM 5548 Leadership, Change and Social Impact Credits: 3

The two core purposes of this course are for students to learn about effective and ethical leadership, and for students to understand and develop their own capacity for leadership in dynamic, complex, and multisector environments. The course is organized around three general themes: 1) leadership as relations with subordinates, including issues of work motivation; 2) leadership as lateral relations, including organizational politics and conflict management and resolution; and 3) leadership as influence in the organization's environment.

PUB-ADM 5551 Managing Nonprofit Organizations Credits: 3

Managing Nonprofit Organizations is designed to prepare students for a career in executive management in private, nonprofit/nongovernmental organizations. The course examines the overall concepts of management and strategy in the nonprofit setting, and the role of board and executive leadership in providing strategic direction for the organization. The course addresses topics of special importance in the governance and strategic management of charitable nonprofit organizations, including organization development, board leadership, strategic planning, human resource management, organizational performance and effectiveness, and marketing.

PUB-ADM 5552 Community Organizations and Public Policy Credits: 3

This course includes examination of both neighborhood organizations and organizations intended to promote other communities of interest. In relation to neighborhood organizations, topics considered include the varieties of neighborhoods, the role of neighborhood organizations in local politics, the use of neighborhoods in administrative and political decentralization, and federal policy toward neighborhood issues. In relation to other community organizations, topics considered include the basis of such organizations, their roles in public affairs and their effects on policy processes.

PUB-ADM 5553 Legal Framework & Financial Management of Nonprofit Organizations Credits: 3

Utilizing a comparative approach the course examines the legal basis and tax treatment of private, nonprofit organizations in the U.S. Related topics also considered include concepts of fund and cost accounting, budgeting processes, earned income strategies, employee compensation and benefits practices, laws and regulations affecting lobbying, competition with business and unrelated business income tax.

PUB-ADM 5554 Seminar on Social Entrepreneurship Credits: 3

Seminar on Social Entrepreneurship is a graduate-level special-topics seminar that offers students from across the university the opportunity to engage in an In-depth examination of social entrepreneurship and how it is being understood, developed and practiced in the nonprofit sector. Students will gain a broad understanding of the various conceptions, types and aspects of social entrepreneurship, learn about processes for engaging in entrepreneurial nonprofit organization development, and discuss design and implementation issues with nonprofit leaders who have implemented various forms of social entrepreneurship.

PUB-ADM 5555 Topics In Nonprofit Fundraising Credits: 1-3

In order to flexibly treat the variety of strategies and techniques of charitable fundraising, these courses will usually be offered in variable credit hour segments, covering traditional and emerging fundraising topics. Each semester, two two-credit-hour segments and two one credit-hour segments will be offered. The two credit hour courses - "Organizing for Successful Fund Raising" and "Creating and Implementing the Annual Development Plan" - cover the basics of fund raising. The one-credit hour courses allow students to explore several different issues related to fund raising such as direct marketing and planned giving. These courses are recommended for nonprofit management students.

PUB-ADM 5555A Topics in Nonprofit Fund Raising: Organizing for Successful Fund Raising Credits: 2

Organizing for successful fundraising.

PUB-ADM 5555B Topics In Nonprofit Fund Raising: Creating & Implementing Annual Development Plans Credits: 2

Creating and implementing annual development plans.

Prerequisites: PUB-ADM 5555A.

PUB-ADM 5555C Topics in Nonprofit Fund Raising: Direct Marketing & Direct Mail in Fundraising Credit: 1

Direct marketing and direct mail in fundraising.

PUB-ADM 5555D Topics In Nonprofit Fund Raising: Planned Giving and Major Gift Solicitation Credit: 1

Planned Giving and Major Gift Solicitation.

PUB-ADM 5555E Topics in Nonprofit Fund Raising: Contemporary Trends/Ethical Issues in Fund Raising Credit: 1

Contemporary trends/ethical issues in fundraising.

PUB-ADM 5555F Topics in Nonprofit Fund Raising: Prospect Research and Proposal Writing Credit: 1

Prospect research and proposal writing.

PUB-ADM 5555G Developing Campaigns and Working with Consultants Credit: 1

In this course, various fund development campaigns and strategies will be explored; students will understand the differences between construction, renovation, equipment, program development and endowment as gift objectives. The phases of a campaign will be reviewed along with background on committee structures, goal-setting, leadership, timing and gift tables. The role of fund raising counsel will be explored. Participants will have an understanding of campaigns as important, episodic exercises for nonprofit agencies.

PUB-ADM 5555H Measurement and Evaluation for Fundraising Success and Social Impact Credit: 1

Nonprofit leaders can spend an enormous amount of time and effort creating evaluation models and reporting relevant data to funders to demonstrate positive social impact. Demonstrating success of a program or initiative is the basis for ensuring that a nonprofit has been a good steward of its mission and donated funds. However, the investment in building and fulfilling evaluation models must be commensurate with the funds awarded. This course will provide an overview of the planning and development of evaluation approaches that align well with the organization's and funder's needs. The course will introduce participants to the development and use

PUB-ADM 5555X Topics in Nonprofit Fundraising Credit: 1

Special topics in nonprofit fundraising.

PUB-ADM 5556 Innovation in Nonprofit Management and Leadership Credits: 3

This course provides an opportunity for students in the nonprofit management specialization to examine "breaking" innovations in nonprofit management and leadership. Intra- and inter-sectoral collaborative strategies and total quality management are illustrative examples. Other topics will be considered as warranted. Recommended preparation: PUB-ADM 5525, PUB-ADM 5548, and at least six hours of nonprofit management coursework.

PUB-ADM 5557 Nonprofit Fundraising and Development Credits: 3

Examines the processes and functions by which nonprofit organizations plan, organize, implement and evaluate the work of fundraising and development to secure the financial resources needed to support and sustain their programs and activities. Students gain an understanding of and practical experience in employing the basic approaches and techniques used by nonprofits to raise and deploy philanthropic resources, including annual and multi-year giving programs, major gift solicitation, planned giving initiatives, capital campaigns, and prospect research and proposal writing.

PUB-ADM 5558 Ethics for Nonprofit and Public Administrators Credits: 3

It is essential that organization and community leaders and managers understand the imperatives of ethical practice and ethical leader and manager behavior in nonprofit and governmental settings. Students are prepared to identify and assess the ethical implications of management and policy alternatives, to spot ethical issues before they become crises, and to competently and confidently develop and implement ethical decisions and actions in policy and practice. The ethical dimensions of democracy, political loyalty, pressure politics, interest group issues, pluralism, diversity and multi-cultural challenges, corruption and evil, honesty, the limits of ethical codes, whistle-blowing are included.

PUB-ADM 5559 Nonprofit Organizations in Context Credits: 3

This course provides a survey of the origins, development and contemporary functioning of the private, nonprofit sector in the U.S. The course explores theories and concepts that describe the social, political, legal and economic meaning of voluntarism, philanthropy and the nonprofit sector.

PUB-ADM 5565 Topics In Urban Administration Credits: 1-3

To flexibly treat the variety of strategies, information, and techniques in urban administration and leadership, these courses will be offered in variable credit hour segments. Each semester, courses will be offered around traditional and emerging topics. An initial "basics" series will be offered on community development organizations, urban economic development and community development strategies.

PUB-ADM 5565A Community Economic Development: The Planning Context Credit: 1

PUB-ADM 5565B Community Economic Development Tools & Techniques Credit: 1

PUB-ADM 5565C Implementing Effective Community Economic Development Credit: 1

PUB-ADM 5565D Topics in Urban Administration Credits: 1-3

To flexibly treat the variety of strategies, information, and techniques in urban administration and leadership, these courses will be offered in variable credit hour segments. Each semester, courses will be offered around traditional and emerging topics. An initial "basics" series will be offered on community development organizations, urban economic development and community development strategies.

PUB-ADM 5566 Urban Environmental Policy Credits: 3

Our cities are a first line of action in our efforts to sustain our environment. Many have begun to examine and address the connection between city problems and environmental and climate change, and the disproportionate impacts that they often have on the disadvantaged, yet these initiatives address only the surface of the issue. It is essential for scientists, public administrators, environmentalists, and policy thinkers to pay greater attention to the environmental challenges of our cities. Students examine and assess the challenge of understanding, developing and implementing coherent environmental policy to address such challenges in urban communities.

PUB-ADM 5567 Managing for Sustainability in an Urban Environment Credits: 3

Managing for sustainability requires an understanding of theories of organization, environmental management, and sustainability, including how to define and achieve sustainability. Students examine the complexities associated with issues of sustainability and the interrelationship between the global, the local and the personal. This includes consideration of how organizations function, the obstacles to sustainability confronted by sustainability managers, and specific management strategies and tools available to sustainability managers. It also involves the study of change models and their application by managers faced with the challenge of moving an organization from an old operational model to a more sustainable new organizational design.

PUB-ADM 5570 Diversity in the Workplace Credits: 3

This course explores the many issues raised by the growing diversity of backgrounds (e.g., race, gender, culture) employees bring to the workplace. The course will examine diversity issues including demographics, relevant legislation, values questions, demands on management, and effects on service delivery to clients. To better illustrate the issues, some class sessions will feature guest lecturers representing a diversity of backgrounds and work settings.

PUB-ADM 5573 Health and Social Equity Credits: 3

Examines the complex relationship between the social and political environment and health outcomes. All policy is health policy – economic, transportation, natural and built environments, schools. This course examines how social equity shapes health behaviors and how the life odds in different communities expose the historical legacies of past injustices. Only ten percent of health disparities are explained by access to care, although health care and health insurance dominate the public conversation. Draws on guest speakers, books, journal articles, popular press, film and art; as varied as are the social determinants of health, so are media that explore those relationships.

PUB-ADM 5581 Seminar In Urban Administration Credits: 3

Advanced work on special topics in urban administration. Topics will vary.

Prerequisites: PUB-ADM 5535.

PUB-ADM 5582 Developing the Social Enterprise Credits: 3

Developing the Social Enterprise is the offering of a new seminar that has been developed to provide an in-depth exploration and examination of nonprofit entrepreneurship and how it is being understood, implemented and practiced in the nonprofit sector. Developing the Social Enterprise is a graduate-level course that offers the opportunity to study in depth this oft-discussed yet often misunderstood phenomenon. Students will gain a broad understanding of the various conceptions, types and aspects of nonprofit enterprise, learn about processes for engaging in entrepreneurial nonprofit organization development, and discuss design and implementation issues with nonprofit leaders who have implemented some form of social entrepreneurship in their own organizations.

PUB-ADM 5585 Seminar In Public Affairs Credits: 3

Advanced work on special topics in public affairs.

PUB-ADM 5585A Seminar In Public Affairs Credits: 3

Advanced work on special topics in public affairs.

PUB-ADM 5585B Seminar In Public Affairs Credits: 3

Advanced work on special topics in public affairs.

PUB-ADM 5585C Seminar In Public Affairs Credits: 3

Advanced work on special topics in public affairs.

PUB-ADM 5587 Special Topics Credits: 3

Special topics in public administration.

PUB-ADM 5595 Internship Seminar Credits: 1-3

Combined classroom study and field internship. To be offered only when government agency internships approved by the Public Administration Committee are available.

Prerequisites: 18 credit hours of completed courses.

PUB-ADM 5598A Supervised Research: Nonprofit Management Credits: 1-6

PUB-ADM 5598C Supervised Research: Urban Administration Credits: 1-6

PUB-ADM 5598G Supervised Research: Unspecified Credits: 1-6

PUB-ADM 5599 Thesis Credits: 1-9

PUB-ADM 5610 Inquiry In Public Administration And Affairs Credits: 3

This course is designed to provide Ph.D. students a thorough grounding in strategies of inquiry. Issues considered include competing metatheoretical paradigms and alternative conceptions of explanation in the social and policy sciences, the implications of such alternatives for empirical research, the variety and standards of qualitative and quantitative approaches to theory and research, theory construction, and research ethics. Contemporary problems in public administration and affairs research and theory are emphasized.

Prerequisites: Doctoral student in the Interdisciplinary Ph.D. program.

PUB-ADM 5620 Literature of Public Affairs and Administration Credits: 3-6

This course grounds the student in the central ideas of the public affairs and administration literature and in the prominent themes of the discipline.

The course is offered in two versions: A, in which the political science approach to public affairs and administration is emphasized; and B, in which the organizational theory and behavior approaches to public affairs and administration are emphasized. Ph.D. students whose primary discipline is public affairs and administration are ordinarily expected to complete both versions.

Prerequisites: Doctoral student in the Interdisciplinary Ph.D. program.

PUB-ADM 5620A Literature Of Public Affairs And Administration: Political Science Credits: 3-6

Literature Of Public Affairs And Administration: Political Science. Prerequisites: PUB-ADM 5525, PUB-ADM 5526, and PUB-ADM 5544.

PUB-ADM 5620B Literature Of Public Affairs And Administration:Organizational Theory & Behavior Credits: 3-6

Literature Of Public Affairs And Administration:Organizational Theory Behavior.

Prerequisites:PUB-ADM 5530 and PUB-ADM 5548.

PUB-ADM 5699 Dissertation And Research In Public Affairs And Administration Credits: 1-12

Dissertation research and writing in the Public Affairs and Administration discipline.

PUB-ADM 5899 Required Graduate Enrollment Credit: 1

Reading (EDRD)

Courses

EDRD 5439 Language and Literacy Across the Disciplines Credits: 3

Principles and application of disciplinary literacy in the middle and secondary classroom. Class will be primarily composed of discussion and lecture.

As a part of the course, teacher candidates will inquire into and analyze disciplinary practices in 5-12 schools.

Prerequisites: Admission to the school of education.

EDRD 5501 Teaching Of Reading Credits: 3

This graduate language and literacy course explores foundational theories and research that have influenced literacy instruction and assessment in the United States. In particular, this course examines critical sociocultural theories and high leverage literacy practices for diverse learners.

Prerequisites: TCH-ED 415; No pre-requisites for students at the MA or EdSpec level.

EDRD 5502 Early Literacy and Language Development Credits: 3

This graduate language and literacy course emphasizes learning theories related to language acquisition, continuums of emergent literacy development, and corresponding teaching methods for literacy instruction and assessment of diverse learners. This course also prepares teachers and reading professionals to implement continuous professional learning related to language acquisition and emergent literacy with other teaching professionals.

EDRD 5510 Adolescent Practicum in Literacy Assessment and Intervention Credits: 3

This course ensures learners understand the purposes, strengths, and limitations of different literacy assessments in order to assess adolescent students' proficiencies. The course will focus on identifying cognitive, motivational, and sociocultural factors that contribute to literacy success for the adolescent student in order to design and teach literacy intervention lessons with a struggling adolescent reader. As part of the practicum experience, learners are trained on communicating assessment results and implications to a variety of audiences.

EDRD 5511 Advanced Literacy Assessment and Evaluation Credits: 3

This graduate language literacy course engages teachers and literacy specialists in building foundational knowledge, analyzing, and administering intelligence and achievement tests focusing on a range of skills and abilities. The course foregrounds research-based, developmentally-appropriate theoretical frameworks and measures of cognitive functioning and academic achievement, as well as formative and summative literacy assessment practices through a variety of advanced level methods.

EDRD 5515 Seminar In Reading Credits: 3

In this seminar, candidates will be introduced to the discourse of literacy research, understand commonly used practitioner research designs, become critical consumers of literacy research, and expand their knowledge of the extant body of literature on literacy and literacy for diverse learners.

Prerequisites: EDRD 5510.

EDRD 5520 Elementary Practicum in Literacy Assessment and Intervention Credits: 3

This culminating elementary practicum is designed for graduate students in Language Literacy. This course prepares teachers to demonstrate proficiency in meeting the literacy needs of struggling readers and diverse learners in an elementary school setting and engaging in peer coaching and active self-peer analysis in order to improve their own instructional practices. Note: As this is the culminating course in the degree program, students are encouraged to implement learning concepts, practices, and assessments from previous coursework as appropriate during this practicum course.

Prerequisites: EDRD 5502

EDRD 5530 Reading Instruction for K-12 English Language Learners Credits: 3

This course investigates ways to differentiate reading instruction to meet needs of English Language Learners with different levels of language proficiency and at different developmental and academic levels. The course focuses on research findings related to literacy development of diverse learners and ways to strengthen diverse classroom communities. This is an elective course in Language Literacy and does not have prerequisites.

EDRD 5540 African American English in Society and Schools Credits: 3

This course deals with the distinctive varieties of English used by and among African Americans, particularly in big-city settings, and their parallels elsewhere in Africa and the New World, especially in the Caribbean. The subject is approached from four perspectives that will be covered in the course: (1) Present-Day Features of African American Vernacular English (AAVE), its phonology, syntax, lexicon; (2) History and origins of AAVE; (3) Speech Events and Expressive Language Use (SEELU) Structure and function of such expressive African American Speech Events ; (4) Educational Issues connected with the use of AAVE.

Prerequisites: Open to graduate students enrolled in Language and Literacy Program. Open to graduate students enrolled in other programs or undergraduate students with permission of professor.

EDRD 5541 Teaching Reading Improvement: Secondary, College, and Adult Levels Credits: 3

Classroom and laboratory techniques for upper level reading instruction; including study skills; reading speed and flexibility, and vocabulary improvement.

EDRD 5601 Organizing And Guiding The Reading Program Credits: 3

This course examines, analyzes, and develops effective K-12 schoolwide literacy programs that include intervention support systems for responding to the needs of all students in diverse contexts. In addition, the course will focus on program goals, the roles and responsibilities of personnel, materials, fostering collaborative leadership, and creating a school culture that focuses on literacy.

EDRD 5650 Dyslexia and Related Learning Differences Credits: 3

This advanced level graduate language and literacy course analyzes theories of atypical literacy development, with a specific focus on identification and awareness of the ways that language processing affects speech, reading and spelling. Students will explore the coexistence of dyslexia with related learning differences and will plan instructional interventions for students with literacy special needs.

Real Estate (RL-EST)

Courses

RL-EST 5556 Entrepreneurial Real Estate Process Credits: 3

This interdisciplinary course adopts an entrepreneurial approach to the real estate process spanning concept generation, planning, research, acquisition, design, construction, finance, and investment. The course is open to students from various units across campus. Students will engage in experiential learning to sensitize them to the breadth of inquiry, critical thinking and analysis involved in contemporary real estate. Instruction focuses on creation of optimal spatial solutions for targeted users on targeted sites that are economically viable, sustainable and environmentally responsible. The course emphasizes the importance of focusing on value creation, control and capture across the full life cycle of real estate.

RL-EST 5571 Real Estate Finance Credits: 3

This course introduces students to the full spectrum of real estate finance and investment analysis. It helps students quantify the financial implications of various real estate decisions for individual properties as well as more strategic decision-making applied to real estate portfolios. Using a combination of experiential and incremental learning students develop the foundation skills necessary to support more advanced concepts and financial theory. The course explores time value of money, law, leverage, underwriting, discounted cash flow, investment analysis, and capital markets. Students also develop advanced modeling skills and learn how to apply state-of-the art financial packages to support decisions.

Prerequisites: RL-EST 5556.

RL-EST 5573 Real Estate Feasibility and Market Analysis Credits: 3

This course helps students develop entrepreneurial, fact-based approaches to problem-solving and decision support. It incorporates experiential learning to help students deploy quantitative and qualitative approaches that incorporate the perspectives of space users, space producers, and market facilitators. Students learn how to address the goals and objectives of a particular client, while also considering the externalities and impacts such decisions have on the built environment. Students will integrate critical thinking with spatial and financial analytical methods and state-of-the-art tools to quantify market demand and to translate that demand to a spatial solution that is marketable and financially feasible.

Prerequisites: RL-EST 5556.

RL-EST 5574 Real Estate Construction and Development Credits: 3

This course explores principles and techniques of construction project management and real estate development. Adopting a holistic perspective it places the production of real estate in a broader context of product life cycles drawing on systems analysis, planning, programming, budgeting and staffing, controlling major projects. Students apply experiential learning and assume the role of a developer who marshals the resources needed to produce real estate. It explores new projects and renovation of existing space with emphasis on customizing products to fit user needs. The course sensitizes students with emphasis on creating sustainable products that are socially responsible and economically viable.

Prerequisites: RL-EST 5556.

RL-EST 5576 Real Estate Property and Portfolio Management Credits: 3

This course explores the complexities and integration of property and portfolio management which are critical to the creation, control and capture of real estate value. Students learn how to approach real estate in a more holistic manner by integrating management functions that range from individual property types to portfolios of properties. Students learn how to incorporate marketplace factors in their decisions and apply modern portfolio theory and other tools to construct and manage properties and portfolios in a socially responsible manner. Using experiential methods students learn to apply critical thinking to solve complex property and portfolio management problems.

Prerequisites: RL-EST 5571.

RL-EST 5577 Real Estate Valuation Credits: 3

This course provides students with an understanding of real estate appraisal garnered through a combination of lectures, projects and discussions. Students explore valuation theory, behavioral processes, and the unique nature of the inefficient real estate market. Through hands on exercises that constitute the experiential learning students apply best practices embedded in the three approaches to value that underpin real estate appraisal: cost, income and sales comparisons. Students also analyze the impact of macroeconomic conditions, supply/demand conditions, capital flows, and investor behavior. Students develop proprietary valuation models and apply appropriate quantitative tools and software for predicting most probable prices.

Prerequisites: RL-EST 5556.

RL-EST 5578 Legal Context of Real Estate Credits: 3

This interdisciplinary course acquaints business and law school students with legal issues in development, ownership and operation of commercial real estate. It also explores the roles of various professionals in real estate transactions. Students will learn legal concepts and terminology, and acquire familiarity with key issues and documents relating to real estate decisions and entrepreneurship, including leasing, insurance, negotiations, construction and architect's contracts, transactions, regulation, financing and bankruptcy. Students learn how to apply risk management to design and construction contracts, insurance, bonding and indemnification, as well choice of business entity, income tax planning and negotiation of joint ventures.

RL-EST 5587 Special Topics Credits: 3

Special topics in real estate.

RL-EST 5595 Internship Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

RL-EST 5597 Real Estate: Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

RL-EST 5899 Required Graduate Enrollment Credit: 1

Religious Studies (RELIG-ST)

Courses

RELIG-ST 5500 Special Topics In Religious Studies Credits: 1-3

Special topics in religious studies. The focus of the course will vary by semester and instructor.

RELIG-ST 5500A Special Topics In Religious Studies Credits: 1-3

RELIG-ST 5500B Special Topics In Religious Studies Credits: 1-3

RELIG-ST 5500C Special Topics In Religious Studies Credits: 1-3

RELIG-ST 5500D Special Topics in Religious Studies Credits: 1-3

RELIG-ST 5500E Special Topics In Religious Studies Credits: 1-3

RELIG-ST 5500F Special Topics In Religious Studies Credits: 1-3

RELIG-ST 5501A Religion In America Credits: 3

An in-depth examination of selected aspects of the history of religions in America from the colonial period to the present. Special emphasis will be given to methodological issues in the study of American religious history.

RELIG-ST 5502 Religion & Colonialism in Latin America Credits: 3

The study of selected aspects of the history of religions in the Americas. Primary focus is on the complex ways that European, Native American Africans religions helped to structure and negotiate the experiences and the significance of cultural contact and colonialism through lived worlds of meaning.

RELIG-ST 5503 Visions, Dreams, and Prophecies as Religious Phenomena Credits: 3

This course explores the way visions, dreams, and prophecies have acquired religious significance in Western and non-western contexts from the ancient to the present.

RELIG-ST 5504 Gender and Religion Credits: 3

Cross-cultural and comparative study of how religious groups create and transmit gender roles and expectations.

RELIG-ST 5506 The History of Christianity to the Middle Ages Credits: 3

This course examines the historical and theological development of Christianity from its origins to the the High Middle Ages The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major social, institutional and intellectual force with a focus on patterns of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.

RELIG-ST 5507 The History of Christianity from the Middle Ages to the Present Credits: 3

This course examines the historical and theological development of Christianity from the High Middle Ages to the present. The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major social, institutional and intellectual force with a focus on patterns of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.

Cross Listings: HISTORY 5507A.

RELIG-ST 5508 Anthropology of Religion Credits: 3

This course explores the ways anthropologists have gone about studying religion from the opening decades of the 20th century to present. The course introduces students to the diversity of human religious expression and experience through anthropological literature and to the diversity of anthropological expression especially as it has been revealed in social scientific studies of religious life. The course is designed to generate a critical dialogue about the special role that religion has played in the ongoing anthropological engagement with "other" societies and cultures over time.

RELIG-ST 5510 Religions Of The World Credits: 3

This course is designed to introduce graduate students to the major religions of the world, as well as to selected small-group religions. Our goal will be to learn to appreciate the similarities and differences in the structure and history of these religions. A primary focus will be on using the categories of the history of religions to examine and analyze the various dimensions of religion (e.g., historical, sociological, ritual, mythological, aesthetic). In addition, methodological issues of comparison will be addressed.

RELIG-ST 5567 Myth and Ritual Credits: 3

Myth and "ritual" have long been fundamental categories in the study of religion. This course will briefly survey some of the major theories and approaches to the study of myth and ritual from the Enlightenment to the present. Will not only trace the shifting meanings of "myth" and "ritual," but will critically evaluate the utility of diverse approaches to the study of religious phenomena designated by these terms. Reading will include theoretical works, as well as selected case studies.

RELIG-ST 5584RS Sacred Narratives And Texts Credits: 3

This course will study the "social lives" of sacred narratives and texts as they circulate within religious communities. Among the topics to be studied are methods of exegesis in different religious traditions, orality and literacy (including the reoralization of written texts), the canonization process, the emergence of interpretive specialists, text as amulets, reading and meditative practices and techniques, and narratives and the arts. The course is comparative, cross-cultural, and interdisciplinary in nature.

RELIG-ST 5586RS Methodological Approaches To The Study Of Religion Credits: 3

This course examines the various disciplines that undertook the critical, objective study of religion beginning in the second half of the nineteenth century and continuing into the present. The course examines how the disciplines of the social sciences and humanities emerged in the last century and how the study of religion emerged from its roots in Jewish scholarship and Christian theology to be included under the umbrella of the humanities and social sciences. The historical development of religious studies as a historical and intellectual contexts.

RELIG-ST 5587 Contemporary Approaches to the Study of Religion Credits: 3

A survey of major scholars and theorists of religion from 1950 to the present, with an emphasis on significant shifts in the field.

RELIG-ST 5587RS Research Seminar Credits: 3

Students in this course will produce a major research paper under the direction of the instructor: a self-contained thesis chapter, an article for publication or the equivalent.

RELIG-ST 5592 Cults Sects, And New Religious Movements Credits: 3

In this course, students will experience: (a) a variety of methods for analyzing and understanding new religious movements in society: sociological, historical, and textual; (b) an introduction to the broad spectrum of religious beliefs which exist (and flourish) outside the cultural mainstream; and (c) an introduction to some of the means by which dominant religious and secular culture has confronted the presence of NRMs-e.g., deprogramming exit counseling, and theologically oriented countermovement.

RELIG-ST 5593 Sex And Religion Credits: 3

The course is designed to highlight issues related to the various ways in which religions of the world have integrated, embraced, or repressed one of the basic human experiences sexual expression. This is an elective course designed for graduate students with Religious Studies either as their coordinating or co-discipline. This is an advanced seminar, and as such does assume a certain measure of theoretical familiarity and background of study.

RELIG-ST 5594RS Death In The History Of Religions Credits: 3

As a biological "fact," death would appear to be a human universal. Yet, human beings have imagined--and, thus experienced--the meaning of death in many diverse ways in different cultures and over time. This course explores the conceptualization and representation of death and dying, as well as the ritual activities surrounding death, found in selected religious communities. The goals are to gain insight into how people have sought to (re) create a world of meaning in the face of death and to gain a critical perspective on our own contemporary situation.

RELIG-ST 5595RS Time And Space In The History Of Religions Credits: 3

Time and space are essential components of the lived worlds of human beings, yet the cultural and historical constructions of these are remarkably diverse and, moreover, are subject to change. This course is a cross-cultural, interdisciplinary, and comparative exploration of the constructions and experiences of time and space found in selected religious communities and historical periods. In addition, it investigates the pivotal role the categories of "sacred and profane time and space" have played in theorizing religion and in the study of religious myths and rituals in the modern period. Time and space are essential components of the lived worlds of human beings, yet the cultural and historical constructions of these are remarkably diverse and, moreover, are subject to change. This course is a cross-cultural, interdisciplinary, and comparative exploration of the constructions and experiences of time and space found in selected religious communities and historical periods. In addition, it investigates the pivotal role the categories of "sacred and profane time and space" have played in theorizing religion and in the study of religious myths and rituals in the modern period.

RELIG-ST 5596RS Body In The History Of Religions Credits: 3

The human body is the site of extensive imaginal and ritual activities in all religious traditions. This course explores some of the diverse ways religious communities have imagined and experienced the human body, as well as how the body had been manipulated and worked on in an effort to transform the human situation in the world.

RELIG-ST 5597RS Non-Thesis Research/Reading Credits: 1-6

Individual direction of student reading or research by selected, consenting faculty. This course can be taken only when faculty supervision is unavailable in colloquia or seminars.

RELIG-ST 5598RS Seminar In The History Of Religions Credits: 3

Advanced graduate seminar on a selected topic or problem in the History of Religion. Topic varies, but the seminar will have a methodical or theoretical focus. May be repeated for credit when topic is different.

RELIG-ST 5680RS Doctoral Colloquium Credits: 3

This course will examine the writings and theories of major scholars in a particular area of Religious Studies. The authors, works and intellectual currents which form the basis of the colloquium will vary from semester to semester depending upon the professor's expertise and design for the course.

RELIG-ST 5687RS Doctoral Research Seminar Credits: 3

Students in this course will produce a major research paper under the direction of the instructor. This shall consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

RELIG-ST 5697RS Doctoral-Level Independent Readings Credits: 1-6

Individual reading under the supervision of members of the Religious Studies Doctoral faculty and adjuncts in preparation for the Comprehensive Examination for the Ph.D.

RELIG-ST 5699RS Dissertation Credits: 1-15

Course credits in dissertation.

RELIG-ST 5899 Required Graduate Enrollment Credit: 1

Research and Psychology (EDUC-R&P)

Courses

EDUC-R&P 5502 Advanced Educational Psychology Credits: 3

Critical examination of the contributions of psychological principles and findings to the field of education.

EDUC-R&P 5505 Statistical Methods I Credits: 3

Non-theoretical approach to statistical procedure, including introduction to simple analysis of variance.

EDUC-R&P 5508 Principles And Methods Of Research Credits: 3

Introduction to the analysis of research literature including types of research, methodology, design and data analysis.

EDUC-R&P 5510 Child Behavior And Development Credits: 3

Growth, maturation, and learning processes in children.

EDUC-R&P 5512 Adolescent Development and the School Credits: 3

An overview of development from preadolescence to adulthood, focusing on major theories and aspects of development, contemporary critical issues of the transitions from childhood to adolescence and into adulthood, and the role of professional educators in facilitating positive development .

EDUC-R&P 5513 Life Span Human Development Credits: 3

This course introduces students to the theories and research of biological, cognitive, social and personality development across the lifespan, within the layers of context of people's lives. Special attention is given to the role in development of social class, gender, ethnicity and culture.

EDUC-R&P 5522 Principles Of Testing Credits: 3

Measurement theory, uses and limitation of assessment procedure.

EDUC-R&P 5555 Statistical Methods II Credits: 3

Non-theoretical approach to statistical procedure, including introduction to factorial ANOVA and multiple regression.

Prerequisites: EDUC-R&P 5505.

EDUC-R&P 5564 Instructional Design Credits: 3

Overview of learning theories and pedagogical models as related to the principles and methods of instructional design. Emphasis on the planning, design, implementation and evaluation of instructional systems including focus on technology integration.

EDUC-R&P 5575 Internship Credits: 3-16

Applied experiences in a planned, supervised program in research or educational psychology.

EDUC-R&P 5589 Special Topics In Education Credits: 1-6

A course designed to deal with a topic in educational research or educational psychology which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-R&P 5589AD Special Topics in Education Credits: 1-6

EDUC-R&P 5589AT Special Topics in Education Credits: 1-6

EDUC-R&P 5589CH Special Topics in Education Credits: 1-6

Special Topics in Education

EDUC-R&P 5589CP Special Topics In Education Credits: 1-6

EDUC-R&P 5589DB Special Topics In Education Credits: 1-6

A course designed to deal with a topic in educational research or educational psychology which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-R&P 5589HL Special Topics in Education Credits: 1-6

EDUC-R&P 5589IS Special Topics in Education Credits: 1-6

EDUC-R&P 5589LP Special Topics in Education Credits: 1-6

EDUC-R&P 5589PE Special Topics In Education Credits: 1-6

EDUC-R&P 5589PR Special Topics In Education Credits: 1-6

EDUC-R&P 5589SC Special Topics in Education Credits: 1-6

EDUC-R&P 5589SE Special Topics In Education Credits: 1-6

EDUC-R&P 5590 Individual Studies Credits: 1-6

Review of the research and trends relative to selected problems in educational research or psychology.

EDUC-R&P 5605 Quantitative Analysis I: Regression And Analysis Of Variance Credits: 3

This graduate level statistics course for students in education and the behavioral sciences provides a strong conceptual understanding of two major statistical procedures within the context of the general linear model: Multiple regression and numerous analysis of variance (ANOVA) models. Students will learn to select appropriate statistical software, and report the results of their analyses in the format of the American Psychological Association.

Prerequisites: EDUC-R&P 5505 and EDUC-R&P 5508.

EDUC-R&P 5606 Quantitative Analysis II : Multivariate Data Analysis Credits: 3

This graduate level statistics course for students in the behavioral sciences and education provides a strong conceptual understanding of advanced topics in regression (interaction effects, logistic regression, path analysis) and various multivariate techniques (MANOVA, canonical correlation, factor analysis). Students will complete a series of data based projects that allow them to demonstrate their skills in analysis, reporting, and interpretation of findings.

Prerequisites: EDUC-R&P 5605 (or PSYCH 5516) and EDUC-R&P 5508.

EDUC-R&P 5608 Introduction To Graduate Research Credits: 3

This course provides an introduction to qualitative and quantitative research methods. It is designed for students beginning their study in a doctoral program.

Prerequisites: EDUC-R&P 5508 and doctoral student status.

EDUC-R&P 5609 Development and Evaluation of Assessment Tools Credits: 3

This survey course examines test theories, construction, and measurement theories. Within the context of a variety of conceptual frameworks and examples, students become knowledgeable about the various purposes, approaches, and computer software tools for measurement.

Prerequisites: EDUC-R&P 5606 or PSYCH 5517.

EDUC-R&P 5611 Structural Equation Modeling Credits: 3

Students will learn core techniques in structural equation modeling, including: path analysis, confirmatory factor analysis, structural regression models; and be introduced to advanced topics such as multi-group SEM and latent growth models. There will be multiple lab sessions using appropriate computer applications.

Prerequisites: EDUC-R&P 5606 (or PSYCH 5517) and EDUC-R&P 5609 (or PSYCH 5538).

EDUC-R&P 5612 Applied Quantitative Research in Education Credits: 3

This class provides an in-depth examination of experimental and non-experimental quantitative research techniques, with a focus on their application in educational research. Students develop a proposal for a quantitative research study, including review of literature, development of research questions and hypotheses; and selection of appropriate research design, data collection techniques, and statistical analyses.

Prerequisites: One semester of statistics at the doctoral level.

EDUC-R&P 5613 Hierarchical Linear Models Credits: 3

Students will be introduced to hierarchical linear modeling techniques. Foundational topics include the rationale for using hierarchical linear models, issues related to assumptions and data screening, and a dissection of the components of a two-level organizational effects hierarchical linear model. Special topics to be discussed include growth modeling, three-level models, dyadic models, and models with categorical outcome variables (i.e., hierarchical generalized linear models). Multiple class sessions will be devoted toward use of software to build and analyze these models.

Prerequisites: EDUC-R&P 5606 and EDUC-R&P 5609.

EDUC-R&P 5615 Qualitative Research Theory & Design Educational Setting. Part 1 Credits: 3

Students will be introduced to qualitative research theory and design.

Prerequisites: EDUC-R&P 5505 and EDUC-R&P 5508.

EDUC-R&P 5616 Qual Data Collection And Analysis In Educational Settings. Part 2 Credits: 3

Students will gain experience in qualitative data collection and analysis.

Prerequisites: EDUC-R&P 5615.

EDUC-R&P 5625 Program Evaluation For Education & Social Credits: 3

Program evaluation is an applied research area that focuses on providing summative and formative data about the progress of an organization or program. This doctoral seminar will focus on learning to identify the goals, objectives and assumptions inherent in a program, and on designing a methodology to assess progress towards the goals. All students will develop a comprehensive evaluation plan for a program of their choice.

Prerequisites: EDUC-R&P 5505, EDUC-R&P 5522, and EDUC-R&P 5508 or EDUC-R&P 5608.

EDUC-R&P 5639 Educational Psychology: Focus on Teaching in Higher Education Credits: 2-3

An introduction to theories and principles from educational psychology as they relate to learning, motivation, assessment, and instruction.

Prerequisites: Doctoral Student Status.

EDUC-R&P 5640 Apprenticeship And Conference In College Training Credits: 1-3

Apprenticeship experience in preparing, conducting, and evaluating college teaching under the direction of and in conference with supervising professors.

Prerequisites: EDUC-R&P 5639.

EDUC-R&P 5690 Special Problems Credits: 1-6

Individual studies; thesis exploration, special reading.

EDUC-R&P 5698 Dissertation In Educational Research & Psychology Credits: 1-16

Dissertation In Educational Research Psychology

Research Methodology - Dentistry (RES-ME)

Courses

RES-ME 5700 Introduction To Research Methodology Credits: 2-3

This lecture/discussion course will facilitate student's understanding of terminology and key concepts of research methodology and design. Assigned exercises are designed to demonstrate application of research design principles, and to increase advanced education students' competency in evaluating and planning scientific studies. This knowledge is indispensable for conducting meaningful research in advanced education certificate, masters of doctoral level programs.

RES-ME 5703 Thesis Writing Credit: 1

The methods of preparing, organizing, and presenting research findings using scientific writing format will be reviewed for completing a thesis. This course is required for the Master of Science degrees in Oral Biology and Dental Hygiene Education.

RES-ME 5704 Introduction to Biostatistics Credits: 2-3

A lecture/seminar course required for students pursuing a master's degree. This course focuses on an in-depth coverage of statistical designs commonly found in dental research, statistical techniques associated with these designs, application to them via the use of a computer based statistical software analysis package, and the interpretation of statistical tests.

Prerequisites: RES-ME 5700.

Saxophone (SAXOPH)

Courses

SAXOPH 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

SAXOPH 5500A Graduate Saxophone-Secondary Credits: 2

SAXOPH 5500B Special Applied Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

SAXOPH 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

SAXOPH 5500JA Graduate Applied Jazz Studies Credits: 2

One-hour lesson weekly. Jury examination is required.

Prerequisites: Graduate standing.

SAXOPH 5500JB Special Applied Jazz Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.

Prerequisites: Graduate standing.

SAXOPH 5500JC Applied Jazz Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied jazz study in an area other than, and in addition to, their primary performance study.

Prerequisites: Graduate standing.

SAXOPH 5501 Graduate Saxophone - Masters Performance Credits: 4

SAXOPH 5601 Graduate Saxophone - Doctoral Performance Credits: 4

School of Graduate Studies (SGS)

Courses

SGS 5501 Disability and Community Support Credits: 3

This is an academic service-learning course that will integrate 15 classroom contact hours with 60 service hours within a framework of Disability Studies.

Prerequisites: LAW 8815S.

SGS 5590A Special Topics Credits: 1-6**SGS 5651A Preparing Future Faculty I Credit: 1**

Course is the first in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. Course development and exploring the various roles and responsibilities of university faculty members are the emphases of the first two courses.

Prerequisites: Year I Preparing Future Faculty Fellow or doctoral student recommended by two faculty members in student's doctoral program.

SGS 5651B Preparing Future Faculty II Credit: 1

Course is the second in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. Course development and exploring the various roles and responsibilities of university faculty members are the emphases of the first two courses.

Prerequisites: SGS 5651A.

SGS 5652A Preparing Future Faculty III Credit: 1

Course is the third in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. The emphasis in SGS 5652A and SGS 5652B is on the teaching/classroom experience including using technology effectively. Students may enroll simultaneously in SGS 5651A and SGS 5652A.

Prerequisites: Year 2 Preparing Future Faculty Fellow, or recommendation by two faculty members in student's doctoral program.

SGS 5652B Preparing Future Faculty IV Credit: 1

Course is the fourth in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. The emphasis in SGS 5652A and SGS 5652B is on the teaching/classroom experience with a focus on using technology effectively. Students who have completed SGS 5651A and SGS 5652A may enroll simultaneously in SGS 5651B and SGS 5652B.

Prerequisites: SGS 5652A.

SGS 5653A Preparing Future Faculty V Credit: 1

Course is the fifth in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. The emphasis in SGS 5653A and SGS 5653B is on academic collaboration and preparing for the academic job market. Students may enroll simultaneously in SGS 5652A and SGS 5653A.

Prerequisites: EDUC-R&P 5639 and either Preparing Future Faculty Fellow or recommendation by two faculty members in student's doctoral program.

SGS 5653B Preparing Future Faculty VI Credit: 1

Course is the last in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. The emphasis in SGS 5653A and SGS 5653B is on academic collaboration and preparing for the academic job market. Students who have completed SGS 5652A and SGS 5653A may enroll simultaneously in SGS 5652B and SGS 5653B.

Prerequisites: SGS 5653A.

Social Sciences (SOC-SCI)

Courses

SOC-SCI 5610 Philosophy Of Social Science Credits: 3

This course examines the development of the philosophy of science since the end of the 19th century. In this regard, Positivism, Conventionalism, and Realism as the three major conceptions of science will be studied and their significance as philosophical foundations of the social sciences will be assessed. Particular attention will be given to the emerging philosophy of science (i.e., Scientific Realism) which has profoundly challenged the more established Positivism.

SOC-SCI 5621 Consensus Social Theory Credits: 3

This course explicates the connections between mainstream (or orthodox) approaches in the various social sciences, which can be collectively viewed as Capitalist interdisciplinary social theory. Explication entails positivist philosophy of science, classic liberal political philosophy, neo-classical economics, pluralist political science, human ecology and functionalist sociology.

Prerequisites: SOC-SCI 5610.

SOC-SCI 5622 Pragmatism & Evolutionary Social Theory Credits: 3

Drawing on the classical pragmatism of Peirce and Dewey as the philosophical framework for inquiry, and the institutional economics of Veblen, Commons, Mitchell, and Ayres, this course develops Evolutionary Social Theory as a paradigm for interdisciplinary social science.

SOC-SCI 5630 Seminar in Research Methodology Credits: 3

This course assists students with the establishment of a framework for their dissertation research that represents a substantive integration of their coordination discipline with the SSC program. The ultimate goal of the seminar is a defensible dissertation proposal for each student. Includes opportunity for participation by supervisory committee members.

Prerequisites: SOC-SCI 5610, SOC-SCI 5621, and a course in Critical Theory.

SOC-SCI 5641 History of a Social Science Discipline Econ Credits: 3

The course examines the social and political development of economics that underpins the development of economic theory in the 20th century.

Prerequisites: SOC-SCI 5610.

SOC-SCI 5690 Special Doctoral Reading in Social Science Credits: 1-3

Special Research Topic in Interdisciplinary Social Science at The Doctoral Level

SOC-SCI 5690A Special Topics Credits: 1-3

SOC-SCI 5690B Special Topics Credits: 1-3

SOC-SCI 5690C Special Topics Credits: 1-3

SOC-SCI 5899 Required Graduate Enrollment Credit: 1

Social Work (SOC-WK)

Courses

SOC-WK 5510 Foundation Field Practicum I Credits: 3

Field practicum is a central component in the student's professional education. Field placements provide the student with a range of practice experience to incorporate theoretical learning and to develop the knowledge, values, and skills for professional social work practice. Learning takes place in community settings (16.25 hours weekly/260 hours per semester).

Prerequisites: SOC-WK 5530; SOC-WK 5534 (or as co-requisites).

Co-requisites: SOC-WK 5532, SOC-WK 5536.

SOC-WK 5511 Foundation Field Practicum II Credits: 3

The field practicum experience is continued from Foundation Field Practicum I (SOC-WK 5510), students will complete 16.25 hours weekly/260 hours in the spring semester. The foundation field practicum places emphasis on the application of skills for generalist social work practice in community settings preparing students for generalist social work practice within the micro, mezzo and macro frameworks.

Prerequisites: SOC-WK 5510; SOC-WK 5532; SOC-WK 5536; SOC-WK 5531 (or co-requisite); SOC-WK 5565 (or co-requisite).

Co-requisites: SOC-WK 5533; SOC-WK 5550.

SOC-WK 5512 Advanced Field Practicum I Credits: 3

The focus of the advanced field practicum is to develop mastery in the area of concentration by increasing skills in practice approaches, examining relevant policies, integrating theoretical learning and applying research knowledge. Field instruction takes place in community agency settings (16.25 hours weekly/260 hours per semester).

Prerequisites: SOC-WK 5511 or SOC-WK 5538.

Co-requisites: SOC-WK 5540, SOC-WK 5578.

SOC-WK 5513 Advanced Field Practicum II Credits: 3

The field practicum experience continues from Advanced Field Practicum I (SOC-WK 5512), completing 16.25 hours weekly/260 hours in the spring semester. The advanced field practicum places emphasis on the student's ability to select and use multiple approaches to social work within micro, mezzo and macro frameworks.

Prerequisites: SOC-WK 5512, SOC-WK 5540, SOC-WK 5578.

Co-requisites: SOC-WK 5541, SOC-WK 5579.

SOC-WK 5530 Human Behavior Theory Credits: 3

This course focuses on the critique, contextualization, and application of human behavior theory to social work practice with individuals in the social environment. The perspectives of social justice, empowerment, and strengths are emphasized.

SOC-WK 5531 Human Behavior: Macro Perspectives in the Social Environment Credits: 3

This theory course applies macro social work perspectives to the broader understanding of human behavior within large systems, organizations, communities, and society. Social justice, empowerment, and strengths perspectives are emphasized.

Prerequisites: SOC-WK 5530 (or co-requisite).

SOC-WK 5532 Foundation Social Work Practice I Credits: 3

This course examines the fundamental ethics, values, knowledge, and skills of generalist social work practice. In this course the first three steps of the Generalist Intervention Model are applied to effectively pre-plan, engage, and assess across all levels of practice (micro, mezzo, and macro).

Prerequisites: SOC-WK 5530, SOC-WK 5534 (or as co-requisites).

Co-requisites: SOC-WK 5510, SOC-WK 5536.

SOC-WK 5533 Foundation Social Work Practice II Credits: 3

This second generalist social work practice course involves interacting with evidence based practice models and group facilitation. Application of the final steps of the Generalist Intervention Model (planning, implementation/intervention, evaluation, termination, and follow-up) will be deployed across all levels of practice (micro, mezzo, and macro).

Prerequisites: SOC-WK 5510, SOC-WK 5532, SOC-WK 5536, SOC-WK 5531 (or co-requisite), SOC-WK 5565 (or co-requisite).

Co-requisites: SOC-WK 5511, SOC-WK 5550.

SOC-WK 5534 Social Welfare Programs and Policies Credits: 3

This course examines social policies that direct current social service trends at local, state, and federal levels. This course teaches a model of analysis that examines the context in which policy decisions are made and the effects that social service programs and policies have on people's lives.

SOC-WK 5536 Social Work Research Methods Credits: 3

This course introduces students to the fundamental knowledge and skills of social work research such as practice evaluation, program planning, and other facets of professional social work practice. Emphasis on application of social research methods in actual practice situations will be used to assist students in skill development.

Prerequisites: SOC-WK 5530; SOC-WK 5534 (or as co-requisites).

Co-requisites: SOC-WK 5510; SOC-WK 5532.

SOC-WK 5538 Advanced Standing Seminar Credits: 6

The Advanced Standing Seminar will provide a bridge between the bachelor of social work and the advanced level MSW Concentration year. This course is practice-centered and emphasizes knowledge, values, and skills, which are unique to social work and form our approach to generalist practice, human behavior, and research.

Prerequisites: Advanced Standing MSW Student.

SOC-WK 5540 Advanced Social Work Practice I Credits: 3

This course prepares students with an advanced generalist practice perspective in order to evaluate and integrate theory, values, and skills in a rapidly changing social work environment.

Prerequisites: SOC-WK 5511 or SOC-WK 5538.

Co-requisites: SOC-WK 5512.

SOC-WK 5541 Advanced Social Work Practice II Credits: 3

The course examines leadership, organizational, and management competencies for professional practice in social service agencies and skills for community organizing.

Prerequisites: SOC-WK 5540.

Co-requisites: SOC-WK 5512.

SOC-WK 5542 Gerontological Social Work Credits: 3

This course provides an overview of social service practice with older adults. The course examines population demographics, contextual aspects of aging, and approaches to effective advanced generalist practice in treatment and community settings.

SOC-WK 5544 Children, Families and their Communities: The Child Welfare System Credits: 3

This course examines child centered, family centered and neighborhood based child welfare policy and practice. Institute of Medicine reports and the Family First Prevention Services Act that funds evidence-based, research-informed and promising practices are closely examined in light of adoption of new programs and practices by Missouri and Kansas.

SOC-WK 5546 Behavioral Health and Addictions in Social Work Practice Credits: 3

This course provides the knowledge and skills necessary to effectively address mental illness, substance misuse or abuse, and co-occurring disorders within the framework of advanced generalist practice. In the course students will apply social work values, ethics, and competencies to advanced generalist practice skills with individuals, families, and groups experiencing mental health and substance abuse disorders.

SOC-WK 5547 Grief and Loss in Social Work Practice Credits: 3

This course provides a comprehensive study of grief and loss from a professional social work perspective that includes current theories, evidence-based frameworks, and intervention strategies from a strengths-based perspective. The course will address many forms of special losses, such as suicide, homicide, HIV/AIDS, war-related grief, bankruptcy, divorce and other life transitional events that may or may not involve death and dying.

SOC-WK 5549 Social Work Practice with Immigrants and Refugees Credits: 3

This course advances knowledge, skills and professional values for social work practice with immigrants and refugees covering the U.S. immigration system, migration processes, barriers to readjustment and cultural competency, and effective intervention on behalf of immigrants and refugees.

SOC-WK 5550 Program Evaluation Credits: 3

This course builds on the content of Research Methods and is designed to enable students to apply the methods of social research to the evaluation of Generalist Social Work Practice. This course employs an experiential learning technique that places students in an immersive experience that involves collaboration, research design, critical analysis of program intervention, and group process.

Prerequisites: SOC-WK 5510, SOC-WK 5532, SOC-WK 5536.

Co-requisites: SOC-WK 5531, SOC-WK 5565.

SOC-WK 5560 Psychopathology in Social Work Practice Credits: 3

This course utilizes the DSM to teach diagnostic criteria, while simultaneously examining ecological and systemic factors that contribute to diagnostic rates. Explore of the biopsychosocial factors which contribute to the accuracy and effectiveness of diagnosis and treatment will be covered.

Prerequisites: SOC-WK 5511 or SOC-WK 5538.

SOC-WK 5561 Social Work in Health Care Credits: 3

This course builds on a foundation of direct social work practice in the context of the health care systems in the United States. The social work role in the medical model will be analyzed along with the roles of nursing and allied health professionals.

Prerequisites: SOC-WK 5511 or SOC-WK 5538.

SOC-WK 5562 Family Organization and Development Credits: 3

This course focuses through The Family Life Cycle, a developmental stage theory that supports family-centered practice. The course provides skills to assess competent and constraining interactions and to use this assessment to identify contributing factors to family achievements and behaviors of concern.

SOC-WK 5563 Life Span Issues in Developmental Disabilities Credits: 3

The need for interdisciplinary process in the human services sector, which supports inclusiveness and quality of life of individuals, is covered. The course covers cultural competence, person-centered and community-based application of services for their implications in planning and delivery of services.

SOC-WK 5564 Advanced Group Interventions in Social Work Credits: 3

This course provides specialized learning in group interventions from an advanced generalist perspective. The course includes the broad spectrum of clinical uses for group as well as the application of group skills within community and administrative practice.

SOC-WK 5565 Systemic-Oppression: Social and Economic Justice Credits: 3

This course presents theoretical concepts that relate issues of social and economic injustice to structural and systemic oppression. This course examines formal and informal social policy that fosters the creation of support of oppressive social structures. A generalist and structural approach to social work engages the student in the examination of the barriers to justice and equality; ranging from internalization to globalization.

Prerequisites: SOC-WK 5534.

SOC-WK 5566 Family and Community Violence Credits: 3

This course examines the sources and forms of community and family violence and its impact on individuals, families and communities. Prevention and intervention models will be studied and developed.

Prerequisites: SOC-WK 5511 or SOC-WK 5538.

SOC-WK 5567 Collaborative Family-Centered Practice Credits: 3

This course presents the emergence, activities, and elements of collaborative family-centered practice. Multi-systemic Therapy and Wraparound are critically examined along with their implementation supports and challenges. Research supporting each model and its theory of change are closely examined.

SOC-WK 5568 School Social Work Practice Credits: 3

This course examines the knowledge and skills required for the roles and functions of school social work in K-12 settings. Students will apply various theories and evidence based practices to school social work, while developing an understanding of how to address the needs of students and their families within the context of school.

SOC-WK 5569 Core Concepts of Child and Adolescent Trauma Credits: 3

This course prepares students for trauma-informed, evidence-based practice. Based on core concepts, the course uses a problem-based learning approach through the use of in-depth case studies.

Prerequisites: SOC-WK 5511 or SOC-WK 5538.

SOC-WK 5575 Advanced Generalist Community Practice Credits: 3

This course covers community social work practice, addressing values, knowledge, and skills essential for community social change. Models of community practice are addressed to facilitate the development of skills in social planning, community development, and community collaboration strategies.

SOC-WK 5577 Sexuality in the Helping Professions Credits: 3

This course is a survey of issues related to integrating human sexuality across a lifespan in the practice of social services. Using a biopsychosocial perspective, emphasis will be placed on historical, political, social, cultural, familial, and individual differences in sexual and reproductive attitudes, values, and behaviors.

SOC-WK 5578 Capstone I Credits: 3

This course is the first half of a yearlong cohort-style course that provides concentration level MSW students the opportunity to critically and creatively present their field of interest in Social Work. The Capstone Course will integrate and apply all knowledge and skills learned previously in classroom, and will culminate in the student preparing for and presenting in the annual UMKC School of Social Work Conference held during the spring semester.

Prerequisites: SOC-WK 5512 (or co-requisite), SOC-WK 5540 (or co-requisite).

SOC-WK 5579 Capstone II Credits: 3

This course is the second half of a yearlong cohort-style course that provides concentration level MSW students the opportunity to critically and creatively present their field of interest in Social Work. The Capstone Course will integrate and apply all knowledge and skills learned previously in classroom, and will culminate in the student preparing for and presenting in the annual UMKC School of Social Work Conference held during the spring semester.

Prerequisites: SOC-WK 5513 (or co-requisite).

SOC-WK 5580 Special Topics In Social Work Credits: 1-3

These seminars are designed to examine relevant and innovative areas emerging in social work practice which are not available in the regular course offerings. Topics, instructors, and prerequisites are listed in the semester bulletin.

Prerequisites: Completion of foundation year.

SOC-WK 5590 Readings And Investigations In Social Work Credits: 1-3

Under the direction of a faculty member, individual students may pursue an in-depth area of study in generalist social work practice, including a research project of the student's choice.

SOC-WK 5899 Required Graduate Enrollment Credit: 1

One Hour Course required to remain continuously enrolled while the student finishes requirements for the Social Work degree.

Prerequisites: Permission of the Department

Sociology (SOCIOL)

Courses

SOCIOL 5501 Social Theory I Credits: 3

Examines the development of social theory in Europe up to the beginning of the twentieth century, with a focus on its intellectual precursors of social theory, debates over the nature of society, and controversies over the distinct features of sociology as an emerging academic discipline. The major perspectives covered include the intellectual origins of sociological thought in Great Britain, France, and Germany, and the debates as reflected in the writings of Karl Marx, Emile Durkheim, Max Weber, and Georg Simmel.

Prerequisites: undergraduate course in Sociological Theory.

SOCIOL 5502 Social Theory II Credits: 3

Examines the major sociological theories developed during the twentieth century and contemporary debates over the nature of society and the nature of our knowledge about society. Theories to be examined include behaviorism, symbolic interactionism, structural functionalism, phenomenology, conflict theory, postmodernism, those that attempt to integrate social agency and structure, and feminist theory.

Prerequisites: SOCIOL 5501.

SOCIOL 5503 Controversies In Contemporary Social Theory And Practice Credits: 3

This course critically examines central issues in contemporary debates among social theorists over the nature of society and how it should be studied.

SOCIOL 5510 Sociological Methods I Credits: 3

A survey of methods used by sociologists: selection and formulation of problem, research design, survey research, participant observation, sampling, reliability and validity, use of scales, and data analysis.

Prerequisites: SOCIOL 362.

SOCIOL 5511 Sociological Methods II Credits: 3

Quantitative research is the primary focus of the course; emphasis is placed on problem formulation; research design; sampling procedures; questionnaire construction and interviewing techniques; data collection; problems of scaling, validity and reliability; uses of secondary data sets; data analyses and report writing.

Prerequisites: SOCIOL 362.

SOCIOL 5516 Intermediate Statistics Credits: 3

A systematic development of the logic and practice of selected statistical methods used in sociological research. Included are analysis of variance and covariance, regression analysis, multiple contingency, and non-parametric tests.

Prerequisites: SOCIOL 363 or CJC 303.

SOCIOL 5530 Anthropology Of Gender Credits: 3

This class explores theories of the social construction of gender in cross-cultural contexts. It will also explore global issues of diversity, local and international politics, the economy and work, education, etc.

SOCIOL 5531 Feminist Theories Credits: 3

This class introduces the major feminist theories and their primary authors over the last 200 years. The class takes both an historical (we begin with two millennia of male-centered theories about women) and a conceptual approach (theories are grouped by common ground) and familiarizes the student with both the historical processes that necessitate feminist theories as well as with the breadth of the historically and currently available scholarship. Graduate students are expected to fulfill all undergraduate requirements at graduate-level quality, including independent research components; in addition, graduate students are required to be prepared to lead class discussions.

Prerequisites: WGS 201.

SOCIOL 5534 Spatial Thinking in Social Science Credits: 3

This course will review ways in which social scientists have incorporated the concepts of space, place, and distance into their theories and research. Readings will be drawn from interdisciplinary work in the areas of urban sociology, criminology, health and demography that deal with spatial organization of communities and cities, spatial disparity of health and crimes, and mobility. Generic computer file management skills are required and knowledge of research methods is desirable.

SOCIOL 5537 Anthropology of Religion Credits: 3

This course explores the ways anthropologists have gone about studying religion from the opening decades of the 20th century to present. The course introduces students to the diversity of human religious expression and experience through anthropological literature and to the diversity of anthropological expression especially as it has been revealed in social scientific studies of religious life. The course is designed to generate a critical dialogue about the special role that religion has played in the ongoing anthropological engagement with "other" societies and cultures over time.

SOCIOL 5538 Gender, Work And Social Change Credits: 3

This course examines the role of gendered work and consumption in global social change. Drawing from sociological perspectives on gender and work, this course foregrounds a global comparative analysis of societal development and working contexts, including tourism employment, sex work, domestic work, and agricultural, garment, and informatics production. Graduate students are required to carry out independent research or complete work in the area of public sociology and academic-service learning. Students will write a conference paper or journal quality article from this research.

SOCIOL 5540 Urban Social Structure Credits: 3

An examination of the social structure of the American city with special reference to the historical development of American cities. Attention will be focused on the role of social institutions as they have changed in relation to urban problems.

SOCIOL 5550 Sociology Of Aging Credits: 3

A seminar in which theoretical orientations, methodologies, and findings from crosscultural and community research in gerontology are systematically reviewed, within a social change framework.

SOCIOL 5554 Sociology Of The Aging Woman Credits: 3

An exploration of the intersection of gender and aging issues with special attention to cultural images of women, the development of self-concept and identity in mid-life and beyond, caring roles in the family, work and retirement, and health and mental health issues. These issues are examined within the context of social class, race, and ethnicity. Implications for community programs and social policy are considered. Graduate students will be expected to carry out a research project and to lead a class session.

SOCIOL 5556 Aging And Developmental Disabilities Credits: 2

This course explores the experience of aging with a developmental disability or mental retardation within the context or normative aging. Among the comparisons made between older persons with and without developmental disabilities are their demographic characteristics, physical and cognitive functioning, role transitions and losses, identities and self-concepts, and family and caregiving issues. Policies, programs, and emerging concepts of best practices are considered within the context of quality of life, ethical, and community inclusion bases.

SOCIOL 5557 Practicum In Aging And Developmental Disabilities Credit: 1

Students gain experience in working with and defining issues of older persons with developmental disabilities through placements in sheltered workshops, senior centers, residential group homes, and other community-based programs.

Co-requisites: SOCIOL 5556.

SOCIOL 5560 Sociology Of Death And Dying Credits: 3

This course examines attitudes, behaviors, and institutions related to death and dying in contemporary American society. Topics include the meanings of death in American society, social settings for dying, interaction with the dying, customs and practices surrounding death, role transitions of survivors, and suicide. Special attention is given to issues of aging and dying.

SOCIOL 5573 Latin American Immigrants and Refugees in the U.S. Credits: 3

This course is the study of history, culture and societies of immigrants and US citizens of Latin American heritage living in the U.S.

SOCIOL 5580 Special Studies In Sociology Credits: 1-3

An opportunity to explore in depth topics not included in usual course offerings. One or more topics will be announced in advance of registration.

SOCIOL 5595 Directed Research Experience Credits: 3

Research project supervised by faculty.

SOCIOL 5597 Independent Readings Credits: 1-3

Intensive readings in an area selected by the student with prior consultation with the instructor.

SOCIOL 5599 Thesis And Research Credits: 1-6

Directed specialized research. Before writing a thesis, the student must clear the topic and research design with the Supervisory Committee. The course also involves the writing of the thesis.

SOCIOL 5699 Dissertation Research Credits: 1-12

Individual directed research leading to preparation and completion of doctoral dissertation.

SOCIOL 5899 Required Graduate Enrollment Credit: 1

Spanish (SPANISH)

Courses

SPANISH 5503 History of the Spanish Language Credits: 3

An introduction to the history of the Spanish language from Latin to the present, with an overview of dialects in the Peninsula and in the Americas.

Prerequisites: SPANISH 325 or higher grammar class.

SPANISH 5514 Spanish Literature Credits: 3

Selected readings in Spanish narrative, poetry, drama and philosophical essay from the beginning of the 20th Century to the Avant-Garde movements in the 1930's.

SPANISH 5516 Medieval Spanish Literature Credits: 3

A study of selected medieval masterpieces in their Old Spanish form, with special emphasis on Romances, the Cantar de Mio Cid La Celestina, El Corbacho, Libro del buen amor, etc. Includes a short history of the Spanish language.

SPANISH 5519 Federico Garcia Lorca Credits: 3

A study in depth of the poetry and drama of Federico Garcia Lorca.

SPANISH 5520 Cervantes' Don Quixote, Part 1 Credits: 3

An intensive reading of the first part of Cervantes' novel, Don Quixote.

SPANISH 5521 Cervantes' Don Quixote, Part II Credits: 3

An intensive reading of the second part of Cervantes' novel, Don Quixote. Part One is not a prerequisite.

SPANISH 5526 Golden Age Drama Credits: 3

A study in depth of the creation of national theater by Lope de Vega and his followers.

SPANISH 5527 Pre-Columbian and Spanish Colonial Literature Credits: 3

A study of pre-Columbian works in drama, narrative, and poetry (Popol Vuh, Apu-Ollantay, Incan and Aztec poetry) along with a survey of Spanish-American colonial literature.

SPANISH 5528 Contemporary Spanish Poetry Credits: 3

A comprehensive and intensive study of 20th-century Spanish poetry. The poets and their poetry will be studied in the light of literary movements, foreign influences, political tendencies and philosophical ideas.

SPANISH 5529 Novel of the Mexican Revolution Credits: 3

The revolution as the principal focus of 20th-century Mexican fiction. The course will examine both the evolving understanding of the event/process and the sophistication of narrative technique employed in its presentation. Among the writers to be studied are Azuela, Guzman, Lopez y Fuentes, Yanez, Revueltas, Rulfo and Fuentes.

SPANISH 5530 Spanish Mysticism Credits: 3

An examination of the development of mysticism in Oriental and Occidental civilizations, with emphasis on the great periods of mystic experience as reflected in the literary production of the Spanish Golden Age. Readings could include the works of Fray Luis de Granada, Fray Luis de Leon, Saint John of the Cross and Saint Teresa of Avila.

SPANISH 5531 The Golden Age Novel Credits: 3

A study of major prose works of the Golden Age. Possible topics include authorship, innovative narrative techniques, textual strategies and metafiction issues. Readings could include works by Alfonso Martinez de Toledo, Diego de San Pedro, Fernando de Rojas, Francisco Delicado, Cervantes, and Lope de Vega.

SPANISH 5532 Pastoral Literature Credits: 3

A study of the development of pastoral literature during the Spanish Golden Age. Possible texts: Juan del Encina's Eclogues, Montemayor's Los siete libros de la Diana and Cervantes' Galatea. These works will be examined within their historical and cultural context.

SPANISH 5533 Cervantes' Exemplary Novels Credits: 3

A study of Cervantes' Exemplary Novels within the context of 17th Century Spain. Attention will be paid to interpretive possibilities and how knowledge of historical contexts might influence readings of this rich and varied cultural output.

SPANISH 5534 The Picaresque Novel Credits: 3

A study of the development of picaresque fiction during the Spanish Golden Age. The course deals with novelists principally active during the Baroque period such as Mateo Aleman, Francisco Lopez de Ubeda, Miguel de Cervantes, and Francisco de Quevedo.

SPANISH 5535 Peninsular Poetry Credits: 3

This course is a survey of poetics and poetry in Spain from the Reconquest to the present, with emphasis on sociohistorical contexts and movements. It examines theoretical and methodological approaches to literary analysis and also provides practical experience in exploring poetic texts. Students will analyze a wide spectrum of poems, while discussing the cultural philosophical, linguistic, political and ethical considerations that surround the reception of a text.

SPANISH 5536 Spain's Transition to Democracy: Literature and Film Credits: 3

This course reviews the cultural production between the death of Francisco Franco in 1975 and the entrance in the European Union, in film, literature and music, within its historical and political context.

SPANISH 5550 Modern Classics of Latin American Literature Credits: 3

The goal of the course is to familiarize the student with the principal Latin American writers of the modern period. The focus will be dual: the progressive sophistication of literary technique, and the refinement of social conscience. Among the authors to be studied are: Asturias, Borges, Carpentier, Cortazar, Donoso, Fuentes, Garcia Marques, Paz, Rulfo, and Vargas Llosa. Pre requisite: SPANISH 315 or SPANISH 325.

SPANISH 5553 Spanish-American Short Story Credits: 3

A study of Spanish-American short stories from Romanticism to the present.

SPANISH 5580 Special Topics Credits: 1-3

Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

SPANISH 5580D Special Topics Credits: 1-3**SPANISH 5590 Directed Studies in Spanish & Latin American Literature Credits: 1-3**

Intensive readings in a field or literary figure to be selected by the student in consultation with the instructor. Available by permission of graduate advisor or instructor, as appropriate, only when student cannot take regularly scheduled courses.

Special Education (EDUC-SP)

Courses

EDUC-SP 5506 Special Education Law, Individualized Education Programs (IEP's), and Transition Credits: 3

This course provides students with knowledge of special education law, the individualized education program (IEP), and transition-related instruction i.e., preparation for post-high school education employment, independent living, and community integration) for students with disabilities. Prior to taking the course, a background check must be completed in order to do the required 10-hour field experience for this course. The field experience will include observation of meetings with families and other professionals.

Prerequisites: Master's student status.

EDUC-SP 5507 Introduction To Mild/Moderate Cross-Categorical Disabilities Credits: 3

This is the initial foundations course in the master's degree sequence in special education of children and youth with mild/moderate disabilities including learning disabilities (LD), emotional/behavioral disorders (EBD), mental retardation (MR), and physical and other health impairments (POHI). It is designed to provide candidates who are new to the field of special education with a foundation for working with students who have exceptional learning needs. Prior to taking the course, a background check must be completed in order to do the required 10-hour field experience for this course. The field experience will include observations and working with children and youth with disabilities.

Prerequisites: TCH-ED 404.

EDUC-SP 5508 Assessment for Special Educators Credits: 3

This is a foundations course in the master's degree sequence in special education of children and youth with mild/moderate disabilities. The purpose of this course is to provide understanding and practice in formal and informal evaluation. This course is applicable to candidates who plan to work either directly (special educators) or indirectly (special education administrators) with students with exceptional learning needs and to engage in critical analysis of assessment issues confronting the field of special education. Prior to taking the course, background check must be completed in order to do the required 10-hour field experience for this course. The field experience will include observations and working with children and youth with disabilities.

Prerequisites: EDUC-SP 5507, EDUC-SP 5513.

EDUC-SP 5509 Cognition & Lang Dev In Mild/Mod Cross-Categorical Disabilities Credits: 3

This is a specialized methods course in the master's degree sequence in special education of children and youth with mild/moderate disabilities. This course examines normal and atypical development and cultural and linguistic diversity of students with exceptional learning needs. Candidates will practice collaborative and reflective decision-making and problem solving in areas such as: (a) developmentally sequenced activities, (b) receptive and expressive language, and (c) communication and augmentative communication skills. The field experience will include working observations and working with children and youth with disabilities.

Prerequisites: Background check, EDUC-SP 5507, EDUC-SP 5513.

EDUC-SP 5510 Practicum in Special Education Credit: 1

The purpose of this course is to provide a field-based experience in a setting with students with mild/moderate cross-categorical disabilities. This field experience affords candidates classroom experience either in their own instructional settings or under the tutelage of a master teacher. Placement sites reflect the multicultural diversity found in special education classrooms (K-12). The practicum will include observations, working with children and youth with disabilities individually and in small groups, as well as lesson preparation and presentation.

EDUC-SP 5511 Practicum II – Special Education Credit: 1

Provides second tier field-based experience in a setting with students with mild/moderate cross-categorical disabilities. This field experience affords candidates classroom experience either in their own instructional settings or under the tutelage of a master teacher. Placement sites reflect the multicultural diversity found in special education classrooms (K-12). Experiences include observations, working with children and youth with disabilities individually and in small groups, as well as lesson preparation and presentation.

Prerequisites: EDUC-SP 5510.

EDUC-SP 5512 Methods I: Introduction to Teaching Students with Mild/Moderate Cross-Categorical Credits: 3

Examines theories and practices which are effective in addressing learning difficulties of students with mild-moderate disabilities. Focuses on understanding learner characteristics with the purpose of differentiating instruction related to academic, behavioral, and social skills presented by students with mild/moderate disabilities.

Prerequisites: Admission to the Special Education program.

EDUC-SP 5513 Methods II: Teaching Students with Mild/Moderate Cross-Categorical Disabilities Credits: 3

Candidates learn academic and behavioral strategies to plan instruction, deliver instruction, and evaluate student and teacher performance in order to promote critical thinking and content literacy across all content areas, including science, mathematics, reading, writing, and social science. Prior to taking the course, a background check must be completed in order to do the required 10-hour field experience for this course. The field experience will include observations and working with children and youth with disabilities.

Prerequisites: EDUC-SP 5512.

EDUC-SP 5514 Understanding and Addressing Challenging Behavior in the Classroom Credits: 3

An examination of validated practices based on principles of Applied Behavior Analysis for managing challenging behaviors, facilitating formal behavioral assessment, creating positive behavioral supports, conducting functional behavioral assessments, and developing behavior intervention programs. Candidates reflect critically on social/affective curricular goals for children and youth with mild-moderate cross-categorical (MM/CC) disabilities and relate the theoretical, research, and practical strategies of behavior change models in an applied setting. Experiences include interactions with teachers, parents, and paraprofessionals, in order to understand and remediate student behavior problems. **Prerequisites:** Admission to program, EDUC-SP 5515.

Prerequisites: Prior to taking the course a background check must be completed in order to do the required 10 hour field experience for this course. The field experience will include observations and working with children and youth with disabilities.

EDUC-SP 5515 Applied Behavior Analysis for Teachers: Understanding and Applying Theories of Behavior Credits: 3

This course is designed as an introductory graduate level class on behavior and is the first of two courses on behavior. The course addresses aspects of managing and motivating learners with special needs placed in general education settings based upon the principles of Applied Behavior Analysis (ABA). Topics include student acquisition of knowledge and skills related to ABA behavior principles theory and history of ABA, ethical considerations of ABA, understanding the principles of reinforcement and punishment, identifying the nature of consequences maintaining or decreasing specific behaviors; and operationally defining behavior. Prior to taking the course a background check must be completed in order to do the required 10 hour field experience for this course. The field experience will include observations and working with children and youth with disabilities.

EDUC-SP 5516 Collaborating with Families and Other Professionals Credits: 3

This is a methods course in the master's degree sequence in special education of children and youth with mild/moderation disabilities. The course presents principles and procedures for fostering collaborative partnerships among family members, caregivers, educators, and human service personnel that lead to outcomes of individual and mutual empowerment. Candidates will engage in reflective thinking on their personal philosophical beliefs and interweave these beliefs with the skills needed to work with the multicultural issues facing families of children and youth with mild/moderate cross-categorical disabilities and other professionals. Prior to taking the course a background check must be completed in order to do the required 10 hour field experience for this course. The field experience will include observations and working with families of children and youth with disabilities and education professionals.

EDUC-SP 5517 Characteristics, Hist & Thrys: Emotional Disturbance In Children Credits: 3

An investigation of theories, classification, etiology, incidence, and characteristics of children with emotional/ behavioral disorders.

EDUC-SP 5570 Student Teaching in Special Education Credits: 8

This is the final clinical course in the master's degree sequence in special education of children and youth with mild/moderate disabilities. The purpose of this course is to provide a field-based experience in a setting where candidates will be fully responsible for designing curriculum and teaching students with mild/moderate cross-categorical disabilities. Placement sites reflect the multicultural diversity found in special education classrooms (K-12). This course requires candidates to apply content learned throughout the master's degree program in an authentic setting. Student teaching involves a full time commitment to the field for 16 weeks.

Prerequisites: EDUC-SP 5510, EDUC-SP 5511, Background check.

EDUC-SP 5589 Special Topics In Education Credits: 1-6

A course designed to deal with a special education topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-SP 5598 Individual Studies Credits: 1-6

Review of the research and trends relative to selected problems in special education.

Statistics (STAT)

Courses

STAT 5501 Statistical Design Of Experiments Credits: 3

This course is designed to present a variety of experimental design techniques to students with moderate mathematical and statistical background. The course includes three major components: efficient factorial designs, linear and quadratic process optimization of the location parameter, and variability reduction. Students will be trained to use the SPSS statistical software package.

Prerequisites: STAT 436.

STAT 5537 Mathematical Statistics I Credits: 3

Probability theory, distribution functions, sampling, statistical inference, topics in advanced applied statistics. Continued in STAT 5547.

Prerequisites: MATH 402.

STAT 5547 Mathematical Statistics II Credits: 3

Continuation of STAT 5537.

STAT 5551 Applied Statistical Analysis Credits: 3

Methods for analyzing data from experiments and observational studies; design-based and model-based inferences; model assessment; ANOVA; power analysis; SAS procedures.

Prerequisites: STAT 441.

STAT 5561 Time Series Analysis Credits: 3

This course is intended to present the basis knowledge (including models, methods and concepts) of time series analysis to students with a good background in intermediate mathematical statistics. Some elementary knowledge of basic linear regression analysis would be helpful but not necessary. The presentation will be balanced between theory and data analysis, with sufficient theory to understand the basis of methods and a broad variety of models and many real data examples. Case studies will be drawn from business and economics, network traffic and meteorology, and data will be analyzed by students using existing computer programs (SAS, Minitab and R). Students are also expected to understand proper use and limits of time series models.

Prerequisites: STAT 441.

STAT 5565 Regression Analysis Credits: 3

Simple linear regression; multiple linear regression; correlation analysis; model selections; checking assumptions; regression diagnostics; combating multi-collinearity; nonlinear regression.

Prerequisites: STAT 441.

STAT 5572 Multivariate Analysis Credits: 3

Random vectors; multivariate normal distributions; Hotelling's T-square distribution; Wishart distribution; inferences on one mean vector; MANOVA; inferences on covariance matrices; profile analysis.

Prerequisites: MATH 420 and STAT 441.

STAT 5575 Stochastic Calculus for Finance Credits: 3

This course presents the basic idea and theory of stochastic calculus with the focus on the applications to finance. Topics include Brownian motion, Ito integral, Ito formula, Black-Scholes equation and formula, risk-neutral pricing, connections with partial differential equations, exotic options, American derivative securities, and term structure models for interest rates.

Prerequisites: MATH 402 and STAT 436.

STAT 5576 Probability Credits: 3

Existence and extension of measure, random variable, expectation and its properties, types of convergence, law of large numbers, weak convergence, central limit theorem, and martingale.

Prerequisites: STAT 436 and MATH 5513.

STAT 5578 Advanced Mathematical Statistics Credits: 3

Exponential and location families, principles of data reduction, asymptotic distributions, advanced theory of estimation and hypothesis testing.

Prerequisites: STAT 5547.

STAT 5588 Theory of Linear Model Credits: 3

This course covers vector space, full rank linear model, general inverse, estimation under linear constraints interval estimation, hypothesis testing, distributions of quadratic forms, general distribution theory, estimability, Gauss-Markov theorem, Best Linear Unbiased Estimation (BLUE), regression on dummy variables, estimation of variance components, Scheffe and Turkey intervals, and non-full rank linear model.

Prerequisites: MATH 420, STAT 5537, and STAT 5565.

STAT 5590 Special Topics Credits: 1-3

Selected topics in various fields of mathematics. May be repeated for credit when the topic varies.

String Bass (STR-BASS)

Courses

STR-BASS 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

STR-BASS 5500A Graduate String Bass-Secondary Credits: 2

STR-BASS 5500B Special Applied Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

STR-BASS 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

STR-BASS 5500JA Graduate Applied Jazz Studies Credits: 2

One-hour lesson weekly. Jury examination is required.

Prerequisites: Graduate standing.

STR-BASS 5500JB Special Applied Jazz Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.

Prerequisites: Graduate standing.

STR-BASS 5500JC Applied Jazz Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied jazz study in an area other than, and in addition to, their primary performance study.

Prerequisites: Graduate standing.

STR-BASS 5501 Graduate String Bass - Masters Performance Credits: 4

STR-BASS 5601 Graduate String Bass - Doctoral Performance Credits: 4

Teacher Education (TCH-ED)

Courses

TCH-ED 5312 Legal and Ethical Aspects of Teaching Credits: 3

This course provides an introduction to landmark court cases, federal and state laws, and regulations that frame students' and teachers' rights and responsibilities and that provide guidance for ethical professional practices.

TCH-ED 5314 Cultural Diversity and Teaching English Language Learners Credits: 3

Foundational knowledge on teaching diverse populations and practical instructional approaches for meeting the needs of linguistically and culturally diverse learners. Emphasis on studying and applying instructional strategies that are appropriate for addressing the unique needs of children whose primary language may not be English.

TCH-ED 5315 Assessment and Data Literacy Credits: 3

Data collection and assessment strategies—including formative, summative, formal, and informal—to be used in developing student learning profiles, planning learning experiences, and monitoring student progress toward academic goals. Topics include the impact of assessment on equitable education for diverse learners, critical observation and questioning, basic qualitative and quantitative data analysis, working with data teams, collaboration/communication with families and other educational stakeholders, setting and monitoring learning goals, and the ethics of data collection and sharing.

TCH-ED 5385 Teaching and Learning with Technology Credits: 3

This course addresses the fundamentals of using technology in education and planning instruction to engage PK-12 students in problem solving and critical thinking using technology. Topics within the course are informed by International Society for Technology in Education Standards (ISTE), InTASC Model Core Teaching Standards and Learning Progressions for Teachers 1.0, Missouri Teacher Standards and Quality Indicators, and Missouri Learning Standards.

TCH-ED 5396 English Language Study for Middle and High School Teachers Credits: 3

Explores the fundamentals of teaching English language and grammar study, emphasizing patterns in the English language including sounds, words, sentences, meaning, and discourse as they are manifested in daily lives. Educationally relevant topics, such as applications of sociolinguistics to the teaching of English language and literature, varieties of grammar, and linguistic descriptions of styles and registers are an integral part of the course.

TCH-ED 5404 Education of the Exceptional Child and Youth Credits: 3

Students will be introduced to identification and educational intervention strategies for educating exceptional children and adolescents in inclusive classroom situations. This course requires a 10-hour field experience.

TCH-ED 5412 Language Arts in the Elementary and Middle School Credits: 3

Provides instruction in planning, implementing and assessing language arts activities. Critical analysis in classroom settings is emphasized. Other issues discussed include: literature-based instruction, multicultural perspectives, special needs students and professional behaviors.

TCH-ED 5413 Mathematics in the Elementary School I Credits: 3

Mathematics-specific pedagogy. Methods, techniques, tools and materials for the effective teaching of mathematics. Focus on the principles, methods, and materials of elementary school mathematics instruction and state curriculum in the context of diverse student backgrounds.

TCH-ED 5417 Science Methods In The Elementary School Credits: 3

The course prepares pre-service teachers to teach science from a constructivist, inquiry-oriented perspective.

TCH-ED 5418 Social Studies Methods in the Elementary and Middle Schools Credits: 3

A critical analysis of current practices, teaching methods, materials and the relationship of the social sciences to social studies. Emphasis is on understanding cultural diversity and cultural influences on learning. The planning, implementation and evaluation of an interdisciplinary social studies unit of instruction, focusing on competencies and skills needed for the 21st Century.

TCH-ED 5419 Student Teaching in Elementary School Credits: 3-12

Observation and student teaching under supervision in an elementary school. Elementary majors must enroll in 12.0 credit hours. Music education majors enroll in 3.0 or 7.0 hours; art education and foreign language education majors enroll in 7.0 hours.

TCH-ED 5422 Practicum I - Middle and High School Credit: 1

The purpose of this field experience is to apply theoretical and practical knowledge gained in concurrent courses.

Co-requisites: TCH-ED 312; TCH-ED 430; TCH-ED 420.

TCH-ED 5423 Practicum II - Middle and High School Credit: 1

The purpose of this field experience is to apply theoretical and practical knowledge gained in concurrent courses.

Prerequisites: TCH-ED 422.

Co-requisites: TCH-ED 385, TCH-ED 314.

TCH-ED 5424 Practicum III - Middle and High School Credit: 1

The purpose of this field experience is to apply theoretical and practical knowledge gained in concurrent courses.

Co-requisites: TCH-ED 315, TCH-ED 463, TCH-ED 438, Content specific methods courses.

TCH-ED 5427 Reading in the Secondary School Credits: 3

An examination of the reading process and study of methods and materials used by the secondary school classroom teacher in assessing student reading ability, determining the readability of content area materials and teaching students of all reading levels how to comprehend their textbooks and other printed instructional materials in various content area subjects.

TCH-ED 5430 Analyzing Learning Environments in Urban Contexts Credits: 3

This course serves as the major vehicle for articulating a programmatic construction of classroom management as establishing productive learning environments, facilitating social interaction, and planning relevant and engaging learning experiences based upon deep knowledge of individual students' contexts and cultures.

TCH-ED 5431 Summer Community Experience Credits: 3

This field-based course provides an in-depth examination into both the evolution of urban communities and dynamics of community building in inner cities, with special emphasis on Kansas City, Missouri. In addition, theories of educational psychology as well as child and adolescent behavior will be infused to assist participants in developing age appropriate mentoring/teaching strategies and activities. Students in the course are engaged with the community through field trips, simulations, course events, and community service.

Prerequisites: Admission into Elementary Education program or Institute for Urban Education.

TCH-ED 5432 Special Methods of Teaching English in Middle and High Schools Credits: 3

This course stresses the skills, knowledge, and dispositions pertinent to teaching English Language Arts in middle schools and high schools.

TCH-ED 5433 Special Methods of Teaching Mathematics in Middle and High Schools Credits: 3

This course stresses the skills, knowledge, and dispositions pertinent to teaching mathematics in middle schools and high schools.

Co-requisites: TCH-ED 315, TCH-ED 463, TCH-ED 438.

TCH-ED 5434 Seminar in Social Science Curriculum Credits: 3

This seminar course is designed to strengthen teacher candidates' content knowledge for designing and enacting transformative social science curriculum and pedagogy. Students will actively examine key content, concepts, themes, issues, multiple perspectives, and enduring questions embedded in the social science disciplines such as history, geography, economics, anthropology, sociology, political science and psychology and cultural and social contexts to enhance their knowledge, skills, and confidence for designing and enacting a transformative social science curriculum for diverse middle and high school students' development of civic competence.

TCH-ED 5435 Special Methods of Teaching Science in Middle and High Schools Credits: 3

Provides an opportunity for future science teachers to refine their skills as science educators and at the same time to reflect upon the ways and whys of teaching science.

TCH-ED 5436 Special Methods of Teaching Social Science in Middle and High Schools Credits: 3

This course will assist teacher candidates in developing the knowledge, skills, and dispositions needed to design and enact powerful transformative social studies curricular experiences, to foster middle and secondary school students' abilities to make informed, reasoned decisions and actions for the public good. Students will be introduced to powerful teaching practices, issues, and resources in secondary school social science.

TCH-ED 5437 Student Teaching in Secondary School Credits: 3-9

Culminating experience in a secondary school (grades 9-12). Enrollment hours vary for teacher candidates in Music, Art, and Foreign Languages.

Secondary majors in English, Mathematics, Science, and Social Science enroll for 9 semester credit hours.

Prerequisites: TCH-ED 5424.

Co-Requisite: Seminar.

TCH-ED 5438 Culturally Responsive Strategies for Teaching Diverse Learners Credits: 3

This course is designed to move students from cultural awareness to the application of culturally responsive practice. Specifically, this course will heighten students' understanding of cultural characteristics and their relationships to teaching and learning. Students will learn culturally responsive strategies and their enactment in instruction for diverse learners.

TCH-ED 5440 Introduction To Early Childhood Education Credits: 3

Introduction to the field of early childhood care and education, birth to age 8. Designed to familiarize future practitioners with the unique characteristics of early childhood education and its practice.

TCH-ED 5441 Literacy Development I Credits: 3

An introduction to how language is acquired and how to facilitate oral language expression in early childhood classrooms.

TCH-ED 5442 Observation, Assessment & Screening in Early Childhood Classrooms Credits: 3

This course is designed to identify developmentally appropriate ways to measure and evaluate child growth and development.

TCH-ED 5444 Mathematics In Early Childhood and Elementary Schools Credits: 3

The course prepares teachers who can create a learning environment in which mathematical concepts are drawn from and modeled within the child's active investigation of his or her own surroundings and views of the world. The emphasis is upon mathematics as a sense-making tool through which observation, action, classification, ordering, seeking patterns and common features, and testing of ideas come together to organize experiences and solve problems in the immediate environment. Stress is placed on methods and materials to make mathematics learning active and hands-on. A variety of materials, physical models, and tools are studied in terms of the way they can be used to help children explore, develop and test ideas, construct meaning, and communicate ideas.

TCH-ED 5445 Science In Early Childhood and Elementary Schools Credits: 3

Focus on ways of involving young children in science activities and experiences designed to promote curiosity, investigation and self-awareness as they explore their world.

TCH-ED 5447 Social Studies In Early Childhood and Elementary Schools Credits: 3

This course is designed to help students understand basic social studies concepts and pedagogy for young learners.

TCH-ED 5448 Literacy Development II Credits: 3

This course is designed to introduce the student to the different theories on literacy development. Students will examine different approaches but focus on a developmental perspective to literacy development.

TCH-ED 5449 Literacy Development III Credits: 3

This course is designed to help students identify effective and developmentally appropriate practices, strategies and experiences that foster literacy development.

TCH-ED 5450 Integrating The Curriculum In Early Childhood Education Credits: 3-4

A culminating curriculum course for early childhood students. The overall goal is to help students become more aware, skilled and informed about developmentally and educationally appropriate practice and curriculum for children during early childhood. Its focus is on constructing an integrated curriculum. A field-based experience is included.

TCH-ED 5451 Child Guidance Within The Classroom Credits: 3

Designed to help students examine and evaluate guidance techniques and teaching strategies used in classrooms for young children. Preventive measures in classroom management will be stressed.

Co-requisites: TCH-ED 481.

TCH-ED 5452 Family and Program Relationships in Early Childhood Education Credits: 4

Provides insight into the challenge of parenting, knowledge about the development and implementation of parent education and support programs, and the significance of school-family relationships. In addition, this course seeks to facilitate students' understanding of and sensitivity to parents' perspectives regarding the care and education of their young children.

Co-requisites: TCH-ED 453.

TCH-ED 5453 Learning From Parents Credits: 2

Designed to provide students with direct interactions with parents whose children are participating in early childhood programs, birth to age 8. Emphasis is placed upon students' understanding of, and sensitivity to, parents' perspectives regarding the care and education of their young children and recognition of parents as significant informants about their children.

Co-requisites: TCH-ED 542.

TCH-ED 5454 Human Relations In The Early Childhood Classroom Credits: 3

Students will analyze the connections between an effective helping relationship and effective teaching in the early childhood classroom. Effective interpersonal communication skills will be identified and practiced. The development of self-concept will be discussed.

TCH-ED 5455 Student Teaching In Preschool Credits: 6-10

Observation and student teaching under supervision in a preschool setting.

TCH-ED 5456 Student Teaching In Elementary, K Through 3 Credits: 6-12

Observation and student teaching under supervision in an elementary school, grades K through 3.

TCH-ED 5457 Infant And Toddler Care And Education Credits: 3

In this course, students will investigate infant and toddler care and education theories and practices. Students will learn about appropriate curriculum and teaching methods, visit infant and toddler programs, learn about state regulations and national standards for quality, and complete an environment rating scale.

TCH-ED 5458 Practicum For Learning About Infants And Toddlers Credit: 1

The purpose of this course is to learn about child care and education practices in various centers. We will discuss how practices are influenced or constrained by human biology and developmental stages, as they are by ecological and environment pressures such as mothers' work roles. The central themes of the course can be summarized by the phrases purposeful care practices and the optimal practices for infants and toddlers.

TCH-ED 5459 Early Childhood Program Management and Advocacy Credits: 2

Students will begin to explore basic early childhood program components. Different types of advocacy will be presented, discussed, and implemented.

Prerequisites: TCH-ED 440.

TCH-ED 5460 Middle School Curriculum Credits: 2

This course offers the pre-service teachers an overview of middle school goals, basic principles, and organizations. The course explores interdisciplinary teaming, flexible scheduling, exploratory and advisory programs, and other aspects of the organization within the context of middle school goals and practices.

TCH-ED 5461 Student Teaching In Middle School Credits: 6-9

Culminating field experience in a middle school setting. Student teachers engage in an all-day, full semester placement in a middle school classroom. Middle School Education (English, Mathematics, Science, Social Science) majors must enroll in 9 credit hours. Hours for other programs using this field experience vary. Teacher candidates should seek advisor approval.

Prerequisites: TCH-ED 5424.

Co-Requisite: Seminar.

TCH-ED 5462 Middle School Philosophy and Organization Credits: 3

This course offers teacher candidates an overview of middle school goals, basic principles, and organizations. Topics include interdisciplinary teaming, flexible scheduling, exploratory and advisory programs, and other aspects of the organization within the context of middle school goals and practices.

TCH-ED 5463 Literacy Intervention across the Disciplines Credits: 3

Examination of research, policy, and effective practice of literacy intervention in middle and secondary disciplinary classrooms (i.e. English/language arts, mathematics, science, and social studies). Topics will include recognition of reading and writing difficulties, response-to-intervention (RTI), scaffolding instruction for grade level reading comprehension, metacognition, and culturally responsive literacy instruction.

TCH-ED 5464 Math Methods for Urban Teachers Credits: 3

Mathematics-specific pedagogy for urban teachers. Methods, techniques, tools and materials for the effective teaching of mathematics. Emphasis on problem solving and reasoning skills in applying mathematics and on teaching in the context of diverse student backgrounds. Portions of this course will occur in urban school classrooms. Students will apply learning to urban classrooms.

TCH-ED 5465 Urban Education VI: Teaching Diverse Students Credit: 1

This interactive course will investigate and examine the principles of teaching diverse students and factors influencing effectiveness of instruction, including empowering African American males, teaching students from diverse populations and working with students with special needs. Some of the class sessions will be taught electronically and work will be submitted electronically.

Prerequisites: Admission into the Institute of Urban Education.

TCH-ED 5466 Field Experience: Diverse Learners Credit: 1

Students will spend a minimum of 90 hours in an urban school classroom. Students will have the opportunity to apply learning and lessons designed in the semester's pedagogical courses, particularly Best Practices for Teaching Math, Science, and strategies for working with diverse learners. Students will work with their seminar leader, having the opportunity to be observed and conference about their teaching.

Prerequisites: Admission into the Institute for Urban Education.

Co-requisites: TCH-ED 465.

TCH-ED 5470 Philosophy and History of Science and Technology Credits: 3

This course uses an historical survey to introduce the main philosophical interpretations of the nature and structure of both science and technology. Core concepts such as prediction, explanation, progress, truth, and utility will be examined in light of various philosophical perspectives. Following this, case study methodology will be used to examine interactions among science, technology, and society. Although the major focus will be upon modern Western culture, some attention will be paid to earlier and non-Western cultures. Case studies to be examined include: Perception and Estimation, nuclear power and pesticides; the impact of high technology upon medicine; and the estimated cost/benefit of computer-mediated communications, for example, the Internet.

TCH-ED 5475 Working with Families and Communities Credits: 3

This course provides an in-depth examination of research and theory relative to children, family, and community which have implications for and application to learning and instruction. Emphasis will be placed on the exploration and critical examination of and insights into the challenge or parenting, knowledge about the development and support programs, and the significance of school-family relationships. In addition, this course seeks to facilitate students' understanding of and sensitivity to families' perspectives regarding the care and education of their children and adolescents. The course is for students in the elementary education program and Institute for Urban Education.

Prerequisites: Admission into Teacher Education or IUE.

TCH-ED 5480 Practicum I Early Childhood Credit: 1

Early Childhood students will participate in observation, assessment, and screening activities as they explore the complex nature of primary school settings. Students will be expected to spend 60 hours at classroom sites during the semester.

Co-requisites: TCH-ED 442.

TCH-ED 5481 Practicum II Early Childhood Credit: 1

Early Childhood students will participate in classroom management and guidance practices as they explore the complex nature of pre-kindergarten settings. Students will be expected to spend 60 hours at classroom sites during the semester.

Prerequisites: TCH-ED 480, admission into teacher education program.

Co-requisites: TCH-ED 451.

TCH-ED 5482 Seminar in Teaching and Evaluating Writing Credits: 3

This course is designed to provide future teachers with a framework for success in the teaching of writing within the English Language Arts curriculum. The goal is to help students turn sound theory provided by the National Writing Project, the National Council of Teachers of English, and other experts in the field of rhetoric and composition into effective practice in the classroom.

TCH-ED 5483 Early Childhood Reading I: Introduction to Literacy and Reading Education Credits: 4

This course introduces concepts about literacy processes: i.e., social, cultural, cognitive and linguistic foundations of reading and writing processes. The major focus of the course is on learning components of comprehensive reading curriculum and a range of instructional approaches and methods appropriate for early childhood learners at different stages of literacy development.

TCH-ED 5484 Early Childhood Reading II: Assessing and Teaching Diverse Learners Credits: 4

This course introduces focuses on understanding the major components of reading processes (Phonemic awareness, word identification and phonics, vocabulary and background knowledge, fluency, comprehension strategies, and motivation) and how they are integrated in fluent reading for individual students at different stages of literacy development. The major projects for the course involves assessing and teaching an individual student over the course of the semester. Teacher candidates should also assess and teach in small groups of readers.

Prerequisites: Admission into the teacher education program.

TCH-ED 5485 Language Arts in the Early Childhood Classroom Credits: 3

This course provides instruction in planning, implementing, and assessing early childhood (birth through third-grade) language arts activities. Critical analysis in classroom settings is emphasized. Other issues discussed include: literature-based instruction, multicultural perspectives, special needs students and professional behaviors.

TCH-ED 5492 Language Arts Capstone Credits: 2

Designed for students in their last professional semester of the TE program, and are in a full-time student teaching placement. The course will serve as a culminating experience of the major concepts from the previous three semesters. Topics covered include school law, classroom management, working with special needs students, building critical thinking activities into the curriculum, planning and implementing authentic assessments, and examining the obligations, challenges, and realities of the teaching profession.

Prerequisites: TCH-ED 432.

Co-requisites: student teaching.

TCH-ED 5493 Seminar - Mathematics Credits: 3

Supports the culminating mathematics student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessments for individual learners. Peer and mentor collaboration in the analytical process are fundamental to the course objectives.

Prerequisites: TCH-ED 5433.

Co-requisites: Student Teaching.

TCH-ED 5494 Seminar - English/Language Arts Credits: 3

Designed for students in their last professional semester of the TE program, and are in a full-time student teaching placement. The course will serve as a culminating experience of the major concepts from the previous three semesters. Topics covered include: school law, classroom management, working with special needs students, building critical thinking activities into the curriculum, planning and implementing authentic assessments, and examining the obligations, challenges, and realities of the teaching profession. Supports the culminating English/Language Arts student teaching experiences, and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Peer and mentor collaboration in the analytical process are fundamental to the course objectives.

Prerequisites: TCH-ED 5432.

Co-requisites: Student teaching.

TCH-ED 5495 Seminar - Science Credits: 3

Supports the culminating Science Education student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of teaching strategies they apply in their student teaching experiences, their effectiveness in facilitating learning in classrooms, and adaption of lessons and assessment for individual learners. Peer and mentor collaboration in the analytical process are fundamental to the course objectives.

Prerequisites: TCH-ED 5435.

Co-requisites: Student teaching.

TCH-ED 5496 Seminar – Social Science Credits: 3

Supports the culminating Social Science Education student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Peer and mentor collaboration in the analytical process are fundamental to the course objectives.

Prerequisites: TCH-ED 5436.

Co-requisites: Student Teaching.

TCH-ED 5497 Teaching Internship Credits: 3-8

Teacher candidates will work 3 to 5 days at the school site in which the candidate will complete the year-long teaching internship.

Prerequisites: TCH-ED 398.

TCH-ED 5498 Urban Education Seminar VII Credit: 1

This seminar meets weekly for 2 hours and is led by a clinical professor who serves as a mentor for the students throughout their program. Students will work closely with mentor teachers in the application and integration of social justice and the elementary school curriculum. A critical analysis of current practices, teaching methods, materials and how social justice manifests in curriculum and instruction. Emphasis is on understanding cultural diversity and cultural influences on learning. Concepts of a classroom community, parental relations and democratic classroom processes will be addressed. Students will have opportunities to apply their learning to urban classrooms.

Prerequisites: Admission into the Institute for Urban Education.

TCH-ED 5499 Capstone Credits: 2

This seminar is designed to complement the student teaching experience through the discussion and analysis of school-based issues. It is intended to help further develop a reflective, critical and analytical approach to pedagogical decision making through supportive collaboration.

Theatre (THEATRE)

Courses

THEATRE 5500RA Theatre Collaboration Credits: 1-2

A course for M.F.A. students exploring the collaboration/ communication process in preparing a production. Must be elected by all students assigned to design, direct, technical direct or stage manage within the current or the following semester. Maximum of 8 hours applicable towards degree.

THEATRE 5501R Voice Training Credits: 2

(A,B,C,D) Training for the speaking and singing voice, development of skills in vocal dynamics, physical control, and relaxation for the actor, dialects and verse structure. Four semesters required for acting emphasis.

THEATRE 5506RR French Drama And Theatre Credits: 3

Study of significant plays and production methods in France from medieval times to the present. Particular emphasis will be given to the plays of Moliere, Racine, and Corneille, and to internationally renowned contemporary directors.

THEATRE 5507 19Th-Century Continental Theatre Credits: 3

Production of significant French, German, Russian, Spanish, and Scandinavian plays and playwriting of the 19th century. Particular emphasis will be given to plays representative of romanticism, realism, naturalism, fin-de-siecle decadence, and intensive study of production history.

THEATRE 5508 20Th-Century Continental Theatre Credits: 3

Study of the production of significant plays of Continental Europe from Strindberg to the present. Dramatic literature will be related to artistic currents such as expressionism, surrealism, the absurd, and where applicable, to political currents.

THEATRE 5509 Russian Drama And Theatre Credits: 3

Study of the production of Russian and Soviet plays with reference to the development of theatre art from the Christianization of Russia to contemporary post-Soviet drama.

THEATRE 5510 History Of The American Theatre I Credits: 3

An exploration of the trends in and the development of the American theatre from Colonial times to 1900.

THEATRE 5511 History Of The American Theatre II Credits: 3

An exploration of the trends in and the development of the American theatre for 1900 to the present.

THEATRE 5512R History Of The English Stage I Credits: 3

The English stage and its arts, crafts and literature from the medieval cycles through the Restoration.

THEATRE 5513 History Of The English Stage II Credits: 3

Development of English and Irish theatre art and dramatic literature from the 18th century to the present.

THEATRE 5514 History of Design And Technology I Credits: 3

The study of period style and scenic, costume, lighting, and technical production practices from the ancient world through the 17th century. The course will emphasize the application of research toward the presentation of period plays and contemporary production.

THEATRE 5515R History of Design And Technology II Credits: 3

The study of period style and scenic, costume, lighting, and technical production practices from the 18th century to the present. The course will emphasize the application of research toward the presentation of period plays and contemporary production.

THEATRE 5516A Technical Production for The Practitioner Credits: 3

The course is an in-depth review of technologies in scenery, lighting and stage operations, expansion of that knowledge, and application of it to the individual class member's particular theatre. Classroom material is augmented by hands-on experience in a controlled laboratory situation. Students should have a prerequisite of a basic technical theatre course or considerable practical experience. This course can be repeated for credit.

THEATRE 5516B Technical Production for The Practitioner Credits: 3

See course description for THEATRE 5516A.

THEATRE 5517A Professional Stage Management I Credits: 3

A functional analysis of the responsibilities of the professional stage manager. Requires the student to be an assistant stage manager on a University or KC Rep production.

THEATRE 5517B Professional Stage Management II Credits: 2

Practical course in stage management. Requires student to stage-manage or assistant stage-manage a production.

Prerequisites: THEATRE 5517A.

THEATRE 5517C Equity Assistant Stage Management Credits: 2

This course develops a skill set for professional assistant stage managers. Class will discuss duties and paperwork and how to supplement the work of the stage manager.

THEATRE 5517D Opera Stage Management Credits: 3

Class covers duties of the opera stage manager, including how to follow an opera score.

THEATRE 5517E Union Contracts for Actors and Stage Managers Credits: 2

Students study and discuss all the rules in the Equity Rule Book.

THEATRE 5517F Professional Production Management in Theatre Credits: 2

This course is a seminar on the duties, planning, negotiations, and problem solving techniques of the professional theatre production manager.

Prerequisites: THEATRE 5517A.

THEATRE 5520 Individual Performance Studies Credits: 1-2

(A,B,C) Private instruction for the advanced student.

THEATRE 5520L Individual Performance Studies Credits: 1-2**THEATRE 5521A Professional Sound Design Credits: 3**

Professional Sound Design is a series of four courses constructed to develop the designer's skills from research and initial sound collection, into interpretation, collaboration and idea development, concluding with the production of finished designs for the MFA productions. Each section deals with problems of increasing complexity beginning with "found" design material for early production and leading to indigenous designs created and layered for complex production support. The course may be taken once or twice for non-sound designers with the full cycle being required for the sound design emphasis.

THEATRE 5521B Professional Sound Design Credits: 3**THEATRE 5521C Professional Sound Design Credits: 3**

Professional Sound Design is a series of four courses constructed to develop the designer's skills from research and initial sound collection, into interpretation, collaboration and idea development, concluding with the production of finished designs for the MFA productions. Each section deals with problems of increasing complexity beginning with "found" design material for early production and leading to indigenous designs created and layered for complex production support. The course may be taken once or twice for non-sound designers with the full cycle being required for the sound design emphasis.

THEATRE 5521D Professional Sound Design Credits: 3

Professional Sound Design is a series of four courses constructed to develop the designer's skills from research and initial sound collection, into interpretation, collaboration and idea development, concluding with the production of finished designs for the MFA productions. Each section deals with problems of increasing complexity beginning with "found" design material for early production and leading to indigenous designs created and layered for complex production support. The course may be taken once or twice for non-sound designers with the full cycle being required for the sound design emphasis.

THEATRE 5522 History of Costuming I Credits: 3

The study of the history of European costume, with emphasis on the social and economic ramifications of costuming through the ages.

THEATRE 5523 History of Costuming II Credits: 3

The study of the history of Non-Western costume, with emphasis on the social and economic ramifications of costuming through the ages.

THEATRE 5524 Rendering Techniques for the Theatre Designer I Credits: 3

Introduces the mechanics of handling black and white media to develop two and three-dimensional techniques with an emphasis on observational training and object drawing, as well as white model and/or maquette construction, materials and techniques.

THEATRE 5530 Drafting for The Theatre Credits: 3

Practical laboratory course in drafting for the theatre encompassing floor plans, sections, designer's evaluations, front and rear elevations, working drawings, and problems in communicating design ideas.

THEATRE 5531R Rendering Techniques for the Theatre Designer II Credits: 3

Continuation of Rendering Techniques with the introduction of color, pastels, watercolor and gouache. Skills are applied in developing projects for design in the theatre.

THEATRE 5532 Professional Costume Design Credits: 3

(A, B, C, D) The courses in Professional Costume Design are intended to develop the costume designer's skills in research, rendering and drawing. Each section will deal with specific problems of design, such as period, line, silhouette, color and texture. Specific problems in design from realistic to stylized productions will be worked on by the students. The course may be taken once or twice by non-costume designers with the full cycle being required for costume emphasis.

THEATRE 5534 Costume Construction I Credits: 3

(A,B,C) Research and methodology into one or more of the following areas of costume construction for the stage: period pattern and tailoring adaptation, work with non-woven materials, and the cutting and finishing of costumes for the stage. May be repeated up to six hours with content change and permission of instructor.

THEATRE 5535 Technical Studies In Costuming And Makeup Credits: 3

(A,B,C) Concentration in one or more of the arts and crafts necessary to costume design. Areas to be chosen from include: fabric dyeing and painting, millinery, wig design and construction, latex prosthetic, and decorative accessories for the stage. May be repeated up to six hours with content change and permission of instructor.

THEATRE 5536 Professional Scene Design Credits: 3

(A,B,C,D) Professional Scene Design is a series of courses constructed to develop the designer's skills from research and initial sketches to finished renderings, models and working drawings. Each successive section deals with problems of increasing complexity beginning with one-set realistic productions through unit-settings, stylization and multiple setting problems. The course may be taken once or twice for non-set designers with the full cycle being required for the scene design emphasis.

THEATRE 5538 Scene Painting Credits: 3

A practicum course in scene painting techniques and execution. Introduction to painting equipment and supplies, priming and preparation of surfaces and materials, standard techniques for painting ornament.

THEATRE 5539 Scene Painting II Credits: 3

A practicum course in scene painting techniques with emphasis on painting interior drops, exterior landscapes and three-dimensional pieces.

THEATRE 5540 Pattern Drafting And Cutting Credits: 3

Theory and laboratory study of the techniques and methods employed in drafting patterns for the professional stage.

THEATRE 5545 Professional Acting Techniques I Credits: 3

Theatre games, exercises, mask work, and some scene study to develop the first year acting/directing class into a training ensemble, instill a clear and uniform vocabulary, heighten awareness, and begin concentrated skill work. The semester will culminate in a class project.

THEATRE 5546 Professional Acting Techniques II Credits: 3

Continuation of THEATRE 5545 with emphasis on the application of the first semester's work through scene study of contemporary plays and monologues.

THEATRE 5547 Professional Acting Techniques III Credits: 3

Concentration on non-naturalistic styles. Work on scenes from Shakespeare and other classical playwrights.

THEATRE 5548 Professional Acting Techniques IV Credits: 3

Work on audition material and further scene work dealing with specific individual acting problems.

THEATRE 5549 Master Class In Acting Credits: 2

(A,B,C,D) Class in advanced studies in acting. May be repeated for credit up to eight hours as content and guest artist change. Permission of instructor or head of area required. Required for third year graduate acting students in the fall semester and may be repeated subsequently as elective.

THEATRE 5551 Rendering Techniques for the Theatre Designer III Credits: 3

Developing techniques for rendering in realistic settings: interiors, landscapes, fabric and furnishings.

THEATRE 5552R Rendering Techniques for the Theatre Designer IV Credits: 3

Developing techniques for rendering in non-realistic styles with the emphasis on imaginative designs, light and air, created textures, etc.

THEATRE 5557 Theatre History I Credits: 3

Development of theatre art-including dramatic literature, staging, and performance styles-from the beginning through the 17th century. This course also looks at Asian theatre forms. Students read approximately 20 plays.

Prerequisites: Graduate Status.

THEATRE 5560 Theatre History II Credits: 3

Development of western theatre art-including dramatic literature, staging, and performance styles-from the 18th century to the present. Students will read approximately 24 plays.

Prerequisites: Graduate status.

THEATRE 5562 Actor Practicum Credits: 3

A contemporary scene study class for actors. Actors test their acquired process skills with major emphasis placed on characterization.

THEATRE 5563 Text Analysis I Credits: 3

Linear analysis of selected prose dramas with concentration on character delineation, images and motivation for actors and directors.

THEATRE 5564 Text Analysis II Credits: 3

Continuation of THEATRE 5563 with emphasis on verse plays. Selected playwrights from the Greek and Elizabethan periods will be included along with modern verse dramatists.

THEATRE 5565 Introduction To Professional Directing Credits: 3

The first part of the class is devoted to an intensive study of various and diverse concepts related to the dramatic experience by dramatists, critics, and directors. The class also examines current production methods and practices for today's functioning professional director. Systems related to stage management and actors are investigated.

THEATRE 5567 Professional Directing Practicum Credits: 3

This class will move from concept to production. Work will revolve around the presentation of production concept statements in which the director will select, organize and articulate the theatrical substance in support of his or her chosen concept. Intensive analysis will lead to the development of an image/metaphor for production. Term will include presentation of a full book justifying concept choices for scenic, costume, music and dance, and, finally, full production.

THEATRE 5568 Seminar In Dramaturgy Credits: 3

Critical analysis of dramatic structure and techniques, with special reference to modern and contemporary drama.

THEATRE 5569 Master Class in Directing Credits: 2

(A,B,C,D) Class in advanced studies in directing. May be repeated for credit up to eight hours as new material and guest artist change. Graduate students elect THEATRE 5569.

THEATRE 5570 Professional Lighting Design Credits: 3

(A, B, C, D) Professional Lighting Design is a series of courses concerned with the study of light as a design element. Projects to implement design theory are primarily selected from the areas of dramatic, musical and opera theatre, and dance. Emphasis is on the design process with each successive section dealing with problems of increasing complexity. Areas of study and projects are chosen on the basis of individual levels of development. When elected by non-lighting designers the course may be elected for a maximum of two semesters.

THEATRE 5571A Professional Projections Design I Credits: 3

This course examines the techniques of theatrical projection design. Focus will be on the manipulation of projected images, and the fundamental use and control of automated projectors. This hands-on laboratory class will instruct students in the use of state of the art projection equipment and control consoles.

THEATRE 5571B Professional Projections Design II Credits: 3

This class will teach students how to design projections. Students will learn the practical applications of projection design as well as the theoretical and critical thinking necessary to successfully complete a projection design assignment. This class will culminate with the presentation of an assigned projection design or a realized projection design.

Prerequisites: THEATRE 5571A

THEATRE 5572 Stage Lighting Technology Credits: 2

This course is a comprehensive study of contemporary technical equipment and its usage to actualize lighting design. Areas of emphasis include photometric, color and color theory, lighting control systems, lighting control operations, cueing techniques, data control of intelligent lighting equipment, lighting fixtures, dimming system, hand drafted light plot standards, CAD light plot drafting, lighting specific software programs, video and image projections, and optical special effects. Theatrical genres will vary by semester.

THEATRE 5573 Professional Technical Production Credits: 3

Detailed study and experimentation with recent scenic materials, scenery construction, rigging systems, use of metal and special effects.

THEATRE 5574 Theatre Regulations, Laws and Safety Credit: 1

Survey of fire, city and Equity codes, and insurance, liability, health rules and regulations related to theater operation. Union and legal contracts, philosophy and relations with theatre facilities and operations.

THEATRE 5575R Property Construction Credits: 3

Construction techniques and materials used to make and modify set and hand properties and set dressing.

THEATRE 5577 Advanced Materials Credits: 3

(A,B,C,D) The theatre technician and designer are dependent on a wide range of materials in the creation of their art. Each semester the student will pursue detailed study of a material area (i.e., wood, metal, plastics, textiles), the processes of its usage and its related process-products (i.e., adhesives, paints, dyes, etc.). Field trips and hands-on laboratory work are integral to the course.

THEATRE 5578 Professional Theatre Administration Credits: 3

Theories, problems and techniques preparing the student for effective interaction with professional theater administration, offering a foundation for potential theatre administrators as well as enrichment for students of directing, design, technical and stage management.

THEATRE 5579R Master Class In Design Credits: 2

(A,B,C,D) Class in advanced studies in design. May be repeated for credit up to eight hours as content and guest artist change.

THEATRE 5580R Graduate Technical Student Seminar Credits: 2

(A,B,C,D,E,F) Required in every semester for Design/Tech M.F.A. candidates choosing a technology emphasis. This continuing seminar course serves as a forum for all graduate technical students to analyze and discuss problems and solutions on current academic and KCRep productions. The course develops collaborative skills through the sharing of ideas and experiences. In addition, topics of general interest to the technician will be studied through guest lecturers and/or individual projects prepared by the faculty and students and presented to the class.

THEATRE 5583 Seminar on Technical Production Management Credits: 2

Seminar involving shop organization, scheduling, purchasing, lending and borrowing, rentals, personnel, job description, organizing structure, etc. Emphasis upon organization and techniques for repertory theatre operation.

THEATRE 5584 Master Class In Technology Credits: 2

(A,B,C,D) Class in advanced studies in technology. May be repeated for credit up to eight hours as content and guest artist change.

THEATRE 5585 Advanced Technical Drafting Credits: 3

An intensive drafting course required for Design/Tech M.F.A. candidates with emphasis in technology. The course aims to equip the student to prepare clear shop working drawings from designer elevations. Topics include both conceptual planning techniques and developing mechanical drawing skills. One hour lecture, four lab hours, and extensive outside preparation.

THEATRE 5586 Structural Design for the Stage Credits: 3

A course in the structural design of scenic elements. The student learns to work within the visual restrictions imposed by the designer to build structures that will bear given load requirements with a minimum of deflection. Basic engineering and load analysis principles are studied and applied in the design procedure to find the best possible solutions in terms of strength, weight, safety and cost.

THEATRE 5587 Structural Design for the Stage II Credits: 3

This course is designed to give an introduction to the physics behind structural design and to guide the student through the process of designing safe, effective structural scenery for the theatre.

Prerequisites: THEATRE 5586.

THEATRE 5590 Directed Graduate Studies Credits: 3-6

Individual projects on the graduate level. No more than three hours with any one instructor. Only one 590 each semester.

THEATRE 5590A Directed Graduate Studies Credits: 3-6**THEATRE 5590B Directed Graduate Studies: Design Credits: 3-6****THEATRE 5590C Directed Graduate Studies: Costumes Credits: 3-6****THEATRE 5590D Directed Graduate Studies: Scenic Design Credits: 3-6****THEATRE 5590E Directed Graduate Studies: Directing Credits: 3-6****THEATRE 5590F Directed Graduate Studies Credits: 3-6****THEATRE 5590G Directed Graduate Studies: Lighting Credits: 3-6****THEATRE 5590H Directed Graduate Studies: Playwriting Credits: 3-6****THEATRE 5590I Directed Graduate Studies Credits: 3-6****THEATRE 5590J Directed Graduate Studies: Stage Management Credits: 3-6****THEATRE 5590K Directed Graduate Studies: Technical Production Credits: 3-6****THEATRE 5590L Directed Graduate Studies: Theatre Management Credits: 3-6****THEATRE 5590M Directed Graduate Studies: Theory And Criticism Credits: 3-6****THEATRE 5590N Directed Graduate Studies: Dramaturgy Credits: 3-6****THEATRE 5590R Directed Graduate Studies Credits: 3-6****THEATRE 5590S Directed Graduate Studies Credits: 3-6****THEATRE 5590T Directed Graduate Studies Credits: 3-6****THEATRE 5592A Seminar on Stage Management Practice Credit: 1**

MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training), to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.

Prerequisites: Graduate Stage Management Student.

THEATRE 5592B Seminar on Stage Management Practice Credit: 1

MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training) to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.

Prerequisites: Graduate Stage Management Student.

THEATRE 5592C Seminar on Stage Management Practice Credit: 1

MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training) to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.

Prerequisites: Graduate Stage Management Student.

THEATRE 5592D Seminar on Stage Management Practice Credit: 1

MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training) to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.

Prerequisites: Graduate Stage Management Student.

THEATRE 5592E Seminar on Stage Management Practice Credit: 1

MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training) to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.

Prerequisites: Graduate Stage Management Student.

THEATRE 5597 Repertory Theatre: Internship Credits: 3-6

Assignments available in the following areas: directing, design, carpentry, lighting, costume, props, acting, stage management. Technical interns will be assigned by the appropriate heads of those areas. Acting interns may understudy and/or play roles with the Kansas City Repertory Theatre on the Spencer stage or in showcase productions. Also, interns will have some responsibility in technical areas such as change-over, props, costume, running crew, and stage management. Directing interns may assist director or assistant stage manager.

Prerequisites: Selection by chairman of department.

THEATRE 5598R Research And Performance Credits: 1-6

Primarily for the M.F.A. student. Permission of the graduate faculty.

THEATRE 5599 Research And Thesis Credits: 1-6

THEATRE 5697 Repertory Theatre: Residency Credits: 6

The residency consists of authorized participation with the Kansas City Repertory Theatre, the Department of Theatre, or an approved outside professional company, and is arranged under departmental advisement, with the chairman of the department, and in consultation with the artistic director of KCRP. The assignment will be determined by matching interest and degree emphasis with available production assignments.

THEATRE 5899 Required Graduate Enrollment Credit: 1

Trombone (TROMB)

Courses

TROMB 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

TROMB 5500A Graduate Trombone-Secondary Credits: 2

TROMB 5500B Special Applied Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

TROMB 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

TROMB 5500JA Graduate Applied Jazz Studies Credits: 2

One-hour lesson weekly. Jury examination is required.

Prerequisites: Graduate standing.

TROMB 5500JB Special Applied Jazz Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.

Prerequisites: Graduate standing.

TROMB 5500JC Applied Jazz Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied jazz study in an area other than, and in addition to, their primary performance study.

Prerequisites: Graduate standing.

TROMB 5501 Graduate Trombone - Masters Performance Credits: 4

TROMB 5601 Graduate Trombone - Doctoral Performance Credits: 4

Trumpet (TRUMPET)

Courses

TRUMPET 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

TRUMPET 5500A Graduate Trumpet-Secondary Credits: 2

TRUMPET 5500B Special Applied Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

TRUMPET 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

TRUMPET 5500JA Graduate Applied Jazz Studies Credits: 2

One-hour lesson weekly. Jury examination is required.

Prerequisites: Graduate standing.

TRUMPET 5500JB Special Applied Jazz Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.

Prerequisites: Graduate standing.

TRUMPET 5500JC Applied Jazz Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied jazz in an area other than, and in addition to, their primary performance study.

Prerequisites: Graduate standing.

TRUMPET 5501 Graduate Trumpet - Masters Performance Credits: 4

TRUMPET 5601 Graduate Trumpet - Doctoral Performance Credits: 4

Tuba (TUBA)

Courses

TUBA 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

TUBA 5500A Graduate Tuba-Secondary Credits: 2

TUBA 5500B Special Applied Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

TUBA 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

TUBA 5501 Graduate Tuba - Masters Performance Credits: 4

TUBA 5601 Graduate Tuba - Doctoral Performance Credits: 4

Urban Leadership (EDUC-UL)

Courses

EDUC-UL 5501 Foundations Of School Leadership & Organization Credits: 3

Participants will study as cohort team members actively engaged in clinical/practical endeavors in schools, concepts and theories focused: 1) to understand and apply modern leadership and organization development theory in relation to school organizational cultures; 2) to understand both the development of productive school relationships and the theoretical concepts of the legal responsibilities of schools in the society; 3) to develop a plan for principal certification based upon participant needs and experiences; and 4) to build school cultures that are collaborative, participative, reflective, and self renewing.

EDUC-UL 5502 Building Administration And Management Credits: 3

Participants will study and apply theories and concepts as members of a Cohort Team doing clinical work in schools designed to study, learn, and practice the management and administrative responsibilities of building level leaders including principal roles, personnel issues, school business management, community relations, supervision of staff, and to know the legal responsibilities relating to teachers, student and public rights.

Prerequisites: EDUC-UL 5501.

EDUC-UL 5503 Student, Staff And Organization Development Credits: 3

Participants will study as a member of a cohort team doing clinical work in school and developing the ability: 1) to gain knowledge of, and practice in developing "learning organizations"; 2) to assist teachers and other staff members of a school in structuring classrooms around the learning and development of all students; 3) to lead and develop urban schools that are culturally diverse where learner outcomes and performance are not related to race, class, or gender; and 4) to provide leadership related to developing school structures that are outcome oriented.

Prerequisites: EDUC-UL 5501 and EDUC-UL 5502.

EDUC-UL 5504 Elementary School Administration Credits: 3

Contemporary knowledge, understanding, and competencies for elementary administration. Focus on leadership, communication, group processes, organization, fiscal, and political areas. In addition, basic roles and responsibilities of the school principalship are addressed.

EDUC-UL 5505 Middle School Administration Credits: 3

Middle school goals, effective middle school leadership, change models for staff development, relevant curricula, auxiliary and support systems.

EDUC-UL 5506 Secondary School Administration Credits: 3

Organization and objectives of secondary education; curriculum trends; role analysis; principal-staff relations.

Prerequisites: EDUC-UL 5501.

EDUC-UL 5507 Instructional Supervision Credits: 3

Principles of supervision, factors influencing effectiveness of instruction, including the evaluation of teachers.

EDUC-UL 5508 Special Education Administration Credits: 3

Provides special educators, special education and regular education administrators with knowledge and experience in the areas of special education process, policy development, data collection and funding, legal issues and program organization. Special emphasis is given to dealing with common problems which arise in public school special education programs.

EDUC-UL 5510 Planning Educational Facilities Credits: 3

Analysis of educational specifications; cooperative planning processes; analysis of trends in school facilities; financial considerations and construction research. Visitation of selected facilities included.

EDUC-UL 5511 Public School Business Administration Credits: 3

The business related aspects of administering a school district including budgeting and accounting, purchasing, transportation, insurance, and facilities management.

EDUC-UL 5512 School Finance Credits: 3

Sources of revenue for public education; distribution of monies for education; budget construction; accounting procedures; and theories for financing education.

EDUC-UL 5513 School Personnel Administration Credits: 3

Study of processes, policies and theory concerned with the personnel function in educational administration. Emphasizes the importance of human resources in developing effective educational systems.

EDUC-UL 5514 Public Relations In Education Credits: 3

Analysis of various public views on education; mass communications and social change; public relations programs.

EDUC-UL 5515 Governmental And Legal Aspects Of Education Credits: 3

Current and recent legislation affecting education; court cases related to education; emerging patterns of modern juris-prudence; administrators' responsibilities regarding legal decisions.

EDUC-UL 5516 Governmental And Legal Aspects Of Special Education Credits: 3

An examination of current and recent legislation affecting special education; emerging patterns of modern jurisprudence; and special education teacher and administrator legal responsibilities.

EDUC-UL 5518 Leadership for School Improvement Credits: 3

The content of this course has a focus on identifying and using data to make school improvement decisions. Students will be engaged in readings, activities, and reflections that discuss the importance of using data for decision-making at the building and district levels of school leadership.

Prerequisites: Admission into the Educational Administration Program.

EDUC-UL 5520 Data Driven Leadership for Reculturing Schools Credits: 3

The challenges facing urban education are complex and may be understood from a myriad of perspectives including historical and socio-cultural underpinnings, economic and political contexts, and pedagogical/achievement orientations. This course will bring together some of these arguments as they relate to what school leaders can do to promote a community of adult leaders who use data to make decisions for the success of all children. Such a challenge includes working as educational leaders to reculture schools to increase opportunities for all students to learn. For some schools this task involves closing the persistent achievement gap that may exist among groups of students which requires disaggregating data by race, ethnicity, socioeconomic status, gender, and special educational needs.

EDUC-UL 5522 School Organizational Culture As The Context Of Change Credits: 3

This course is designed to enable students to understand that schools as organizations develop cultures and that this culture establishes relationships and conditions in schools for students, teachers, and administrators. Students will develop an understanding of the culture of a school and its influence on efforts to achieve substantive change or reform.

EDUC-UL 5523 Administrative Roles For Instructional Leadership Credits: 3

This course meets a requirement for administrator certification in Missouri and Kansas in the area of school improvement and leadership. The course focuses upon leadership roles necessary for creating a supportive climate for change and for implementing improved instructional programs.

EDUC-UL 5524 Philosophical Inquiry And Education Credits: 3

An examination of issues, problems and controversies discussed in educational and related literature, utilizing criteria and techniques of logical and philosophical analysis. The focus is on the development of critical thinking abilities as applied to theories, positions and arguments in educational and related contexts.

EDUC-UL 5525 Cultural Foundations Of Education Credits: 3

Examines education and schooling as cultural phenomena. This course focuses on an analysis of education and schooling as both cultural transmission and cultural change and the practical implications. Also included is a philosophical/ theoretical examination of varying relationships between dominant and minority cultures.

EDUC-UL 5526 Philosophical Foundations Of Education Credits: 3

Introduction to the study of philosophical problems implicit in educational issues. Focuses on the application of a number of philosophical concepts and skills to a variety of controversies, policies, and theories in education.

EDUC-UL 5527 Historical Foundations Of Education Credits: 3

Study of the development of educational policy, practice, and theory in relation to changes in social institutions and thought. Focuses on the analysis of contemporary educational problems in the light of historical perspectives.

EDUC-UL 5528 Sociological Foundations Of Education Credits: 3

An analysis of issues involving the role of schools in society, the relationship between education and other social institutions, and contemporary social developments which have major implications.

EDUC-UL 5531 Educational Leadership and Human Resources Credits: 3

This course has been designed to develop students' proficiencies in school human resource management and its importance to positive outcomes for student learning. The course focuses on human resource components that are essential to effective schools.

Prerequisites: Admission into the Educational Administration EdD Program.

EDUC-UL 5532 Educational Leadership and Organizational Behavior Credits: 3

This course has been designed to develop the students' proficiencies in school organization and management to provide positive outcomes for student learning. The course focuses upon organizational behavior and development and its components that are essential to effective school.

Prerequisites: Admission into the Educational Administration EdD Program.

EDUC-UL 5534 English Language Learner Program Administration Credits: 3

Provides educators, administrators, and district officials with knowledge, skills, and dispositions necessary to supervise/manage programs and teachers in elementary, middle, or secondary schools that serve students with limited English proficiency. Participants will study and apply theories and practices related to language acquisition cultural pluralism, multicultural education, family and community engagement, acculturation, assessment, and legal rights and responsibilities relating to English language learners and the school.

Prerequisites: Bachelor's degree.

EDUC-UL 5535 Current Topics in Urban School Leadership Credits: 3

Current Topics in Urban School Leadership

EDUC-UL 5550 Organization And Administration Of Higher Education Credits: 3

Organizational patterns; administrative roles and procedures; establishment of policies, institutional development; and public and private financing of higher education.

EDUC-UL 5551 Student Affairs Administration In Higher Education Credits: 3

Study of the objectives, organizational structure, and current issues of student affairs administration as they relate to the academic program, the campus environment, and the needs of students; analysis of the functions of different services.

EDUC-UL 5553 Supervision and Management of People Credits: 3

The purpose of this course is to provide a broad overview of staffing practices in the field of higher education, especially student affairs. The course will assist students to be better professionals, to learn the literature as it relates to supervision, and to begin basic skill development. Other course content includes issues surrounding staff selection, staff orientation. The course is open to any graduate student.

EDUC-UL 5556 The College Student Credits: 3

An examination of today's college students. Review and study of demographics, relationships of students and colleges, nature of student communities, new student populations and the impact of college on students and their educational development.

EDUC-UL 5557 Legal Aspects Of Higher Education Credits: 3

Study of legal issues within higher education. Focus is on state and federal law and regulations as they pertain to issues ranging from academic freedom to governance and administration. Focus on strategies for preventive law is a major component of the course.

EDUC-UL 5558 Advanced Student Development Theory Credits: 3

A focused and in-depth examination of developmental theories related to the college student. This course builds on information presented in EDUC-UL 5556.

Prerequisites: EDUC-UL 5556.

EDUC-UL 5559 Current Issues In Community Colleges Credits: 3

A course responsive to the contemporary issues in community college administration, addressing interesting and important topics that fall outside the scope of other courses in the higher education curriculum. Students will have an overview of the role of community colleges within the larger organization of colleges and universities in the U.S. higher education system.

Prerequisites: Graduate student status.

EDUC-UL 5560 Leadership In Higher Education Credits: 3

Focus on leadership, connections among different approaches to leadership, different forms of power, and different leadership behaviors. A series of opportunities to think systematically about leadership and to increase a student's personal leadership capacities in higher education will be provided.

EDUC-UL 5562 Gender & Leadership In Educ: Implications For Prof. Effectiveness Credits: 3

This course is for women and men who want to understand better the unique challenges and opportunities facing leaders in today's educational organizations. Exploration of connections between gender and leadership is the focus of study. Students will probe linkages between gender and leadership for their own leadership and for organizational policy and practice.

EDUC-UL 5564 History Of Higher Education Credits: 3

Study of the evolution of the constituencies within different types of American higher education institutions. The development of professional, practical, and graduate education will be examined as will 20th century alternatives to the liberal arts colleges and research university models.

EDUC-UL 5566 Racial And Ethnic Diversity, And Cultural Understanding Credits: 3

An exploration of the ideological and historical construction of education for social equality, and subsequent issues of race, ethnicity, and class that influence colleges and universities in the U.S. today.

EDUC-UL 5567 Higher Education Capstone Credits: 3

This course will provide a culminating experience for students in the Higher Education Masters program. All aspects of higher education administration will be examined and synthesized to enhance student ability to understand and operate in a complex setting.

EDUC-UL 5570 Administrative Practicum Higher Education Credits: 3-6

Assigned administrative responsibilities under supervision of practicing higher educational administrator, seminar and written project accompany field experiences.

EDUC-UL 5571 Internship In Higher Education Credits: 3-16

Applied experiences in a planned, supervised program. Seminar accompanies internship experiences.

EDUC-UL 5572 Higher Education Administration: The Profession Credits: 3

A course to introduce the prospective or new student affairs professional to all facets of higher educational administration. The course provides a balance of presentations by student affairs professionals, participation and observation in a variety of higher education offices and individual research projects. It is anticipated that students will visit several institutions of higher education and will participate in a service-learning project.

EDUC-UL 5574 Administrative Practicum Credits: 1-6

Assigned administrative responsibilities under supervision of practicing educational administrators seminar and written project accompany field experiences.

EDUC-UL 5575 Internship In Administration Credits: 1-16

Applied experiences in a planned, supervised educational administration program. Seminar accompanies internship experiences.

EDUC-UL 5589 Special Topics In Educational Leadership Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589AD Special Topics In Educational Leadership Credits: 1-6

EDUC-UL 5589BE Special Topics in Educational Leadership Credits: 1-6
Special Topics in Educational Leadership

EDUC-UL 5589CP Special Topics In Educational Leadership Credits: 1-6**EDUC-UL 5589EA Special Topics In Educational Leadership Credits: 1-6**

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589ED Special Topics In Educational Leadership Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589EL Special Topics In Educational Leadership Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589ET Special Topics In Educational Leadership Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589HR Special Topics In Educational Leadership Credits: 1-6**EDUC-UL 5589LR Special Topics In Educational Leadership Credits: 1-6****EDUC-UL 5589OB Special Topics In Educational Leadership Credits: 1-6****EDUC-UL 5589SM Special Topics In Educational Leadership Credits: 1-6****EDUC-UL 5590 Seminar Credits: 3**

Discussion and evaluation of literature in Education Administration.

EDUC-UL 5598 Individual Studies Credits: 1-6

Review of the research and trends relative to selected problems in education.

EDUC-UL 5601 Research In Education Administration: Qualitative Theory & Design Credits: 3

First of two courses in advanced qualitative research in higher education and educational administration. Focus is on the theory and design of qualitative work. Students will become familiar with the various ontological, epistemological, and methodological assumptions that guide research in the social sciences and be able to make informed choices about inquiry techniques for dissertation and future research.

EDUC-UL 5602 Seminar In The History Of American Urban Education Credits: 3

A study of the historical development of American urban educational institutions and ideas and of how that development is embedded within the broader context of social, political, and economic change in the United States.

EDUC-UL 5603 Research In Education Administration: Qualitative Data & Analysis Credits: 3

Second of two courses in advanced qualitative research in higher education and educational administration. Focus is on data collection and analysis in qualitative work. Students will become familiar with various data gathering techniques and devices for interpreting qualitative data and drawing meaningful conclusions. This information will guide students in dissertation and future research.

Prerequisites: EDUC-UL 5601.

EDUC-UL 5604 Introduction to Doctoral Study Credits: 3

This course is designed as an introductory course in the doctoral sequence for the EdD in Educational Administration with an emphasis in Higher Education. The course is designed to introduce students to the tasks and processes involved in the completion of the doctoral requirements. It is required for all entering doctoral students.

Prerequisites: Admission to the doctoral program.

EDUC-UL 5616 Analysis Of Educational Theory Formation Credits: 3

Study and application of criteria for evaluating the adequacy of educational theories and evaluating the relevance to theories of research studies.

EDUC-UL 5626 Theory In Educational Administration Credits: 3

Leadership theories and research; bureaucracy and organizational processes; new directions in organizational analysis; sociological and psychological concepts in school administration.

Prerequisites: EDUC-UL 5501.

EDUC-UL 5627 Advanced Educational Supervision Credits: 3

Principles and concepts of educational supervision and implementation.

Prerequisites: EDUC-UL 5507.

EDUC-UL 5628 The Superintendency Credits: 3

Analysis and overview of the nature, functions and activities of the public school superintendency including: historical and philosophical foundations; board-staff and other governing body relationships and functions; professional staff relations and management; public relations and communication; inter-governmental relations and responsibilities, and the functions of planning, direction and supervision of the instructional enterprise.

EDUC-UL 5634 Faculty & Curricular Issues Higher Education Credits: 3

This course will explore different facets of college and university curricula. This course will include varying ways curriculum has been structured and the debates that have surrounded the structure and content. Faculty issues will be explored via the curriculum and will include a focus on workload policies and practices.

Prerequisites: Admission to the doctoral program.

EDUC-UL 5635 Topics In Higher Education Credits: 3

Organization of higher education, public and private financing; accreditation; academic freedom; policy development; community relations; curricular patterns, selected current issues.

Prerequisites: EDUC-UL 5550 (or equivalent).

EDUC-UL 5636 Policy Issues in Higher Education Credits: 3

This course is intended for those whose roles as educational leaders requires them to participate in the analysis and development of policies associated with educational programs and practice. Students will be able to understand the characteristics of a well developed policy agenda, obstacles to policy implementation, and interpretations related to policy implementation. Concurrently, institutional, political, economic, social, and moral consequences of various policies will be explored.

Prerequisites: Admission to the doctoral program.

EDUC-UL 5637 Community College Credits: 3

Investigation of the purposes, programs, and the problems in the American community college movement; analysis of the structure, governance, and financial support of community colleges.

Prerequisites: Doctoral status.

EDUC-UL 5640 Apprenticeship And Conference In College Training Credits: 2-5

Apprenticeship experience in preparing, conducting, and evaluating college teaching under the direction of and in conference with supervising professors. Some attention to student personnel and administration in higher education.

EDUC-UL 5652 Financial Aspects Of Higher Education Credits: 3

This course is designed for graduate students with a basic understanding of the area of Higher Education Administration. The course examines basic concepts and principles of finance in higher education in the United States. Students are expected to: Develop an understanding of 1) the issues and fiscal problems of higher education, 2) the roles and responsibilities of financial officers in higher education, and 3) possible future trends in the financing of higher education.

Prerequisites: Doctoral status.

EDUC-UL 5655 Studies In Philosophy Of Education Credits: 3

Study of special topics in the philosophy of education.

Prerequisites: EDUC-UL 5523, EDUC-UL 5526.

EDUC-UL 5660 Effective Practices II Credits: 3

This course builds on the general understanding of leadership and professional practices developed in Leadership in Education Effective Practices I. The course addresses key leadership challenges and decision making in today's complex work world. The course uses reading on selected issues, case discussions, and role plays to move beyond theory and understanding to application and effectiveness.

EDUC-UL 5665 The Urban University Credits: 3

This course examines the development and unique aspects, characteristics and role of the urban university. In addition to an exploration of the historical relationship between urbanization in American society and university development and evolution, seminars will focus attention on undergraduate and graduate education, faculty development, community relations, and regional and economic development for urban institutions.

Prerequisites: Doctoral status.

EDUC-UL 5685 Problems And Issues In Education & Urban Leadership Credits: 3

This course serves as the capstone class for all doctoral students in education. The course requires analysis of successful dissertations in urban education and prepares students to write their own dissertation relative to urban study and education.

EDUC-UL 5690 Special Problems Credits: 1-6

Individual studies; thesis exploration, special reading.

EDUC-UL 5690A Special Problems Credits: 1-6

Individual studies; thesis exploration, special reading.

EDUC-UL 5696 Dissertation Administration And Community Leadership Credits: 1-16

Culminating written research project for doctoral students in Urban Leadership and Policy Studies.

Urban Planning and Design (UPD)

Courses

UPD 5526 History of Urban Planning & Design Credits: 3

The course provides a survey of the history of urban planning and design with emphasis on the nineteenth and twentieth centuries in the United States. The course also teaches basic historic research methods.

UPD 5596 Directed Study In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5596A Directed Study In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5596B Directed Study In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5596C Directed Study In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5599 Special Topics In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5599A Special Topics In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5599B Special Topics In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5599C Special Topics In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5630 Quantitative Planning Methods I Credits: 3

This course introduces graduate students to quantitative methods in urban planning analysis. Topics include relating built form to function, demographic forecasting, economic impact analysis, trip generation, and housing market dynamics.

Prerequisites: STAT 235.

UPD 5700 Advanced Planning Theory & Practice Credits: 3

Exploration of contemporary planning theory and practice, including planning knowledge, skills, values, and ethics.

UPD 5710 Historic Preservation Studio Credits: 3

Studio instruction in historic preservation planning focusing on research, context, evaluation, policy, and plan creation for historic resources.

UPD 5740 Advanced GIS for Urban Planning Credits: 3

This advanced level GIS course is designed to expose graduate students to high level GIS techniques and geospatial analysis in the urban planning context. Students will learn data management skills in GIS and advanced geoprocessing tools with hand-on experiences. Students will also have an opportunity to work on a real world GIS project as part of course requirements.

Prerequisites: UPD 203.

UPD 5742 Transportation Planning Credits: 3

This course provides fundamental theories, methods, and contemporary issues in transportation planning. The topics covered in this course include the transportation planning process, transportation systems, travel demand analysis, and policy issues such as the linkage between land use and transportation and environmental impacts, and traffic congestion.

UPD 5743 Introduction to Historic Preservation Credits: 3

The course introduces the history and theory of historic preservation through a survey of major issues in the field from a planning perspective. The course focuses on preservation through cultural, social, historical, legal, policy, and economic lenses, primarily in the United States.

UPD 5744 History of the Built Environment Credits: 3

Survey of the built environment concentrating on nineteenth and twentieth century design in the United States.

UPD 5745 Historic Preservation Methods Credits: 3

Exploration of historic preservation methods, including survey, documentation, policy, and management approaches used in practice.

UPD 5746 Urban Environmental Planning Credits: 3

Urban environmental planning examines ecological change due to urbanization. It looks at ways to measure and demonstrate ecological change at the site, neighborhood, and regional scales. Students incorporate environmental ideas and policies into plans developed for a client.

UPD 5747 Urban Redevelopment Credits: 3

This course examines techniques of urban redevelopment within urban planning and real estate. Graduate students learn about the development process, real estate markets, techniques of development finance and local policy approaches to urban redevelopment incentives.

UPD 5750 American Housing Credits: 3

Students will explore housing in cultural, design, and historical terms and examine contemporary American housing policy.

UPD 5790 Historic Preservation Internship Credits: 3

Off-campus work experience with an approved professional, government, or nonprofit agency sponsor.

Prerequisites: UPD 5743.

Viola (VIOLA)

Courses

VIOLA 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

VIOLA 5500A Graduate Viola-Secondary Credits: 2

VIOLA 5500B Special Applied Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

VIOLA 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

VIOLA 5501 Graduate Viola - Masters Performance Credits: 4

VIOLA 5601 Graduate Viola - Doctoral Performance Credits: 4

Violin (VIOLIN)

Courses

VIOLIN 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

VIOLIN 5500A Graduate Violin-Secondary Credits: 2

VIOLIN 5500B Special Applied Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

VIOLIN 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

VIOLIN 5501 Graduate Violin - Masters Performance Credits: 4

VIOLIN 5601 Graduate Violin - Doctoral Performance Credits: 4

Voice (VOICE)

Courses

VOICE 5200 Vocal Coaching: Recital and Operatic Repertoire Credit: 1

The purpose of vocal coaching is to aid singers in refining their performance in terms of musical style, nuance, language, and character. It is intended to amplify the singer's understanding of aspects of performance including musical shaping, dynamic contrasts, poetic/textual architecture, traditional approaches to literature of various periods and styles, and appropriate performance practices.

Prerequisites: You must be a graduate student in vocal performance at the Conservatory of Music Dance.

VOICE 5300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

VOICE 5311 University Singers Credit: 1

Mixed chorus specializing in choral-orchestral literature. May be repeated for credit. Open by audition to University students, regardless of major.

VOICE 5500A Graduate Voice-Secondary Credits: 2

VOICE 5500B Special Applied Studies Credits: 2

One-hour lesson weekly. This course is for pedagogical or review purposes. An audition is required, and a jury for comments only may be held at the discretion of the division. May be repeated for credit.

VOICE 5500C Applied Study of a Second Instrument Credit: 1

One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

VOICE 5501 Graduate Voice - Masters Performance Credits: 4

One hour weekly participation in Vocal Performance Seminar is required

VOICE 5502 Applied Voice Credits: 2

Applied instruction in voice, focusing primarily on the pedagogical aspects of proper solo vocal singing technique for the graduate level singer.

VOICE 5601 Graduate Voice - Doctoral Performance Credits: 4

One hour weekly participation in Vocal Performance is required.

Undergraduate Course Offerings

Accounting (ACCTNG)

Courses

ACCTNG 210 Introduction To Financial Accounting Credits: 3

An overview of basic concepts and terminology associated with reporting financial information to parties outside of an organization. This course requires students to take an accompanying lab that meets one day a week.

Prerequisites: MATH 110 or MATH 120 or higher; or ALEKS score of 61 or higher; or ACT MATH sub-score of 28 or higher; or SAT MATH sub-score of 660 or higher; and 30 hours completed.

ACCTNG 211 Introduction To Managerial Accounting Credits: 3

An introduction to the use of cost accounting concepts and information in managing the activities of a business.

Prerequisites: ACCTNG 210 and completion of 45 hours.

ACCTNG 306 Introduction to the Accounting Profession and Procedures Credits: 3

A study of the profession of accounting, the accounting process, and tools used in implementing that process.

Prerequisites: ACCTNG 210 and completion of 45 hours.

ACCTNG 307 Cost Management Credits: 3

A study of the principles and techniques of cost accounting with emphasis on the structure of cost accounting systems and the processing, summarizing and reporting of cost information. Topics include various issues relevant for manufacturing and service organizations, and introduction of situations that require the application of cost information to managerial settings.

Prerequisites: ACCTNG 211 and junior standing Bloch student.

ACCTNG 310 Intermediate Accounting Credits: 3

A study of theory and application of external corporate reporting. The course covers a variety of financial accounting issues including assets, liabilities, revenue recognition, and accounting change analysis. Publications and pronouncements of the accounting professions are emphasized where applicable.

Prerequisites: ACCTNG 306 and Bloch student.

ACCTNG 318 Introduction to Data Analysis in Accounting Credits: 3

With the proliferation of large data sets, the ability to use a variety of software tools to gain understanding of this data has become an invaluable skill set in modern accounting. The statistical concepts and spreadsheet versatility presented in earlier course work will be augmented with graphical presentation types and best practices, database structure and usability, and statistical application here. These skills will be embedded in the methodology of data analysis commonly found in accounting environments.

Co-requisites: ACCTNG 310.

ACCTNG 350 Accounting Systems And Controls Credits: 3

This course examines a number of systems employed to process accounting information, the internal control activities typically used in each system and associated documentation techniques.

Prerequisites: ACCTNG 310 (or co-requisite, ACCTNG 306, and Pre-MSA student).

ACCTNG 360 Accounting Research and Communications Credits: 3

A study of solving accounting issues by conducting research in the professional literature and communicating the results of that research to users. Students practice oral and written communication skills.

Prerequisites: ACCTNG 310.

ACCTNG 405 Auditing Credits: 3

A study of how the auditor determines the nature and amount of evidence that should be accumulated considering the unique aspects of an engagement, as well as some idea of how that evidence is evaluated in the context of a financial audit.

Prerequisites: ACCTNG 311 and ACCTNG 350.

ACCTNG 412 Introduction to Income Taxation Credits: 3

An examination of the theory, practice, and research methodology of taxation as applied to individuals and business entities.

Prerequisites: ACCTNG 211.

ACCTNG 418 Data Analytics for Accounting Credits: 3

Data Analytics is an investigation of the stories that large data stores can tell if only we know how to unravel them. As such, this course will examine big data sources from both a data-mining and a hypothesis-testing approach.

Prerequisites: Senior standing and BS Accounting student.

ACCTNG 420 Advanced Accounting Credits: 3

A study of the accounting for business combinations and the preparation of consolidated financial statements.

Prerequisites: ACCTNG 310.

ACCTNG 421 Governmental/Not-For-Profit Accounting Credits: 3

An overview of accounting for state and local governments and not-for-profit entities. Pronouncements of the accounting profession are emphasized where applicable.

Prerequisites: ACCTNG 310.

ACCTNG 464 Principles of Internal Auditing Credits: 3

A study of how the internal auditor determines the nature and amount of evidence that should be accumulated considering the unique aspects of an engagement, as well as some idea of how that evidence is evaluated in the context of a financial audit.

Prerequisites: ACCTNG 311 and ACCTNG 350.

ACCTNG 470 Fraud Examination Credits: 3

An examination of the elements of fraud and the fraud auditing process.

Prerequisites: Junior standing Bloch student.

ACCTNG 487 Special Topics Credits: 3

Special topics in accounting.

ACCTNG 496 Internship: Accounting Credit: 1

An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

Prerequisites: Departmental consent.

ACCTNG 497 Special Topics In Accounting Credits: 1-3

Study and research in accounting areas of special student interest, under individual faculty supervision and guidance.

Prerequisites: Departmental consent.

Anchor (ANCH)

Courses

ANCH 101 University College Seminar Credits: 3

The purpose of ANCH 101 is to help new students make a successful transition to the University of Missouri-Kansas City, both academically and personally. This course aims to help students develop and apply critical thinking skills (Interdisciplinary and Innovative Thinking and Valuing and Reasoning), engage in the curricular and co-curricular life of the university, articulate to students the expectations of the University and its faculty, understand the value of a liberal education in the 21st century, and continue to clarify their purpose, meaning, and direction. First-time, year-one students admitted into the University College will enroll in ANCH 101.

Co-requisites: DISC 100.

ANCH 102 Introduction to Urban Studies Credits: 3

Introduction to Urban Studies is a lecture and discussion course that provides the undergraduate student with an overview of the interdisciplinary field of urban social science. The student who successfully completes this course will have a broad understanding of the major issues, vocabulary, basic methods, and prominent scholars in urban studies. We will explore current events of relevance, including the opportunities and problems facing major cities in the United States including Kansas City.

Co-requisites: DISC 100.

ANCH 102 - MOTR URBN 202: Intro to Urban Studies**ANCH 103 Muse Credits: 3**

This course merges a variety of academic platforms and student activities so that collaboration among disciplines becomes a natural, logical solution to academic, professional, and performing arts challenges. Course content is derived from music history as it relates to Kansas City in the 21st century through examining the ethics of creating the canon. Activities are drawn directly from music history to achieve understanding in Human Values and Ethical Reasoning as they relate to our community.

Co-requisites: DISC 100.

ANCH 104 The Countercultural Experience Credits: 3

This interdisciplinary course examines countercultures, groups whose shared values and practices set them apart from mainstream culture. Students will explore how and why countercultures form, transform and decline; how they reason out, articulate and practice their shared cultural values; their function as distinctive discourse communities; and how individual members negotiate their identities and values within and between cultural groups.

Co-requisites: DISC 100.

ANCH 105 The Value of Beauty Credits: 3

This class surveys European aesthetics, defining what counts as beautiful and the roles art plays in society.

Co-requisites: DISC 100.

ANCH 106 Money, Medicine and Morals Credits: 3

This course will improve the student's understanding of and ability to critically evaluate complex moral dilemmas in medicine, business, law and other professions. Students will learn critical thinking, arguing, writing and presentation skills through examining moral issues for professionals. Guest speakers will introduce students to practical aspects of professional life.

Co-requisites: DISC 100.

ANCH 107 Global Inequality: Slavery in Historical and Archaeological Perspective Credits: 3

Using archaeological and historical evidence from around the world, including the state of Missouri and the Kansas City region, students will explore the conditions which gave rise to inequality. By exploring slavery in various forms, students will understand its historical development, as well as its continued impact on society today.

Co-requisites: DISC 100.

ANCH 108 Surfing the Matrix: Keeping Your Head Above Water in a Sea of Information Credits: 3

Students will analyze, interpret and/or reconstruct human events, experiences, actions and interactions, through case studies that will help them to understand the principles of value and civic duty in a wide range of settings. Students will be able to identify ethical problems in business, apply critical thinking concepts to better synthesize their understanding of ethical issues and moral reasoning, and be able to articulate implications and consequences that emerge from critical thinking constructs when filtering, analyzing and synthesizing multiple variables.

Co-requisites: DISC 100.

ANCH 109 Education and Urban Society Credits: 3

This course is designed to introduce students to the social and philosophical issues in urban education and will include an emphasis on culture, race, class, and ethnicity as they relate to schooling in urban America. Students will engage in thinking and rethinking problems, issues and solutions that complicate our collective understanding of the intersection of urban society and education.

Co-requisites: DISC 100.

ANCH 150 Computing and Engineering in Society Credits: 3

This course provides a broad and general introduction to the practice and history of engineering and computing fields; their impact on humanity and society and their relationship to the ecosystem, professionalism and ethics. The course introduces important concepts relevant to the fields of engineering and computing, including the engineering approach to solving problems, communications and computations, ethics, environmental responsibility and teamwork. Particular attention will be paid to how technology, engineering and pervasive computing impacts society. The course also introduces academic skills and strategies for success as a student and in a professional career.

Co-requisites: DISC 100.

ANCH 199 Anchor I Special Topics Credits: 3

Anchor I Special Topics

ANCH 201 Race in American Film Credits: 3

This course examines representations of race and ethnicity in American film from the silent era onward in mainstream and countercultural traditions. It explores how social, political, and economic conditions contribute to constructions of race and ethnicity.

Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

ANCH 202 Crossing Boundaries Credits: 3

This course examines the Latina/o immigrant experience from the immigrants' diverse origins in the Americas to the communities they shape. Students will examine how empire, war, and economic integration have pushed people to migrate and how work, family, and immigration policy have shaped patterns of migration and settlement as well as integration and exclusion.

Prerequisites: DISC 100 and Anchor I.

Co-requisites: DISC 200.

ANCH 204 Women in the Ancient World Credits: 3

This course focuses on the history, representation, literature, social lives, and political roles of women in ancient civilization including Egypt, Mesopotamia, the Biblical World, Greece, and Rome. It integrates methodologies from history, art history and archaeology, literary studies, and women's studies.

ANCH 205 Self in a Multicultural Society Credits: 3

This course will focus on what it means for the individual to live in a multicultural, urban, and increasingly global society. Students will examine their own cultural identity, including values and worldviews as well as assumptions and biases regarding others' diversity. In addition, the course will focus on learning about different cultures and issues associated urbanism, globalization, cultural conflicts and social advocacy.

ANCH 206 Queer in the City/An Introduction to LGBT Studies Credits: 3

This course introduces queer theory within the context of gender studies and urban studies. We will read, discuss, and react to classic text in queer theory, lesbian and gay studies, and sexuality and space studies. There will be an emphasis on finding "otherness" within everyday spaces, places, texts, and discourses.

Prerequisites: Anchor I and DISC 100.

Co-requisites: DISC 200.

ANCH 207 The Classical Mediterranean World Credits: 3

This course examines the history, literature, and culture of Ancient Greece and Rome in the context of the Mediterranean world, from its origin until the Barbarian invasion. Students will read poetry, philosophy, history, rhetoric, and letters from primary text sources and they will study material evidence such as architecture, graffiti, and physical objects as representative survivals of these cultures.

Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

ANCH 208 Women in the Medieval World Credits: 3

This course offers an interdisciplinary approach to the study of women during the Middle ages (ca. 600-1500), focusing on the different cultures of Europe. Arranged around a series of themes, the cluster will read a variety of documentary and literary texts to investigate the ways in which women experienced agency, were depicted and imagined, and acted within the social and cultural contexts of the era.

Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

ANCH 209 World Cultures, Histories and Ideas Credits: 3

This interdisciplinary course will explore the cultures, histories, and ideas of one or more regions of the world as well as dynamics of interaction between them. Students will be exposed to a very wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.

Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

ANCH 210 American Cultures, Histories & Ideas Credits: 3

This interdisciplinary course will explore the cultures, histories, and ideas of the United States. Students will be exposed to a very wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.

Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

ANCH 211 Cities of the World Credits: 3

This course will focus on urban issues to help students develop global perspectives. Urbanization has been a global phenomenon, and more than half of the world population lives in urban areas. Students will learn past, present and future urban issues and challenges on the global scale and about how cities of the world have coped and will cope with these issues and challenges.

Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

ANCH 212 Critical Issues in Women's, Gender, and Sexuality Studies Credits: 3

This class is an interdisciplinary course that will examine critical issues in women's, gender and sexuality studies by focusing on the intersections of gender, race, class, sexuality, and social context. Through their study of these intersections, students will become more sensitive to the impact of social structures on gender and the experiences of women and men.

Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

ANCH 213 Empire Credits: 3

This is an interdisciplinary, team-taught course designed to teach students ways to think about the complexities of human cultures, past and present, helping them examine how imperialism continues to shape contemporary understandings of personal, institutional, and cultural identities (both of selves and others). The course analyzes global cultures with a focus on the economic, environmental, political and social consequences of specific imperial regimes and the ongoing impact of these regimes on particular groups that continue to live with the legacies of empire.

Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

ANCH 214 European Cultures, Histories & Ideas Credits: 3

This interdisciplinary course will explore the cultures, histories, and ideas of a particular region of Europe. Students will be exposed to a wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.

Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

ANCH 215 Crossing Boundaries: The Latina/o Immigrant Experience Credits: 3

This course examines the Latina/o immigrant experience from the immigrants' diverse origins in the Americas to the communities they shape. Students will examine how empire, war, and economic integration have pushed people to migrate and how work, family, and immigration policy have shaped patterns of migration and settlement as well as integration and exclusion.

Prerequisites: DISC 100 and Anchor I.

Co-requisites: DISC 200.

ANCH 216 Intersections of Race, Class, Gender, and Sexuality Credits: 3

This course explores the complex, interconnected dynamics of and between race, (social) class, gender and human sexuality. As an interdisciplinary course, it explores how these concepts are understood holistically and how they are constructed and positioned within US society. This class emphasizes investigations, via critical thinking, about how these different systems of inequality interact with and through each other, while also being sensitive to different theoretical and methodological frameworks from several disciplines employed to analyze those systems.

Prerequisites: Anchor I, DISC 100.

Co-Requisites: DISC 200.

ANCH 218 Introduction to Ethnic Studies Credits: 3

An interdisciplinary course that uses a comparative perspective to examine the history, social issues, and cultural productions of African Americans, Arab Americans, Asian Americans, Latina/os, and Native Americans. Students will be introduced to key concepts and methods used in the study of race in an American context.

Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

ANCH 218 - MOTR LITR 105: Multicultural Literature**ANCH 220 We Shall (All) Overcome: Civil Rights Movements in Contemporary America Credits: 3**

This course examines the fight for civil rights in America in the 20th and 21st centuries in order to emphasize the importance of culture and diversity in American society. Using interdisciplinary methods, the course addresses various local and national movements among the African American, Latino/a, LGBT, and Native American communities, as well as the women's rights movement.

Prerequisites: Anchor I, DISC 100.

Co-Requisites: DISC 200 (or satisfy DISC 200 with credit from two of ENGLISH 110, ENGLISH 225, or COMM-ST 110).

ANCH 299 Anchor II Special Topics Credits: 3

Anchor II Special Topics.

Prerequisites: Anchor I and DISC I.

ANCH 301 Environmental Sustainability Credits: 3

This course will introduce the concept of environmental sustainability and review examines how sustainability might work at the individual, neighborhood, state, nation and global scales. Students will participate in some form of community engagement on sustainability as well as reflect upon how their own practices impact the environment.

Co-requisites: DISC 300.

ANCH 302 Archaeology of Ancient Disasters Credits: 3

Remarkable human achievements are revealed by archaeological research, but the human past was frequently shaped as well by disasters of natural and human origin. Drawing on case studies that include data from the geosciences, archaeological excavations, and historical sources, this class examines how earth processes, the biosphere, and human cultural behavior were all sources of catastrophe.

Co-requisites: DISC 300.

ANCH 303 Film Adaptation Credits: 3

The class will explore the process of adapting both fiction and non-fiction literary works into motion pictures. Students will examine the original literary source, then the interim screenplay and finally the completed motion picture. This class will also explore the practical aspects of creating a film adaptation in Kansas City. Students will interact with Kansas City area film professionals and learn about the practical aspects of filming and exhibiting films in Kansas City.

Prerequisites: Anchor II, DISC 200.

Co-requisites: DISC 300.

ANCH 304 Telling Stories: History, Memory, and American Life Credits: 3

How we remember the past is shaped not only by academic historians but also by collectors, curators, librarians, archivists, artists, architects, urban planners and ordinary people. This course will invite students to participate in the shaping of history and memory through civic engagement in their community. Students will use resources available in local institutions to raise critical awareness about historical issues relevant to the present.

Prerequisites: Anchor II, DISC 200.

Co-requisites: DISC 300.

ANCH 305 The Artist in Society Credits: 3

This interdisciplinary anchor III course explores the various roles of artists in society. Using historical examples and building on current best practices, students will engage critically with the interplay between artistic pursuits, social justice, and community engagement.

Prerequisites: Anchor II, DISC 200.

ANCH 306 From Bench to Bedside: Translational Research Credits: 3

This course explores the spectrum between basic biological research and bedside clinical practice, delving into the topics “what is translational research?” and “how does a drug get to the market”. By engaging with people from the community involved at all levels of translational research, students will gain an appreciation for the civic issues behind medical research, the interdisciplinary nature of research, and the part that Kansas City institutions play in regional life and health sciences.

Prerequisites: Anchor I, Anchor II.

Co-Requisites: DISC 300.

ANCH 307 Frauds, Myths and Mysteries in Archaeology Credits: 3

Using archaeological hoaxes, myths, and mysteries from around the world – including local and regional examples - students will use science to make good judgments about information they receive in today’s world. This course will demonstrate how science approaches questions about human antiquity and will show where pseudoscience falls short.

Co-requisites: DISC 300.

ANCH 308 Ethical Issues in Computing & Engineering Credits: 3

Societal and ethical obligations of computer science, IT, and electrical/computer engineering practice. Topics include ethical obligations of professional practice, electronic privacy, intellectual property, software and system security and reliability, and whistle-blowing. This course teaches the principles of ethical analysis and how technology, law, and ethics interact in society, to help the graduate confront and deal with the ethical challenges that arise in professional practice.

Co-requisites: DISC 300.

ANCH 309 Mechanical Design Synthesis I Credits: 3

Introduction to and application of the Engineering Design Process including: product development, needs identification, benchmarking, information gathering, intellectual property, concept generation, creativity methods, concept selection, professional, ethical and legal responsibilities, and computer-aided design and rapid prototyping applications. A comprehensive design project requiring community engagement and an interdisciplinary design approach is required for each student. Recommended preparation: MEC-ENGR 130 or MEC-ENGR 131 or comparable non-engineering 3D CAD course.

Prerequisites: Anchor II.

Co-Requisites: DISC 300.

ANCH 310 Innovation and the Aging Population Credits: 3

Students in this course will explore the problems, challenges, and opportunities of an aging urban population and the role of the University in that context.

Prerequisites: ANCH I (Reasoning and Values) or equivalent, ANCH II (Culture and Diversity) or equivalent.

Co-requisites: DISC 300 (Civic and Community Engagement).

ANCH 311 Civil Engineering Capstone Design II Credits: 3

Comprehensive and realistic design project for area municipalities. Design choices and their effect upon the environment. Design constraints include constructability, minimization of environmental impact and cost-effectiveness. Managerial and professional aspects of design practice. Demonstrate understanding of engineering ethics. Includes interdisciplinary, community engagement within the context of civil engineering practice. Recommended preparation: CIV-ENGR 411.

Prerequisites: ANCH II.

Co-Requisites: DISC 300.

ANCH 314 Interdisciplinary Community Oral Health Field Experiences Credits: 3

Students will practice skills/principles learned in Anchor I-II by participating in interdisciplinary community projects and clinical activities targeting Kansas City's urban and surrounding rural environments. Students will use strategies of assessment, program planning, implementation and evaluation to improve existing, develop new, and reflect on service projects' purposes, methods, and consequences. Major emphases include team collaboration/leadership of civic action, community programming to enact measurable and meaningful change, respectful communication considering health literacy and associated disparities among patients and health care providers, to express ideas supporting wellness through improved oral health.

Prerequisites: Anchor I, Anchor II.

ANCH 315 Application to Practice I Credits: 3

This is the first of two clinical application courses designed to complement didactic content from the four-course block sequence (N481-N484). Students will integrate an increasingly complex knowledge base with an emphasis on developing effectiveness: personally, interpersonally, and in the health management of populations of clients within systems of community and professional organizations and practice settings. Student cohort groups, in collaboration with personnel from health related organizations and faculty, assess population health needs, identify outcomes and develop action plans based on real need. The practice experience learning processes and outcomes will be collective and provide solutions for the health care community.

Prerequisites: NURSE 481.

Co-requisites: NURSE 482 or NURSE 483.

ANCH 317 Science, Technology, and Society Credits: 3

This course examines how practitioners of science and innovators of technology have engaged with society throughout the past and up to the present. The central question that will frame our examination of their activities is, "What is civic engagement?" Through readings and research, we will examine how science and technology have influenced public policy and thus democracy itself. Students will take advantage of the close proximity of the Linda Hall Library to work with professionals at this unique repository of scientific and technological source material.

Prerequisites: ANCHOR I, ANCHOR II.

Co-requisites: DISC 300.

ANCH 318 From Oil Gushers to Fracking: A History of American Petroleum Credits: 3

This course asks students to consider civic engagement by studying how the history of oil production and consumption has influenced people's relationships to their communities and environments at the local, regional, and global scale. Bringing together the fields of geology and history, this interdisciplinary course explores how carbon fuels shapes life on the planet. Students will use civic engagement as a lens to examine how the use of fossil fuels has impacted societies and to learn how their actions as individuals and community members presently leave carbon footprints.

Prerequisites: ANCHOR I, ANCHOR II.

Co-requisites: DISC 300.

ANCH 319 Immersion in Urban Communities Credits: 3

This course is an experiential course where in much of the learning occurs through the student's interaction with their community and the student's thoughtful reflection on those activities. This course provides an in-depth examination into both the evolution of marginalized communities and dynamics of community building in inner cities, with special emphasis on Kansas City, Missouri. Students will be expected to explore their own role as an active citizen of their community through volunteerism and participation at civic events.

Prerequisites: ANCHOR II.

Co-requisites: DISC 300.

ANCH 320 Visual Culture and Civic Engagement Credits: 3

In this course students explore civic engagement through visual culture as both consumers and producers of information, and through both historical and contemporary examples. Areas of study include political communication and propaganda, public art, infographics and data visualization, performance, signage, monuments and mass media.

Prerequisites: Anchor II.

ANCH 399 Anchor III Special Topics Credits: 3

Students will explore the role of socially responsible citizens and leaders in a democratic society and contribute towards the betterment of the community. More specifically, this course will introduce students to concepts and strategies that will enable them to collaborate with classmates to analyze a social problem, develop a solution to that problem, and implement the solution. Group work is a significant component of this class and attendance is mandatory

ANCH H199 Anchor I Special Topics Credits: 3

Anchor I Special Topics

ANCH H214 European Cultures, Histories & Ideas Credits: 3

This interdisciplinary course will explore the cultures, histories, and ideas of a particular region of Europe. Students will be exposed to a wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.

Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

ANCH H298 Great Ideas: The Idea of Culture Credits: 3

Course will follow the evolution of ideas of culture from Classical Antiquity to the present, discussing different notions of culture across the world, whether anthropological, political or otherwise. We will begin by considering how culture is opposed to nature, and then move to the idea of comparative cultural anthropology in the Enlightenment, and finish with discussing current ideas of “cultural technologies.” Culture has also been opposed to technology (particularly in old European ideas of high culture), yet it increasingly depends on material mediation, whether through book-printing, the public institutions of newspaper and symphony orchestra, or radio, film and TV.

Co-requisites: DISC 200.

ANCH H299 Anchor II Special Topics Credits: 3

Anchor II Special Topics

ANCH H397 Public Urban Education Credits: 3

Is public urban education a “wicked problem,” an unparalleled opportunity, or a complex challenge that can be met during the twenty-first century in the United States? This interdisciplinary course will interrogate that question by surveying the history of public urban education, by considering contemporary educational issues, and by sending students into public urban schools to make their own observations and recommendations. Students will volunteer at least twelve hours during the semester at designated Kansas City schools.

Co-requisites: DISC H300.

ANCH H398 CITYLAB: ADDRESSING URBAN POLICY AND PUBLIC HEALTH THROUGH COMMUNITY ENGAGEMENT Credits: 3

This CITYLAB course engages the undergraduate student as an active participant in the life of an Urban-Serving University through the research and community partnerships developed through a collaborative, community-based process. The purpose of the course is to familiarize students with community-based participatory research (CBPR), to develop a community-based project, and to experience the ethics of civic and community engagement firsthand. The purpose of the CITYLAB approach is to: a) Identify and tackle a complex urban challenge that impacts people's everyday lives and b) Look at urban problems in new ways through a university-community partnership.

Prerequisites: Anchor 1 and Anchor 2 or equivalent.

Co-requisites: DISC 300.

ANCH H399 Anchor III Special Topics Credits: 3

Students will explore the role of socially responsible citizens and leaders in a democratic society and contribute towards the betterment of the community. More specifically, this course will introduce students to concepts and strategies that will enable them to collaborate with classmates to analyze a social problem, develop a solution to that problem, and implement the solution. Group work is a significant component of this class and attendance is mandatory

Anthropology (ANTHRO)

Courses

ANTHRO 103 Introduction To Cultural Anthropology Credits: 3

An introduction to culture and the basic concepts of anthropology. Topics include kinship, language, and cultural change.

ANTHRO 103 - MOTR ANTH 201: Cultural Anthropology

**ANTHRO 300 Special Topics in Anthropology Credits: 1-3**

Each time this course is offered, a different area of anthropology, to be announced, will be examined.

ANTHRO 302 Social Stratification Credits: 3

The distribution of power, privileges and prestige are examined in a historical and comparative perspective. The process whereby distribution systems develop, become institutionalized, and become transformed are analyzed.

ANTHRO 305 Language and Culture Credits: 3

This course is designed to familiarize students with the basic objects, aims, and methods of linguistic anthropology. Students will acquire this familiarity by studying both theoretical and ethnographic articles that focus on some of the major areas of concern within the field including: the evolution of human language, linguistic particularity and universality, the relationship of language to thought, structuralism and semiotics, trope theory, language and emotion, sociolinguistics, the development of writing systems, and language conservation and change.

ANTHRO 306 Culture, Emotion, and Identity Credits: 3

This course introduces students to some of the key theoretical perspectives and debates within the field of psychological anthropology. By drawing upon cross-cultural studies of emotion, personhood, sexuality, illness, and consciousness it seeks to understand some of the ways that culture and society influence human psychology and experience.

ANTHRO 308 The Social Life of Things Credits: 3

This course examines the connections between people and things. It explores how social relationships are created and changed through the use and exchange of objects, and how objects themselves take on particular meanings and values in these processes.

ANTHRO 322 Race And Ethnic Relations Credits: 3

The nature, origin and dynamics of ethnic and race relations in the U. S. and other societies. Specific attention will be given to the historical and contemporary contexts of prejudice, discrimination and confrontation.

ANTHRO 326 Consumer Society Credits: 3

This course explores the emergence of Consumer Society as both a sociohistorical development and as an object of social scientific inquiry. Students will explore how the study of Consumer Society has been animated by different scholarly questions, debates, and analytic approaches.

ANTHRO 328 Body and Society Credits: 3

Body and Society is an interdisciplinary and comparative approach to the study of the body as the subject and object of social processes. Interdisciplinary approaches to topics such as meaning, ritual, performance, and practice will provide a framework for classical as well as contemporary explorations of bodily representation and experiences across a variety of cultural contexts.

Prerequisites: ANTHRO 103.

ANTHRO 331 Urban Anthropology Credits: 3

A course designed to apply anthropological methods to the study of various urban environments. The approach to the subject is comparative, seeking to spell out those features of the urban setting which vary from culture to culture as well as those which are common to all.

ANTHRO 348 Latinx Immigrants, Migrants, and Refugees in the U.S. Credits: 3

This course addresses the culture of societies of U.S. citizens, immigrants, and refugees of Latin American heritage living in the U.S. The course emphasizes recent anthropological, historical, cultural, and sociological studies.

ANTHRO 358 Culture and Society Credits: 3

This course examines the "culture concept" at the heart of the contending theories of society, which is used to describe a society or way of life, a whole social order, or particular aesthetic styles and objects. The course links these various topics together in a concluding section on culture in the age of the Internet and globalization.

ANTHRO 359 Media and Society Credits: 3

This course examines the rise, development, and change of mass media in American society from broadsheets and news flyers through contemporary media formats.

ANTHRO 373 Anthropology of Religion Credits: 3

This course explores the ways anthropologists have gone about studying religion from the opening decades of the 20th century to present. The course introduces students to the diversity of human religious expression and experience through anthropological literature and to the diversity of anthropological expression especially as it has been revealed in social scientific studies of religious life. The course is designed to generate a critical dialogue about the special role that religion has played in the ongoing anthropological engagement with "other" societies and cultures over time.

ANTHRO 380 Technology and Society Credits: 3

This course will help students explore the ways technology shapes and is shaped by human interaction. Students will read interdisciplinary literature that builds theoretical and interpretive frameworks around classical and contemporary case studies. A fundamental question to be addressed throughout the course: how does the comparative study of technology help us understand what it means to be human?

ANTHRO 397 Independent Readings in Anthropology Credits: 1-3

Intensive readings in an area selected by the student with prior consultation with instructor.

Prerequisites: Twelve hours of anthropology.

ANTHRO 407 Writing Culture: The Craft of Ethnography Credits: 3

This course will explore the ways anthropologists document and write about cultural practices, processes, and beliefs. Students will become familiar with debates about representation while they consider differences in the ways ethnographic writing rhetorically conveys culture. Students will also compare ethnographic methods, theories, and styles of writing as these have changed over time.

ANTHRO 441 Globalization and Development Credits: 3

Focuses on issues of economic development, social stratification, political institutions, and political mobilization in societies where colonialism provided the context for their long-term disadvantages in the international economic order. Specific attention is paid to the intersection of the international components that define the options and limits for societal development (e.g., market shifts, international institutions and contracts, foreign policies, and migration) and the distinct social, political and cultural implications of these factors for developing societies.

Arabic (ARABIC)

Courses

ARABIC 110 Elementary Arabic I Credits: 5

Fundamentals of the language, essentials of conversation, grammar, practical vocabulary, useful phrases, and the ability to understand, read and write simple classical Arabic.

ARABIC 110 - MOTR LANG 105: Foreign Language I

**ARABIC 120 Elementary Arabic II Credits: 5**

Continuation of ARABIC 110.

ARABIC 120 - MOTR LANG 106: Foreign Language II

**ARABIC 211 Second Year Arabic I Credits: 3**

Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.

ARABIC 221 Second Year Arabic II Credits: 3

Continuation of ARABIC 211.

ARABIC 280 Special Intermediate Arabic Topics I Credits: 1-3

Instruction of Arabic on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.

ARABIC 290 Special Intermediate Arabic Topics II Credits: 1-3

Continuation of ARABIC 280. May not be repeated for credit.

Architectural Studies (ENV-DSN)

Courses

ENV-DSN 110 The Meaning Of Architecture Credits: 3

Architecture is a visual and physical expression of civilization. This course will introduce to the student an understanding and appreciation of architecture and our built environment through a broad examination of cultural and aesthetic paradigms. May not be taken for credit by students enrolled in the Architectural Studies curricula.

ENV-DSN 201 Environmental Design Studio I Credits: 4

Foundation studies introducing the principles, processes and vocabularies of environmental design. Instruction in two and three dimensional visualization of objects and spaces. Instruction in the use of instrument-aided drawing, freehand drawing and model building to represent and communicate design ideas at different scales of observation.

ENV-DSN 202 Environmental Design Studio II Credits: 4

Continuation of ENV-DSN 201.

Prerequisites: ENV-DSN 201.

ENV-DSN 203 Survey of the Design Professions Credit: 1

Overview of the design professions. Comparative study of the roles of the architect, interior architect, interior designer, landscape architect, and planner; their working methods, collaborative endeavors, and interaction with consultants and specialists. Description of career paths, educational alternatives, licensure, and professional organizations.

ENV-DSN 248 Fundamentals of Architectural Technology Credits: 3

Instruction in the fundamentals of architectural technology with emphasis on the concepts and principles necessary for developing an integrated approach to building design.

ENV-DSN 250 History of the Designed Environment I Credits: 3

This course will present an overview of the developments in architectural, urban, landscape and interior design which have had an impact on the physical environment from ancient times through the medieval up to the gothic period. A central objective of the course is to gain an understanding of why these developments occurred and how the needs and aspirations of a given time were manifested in physical form.

ENV-DSN 251 History of the Designed Environment II Credits: 3

This course will present an overview of the developments in architectural, urban, landscape and interior design which have had a consequential impact on the physical environment of the Western world from the Italian Renaissance (starting in the 15th century) up to the present day.

ENV-DSN 252 History of the Designed Environment III Credits: 3

The history of the designed environment from the mid-18th century to the present.

ENV-DSN 301 Architectural Design Studio I Credits: 5

Instruction in architectural design focusing on the application of elements and principles of form and space in design. Instruction in the use of techniques for visually representing design ideas.

Prerequisites: ENV-DSN 202.

ENV-DSN 302 Architectural Design Studio II Credits: 5

Instruction in architectural design focusing on the synthesis of basic social, functional, technical, and aesthetic factors in design. Continued instruction in techniques for visually representing ideas.

Prerequisites: ENV-DSN 301.

ENV-DSN 347 Structural Systems in Architecture I Credits: 4

Introduction to structure as a building system. Overview of contemporary structural systems and their components, including wood, timber, steel, concrete, masonry, and hybrid structures. Discussion of building code requirements for structure, general guidelines for building structures, including appropriate application, and methods for schematic estimation of structural member sizing. Basic understanding of how gravity and lateral forces are propagated through a structural frame from load to building foundation. Recommended preparation: PHYSICS 210.

Prerequisites: MATH 110 or MATH 120 or higher.

ENV-DSN 433 Building Construction Systems in Architecture I Credits: 3

In this lecture course, students develop an understanding of how materials and systems assembly reinforce and extend the intentions of the designer as well as an understanding of the strategies and techniques for integration and coordination of the building components.

Prerequisites: ENV-DSN 248.

Art (ART)

Courses

ART 105 Introduction to Photography Credits: 3

An introduction to the general practice of photography. The course centers on the basic technical and aesthetic aspects of the medium. A fully adjustable digital camera is required.

ART 112 Foundation Drawing Credits: 3

This course focuses on developing skills and techniques of observational drawing. No previous drawing experience required.

ART 114 Foundation Digital Design Credits: 3

This is an introductory course on techniques, practical applications, and aesthetic considerations for digital arts, graphic design, and computer multimedia. Students will create visual projects and learn to participate in a creative class community.

ART 114 - MOTR PERF 105GA: Studio Art-Graphic Arts**ART 121 Foundation 2D Design Credits: 3**

The principles of visual thinking with emphasis on color theory and perception of form and space.

ART 206 Photography I Credits: 3

An introduction to photography as a means of creative self-expression. The course centers on the technical and aesthetic aspects of the medium. A fully adjustable digital camera is required.

Prerequisites: ART 105 or ART 114.

ART 212 Intermediate Drawing Credits: 3

Continuation of foundation drawing. Emphasis is on gaining technical facility with various drawing mediums and expanding conceptual approaches.

Prerequisites: ART 112.

ART 218 Graphic Design I Credits: 3

A beginning level introduction to Graphic Design principles, such as layout, design, concept, basis design theory, graphic design production, and use of industry-level design software and tools.

Prerequisites: ART 112, ART 114, and ART 121.

ART 221 Painting I Credits: 3

Exploration of the visual language in paint with continued emphasis on color and design.

Prerequisites: ART 112, ART 114, and ART 121.

ART 224 Print Media I Credits: 3

Through hands-on lessons, students will learn printmaking methods, including relief and screen printing, to practice historical and contemporary approaches.

Prerequisites: ART 112, ART 114, and ART 121.

ART 230 Fibers I Credits: 3

From altering the surface of fabric to three-dimensional construction, students are taught the basics of fiber arts. This is a hands-on introduction to surface design and soft sculptural hand processes. The course will cover dyeing, shibori, screen-printing, knitting, crochet, and basic sewing. Projects are individualized by expertise, availability of supplies, and students' own objectives.

ART 230 - MOTR PERF 105M: Studio Art-Multimedia Crafts

**ART 309 Print Media II Credits: 3**

A continuation of ART 224, this course deepens students' understanding of the historical conventions of and contemporary approaches to print media. Explores concepts and techniques through material involvement.

Prerequisites: ART 224.

ART 310 Digital Video and Motion Design Credits: 3

This course provides an overview of techniques and concepts in contemporary video and animation practices for art and graphic design. Intended for studio art majors and minors, the course features lectures, demonstrations, discussions and projects.

Prerequisite: ART 114.

ART 311 Painting II Credits: 3

Painting in oil or acrylic on the intermediate level with continued emphasis on color.

Prerequisites: ART 221.

ART 312 Figure Drawing I Credits: 3

A study of the structure of the human figure with emphasis on the dynamics of figure movement.

Prerequisites: ART 212.

ART 330 Fibers II Credits: 3

Intermediate study of surface design and soft sculptural hand processes. Projects are individualized by expertise, availability of supplies, and students' own objectives.

Prerequisites: ART 230.

ART 337 Graphic Design and Typography I Credits: 3

This course is an introduction to the theory and practice of graphic design and typography. It covers page layout, type, concept development, basic design history and theory, and the use of industry-standard design software. Students will create their own designs based on lectures and demonstrations.

Prerequisites: ART 114 and ART 121.

ART 338 Graphic Design II Credits: 3

Intermediate study of graphic design theory, methodology and techniques, stressing a visual approach to problem solving in design, image making techniques, materials, and production processes standard to the industry.

Prerequisites: ART 218.

ART 340 3D Modeling and Animation Credits: 3

This course addresses the usage of virtual three-dimensional modeling and animation in the contemporary art and design fields.

ART 348 Introduction To Typography Credits: 3

This course explores the formal and applied aspects of typography as tools for design and artistic expression. Focus is on how type relates to art, layout, and design. Both hand produced typography and computer assisted design software will be incorporated.

Prerequisites: ART 112, ART 114, and ART 121.

ART 375 Interdisciplinary Studio Projects Credits: 3

This course explores and combines a variety of media to investigate and examine relevant topics across visual arts. Students develop their creative expression and professional practices through individual and collaborative projects in the classroom and community engagement.

Prerequisites: At least one of the following: ART 206, ART 212, ART 224, ART 221, ART 230, ART 310, ART 337, ART 312, ART 340.

ART 405 Practices in the Visual Arts Classroom Credits: 3

Candidates preparing to student teach will master the use of current research in art education, and apply theoretical and practical educational knowledge.

Prerequisites: Departmental consent.

ART 411 Painting III Credits: 3

Painting on the intermediate level with a focus on experimentation and developing a personal visual language and expression.

Prerequisites: ART 311.

ART 412 Figure Drawing II Credits: 3

A continuation of ART 312. Drawing on the advanced level with study of the figure in environmental context.

Prerequisites: ART 312.

ART 421 Painting IV Credits: 3

Painting on the advanced level with supervised individual selection of technique and subject matter.

Prerequisites: ART 411.

ART 439 Egghead: Student Advertising Agency Credits: 3

This course operates as a faculty-supervised advertising/design agency that works with clients to produce visual marketing materials.

Prerequisites: ART 337.

ART 488 Creative Project Development Credits: 3

In this class students evaluate their creative goals and styles, as well as artistic abilities, in relation to their professional aspirations. Specific artistic and appropriate technological skills are developed through projects.

Prerequisites: ART 114 and ART 121.

ART 492 Advertising Campaigns Credits: 3

This course focuses on branding, re-branding or development of an identity program, and combines advertising planning with creative execution.

Students will learn how to develop advertising/marketing/creative campaign plans for a specific client(s), conceptualize, design and develop all creative aspects including but not limited to logo/identity, copy, advertising, website development, app design, etc., and complete a presentation of the plans/briefs and final creative developments of the plans/briefs and creative to the client(s).

ART 493 Directed Projects in Studio Art Credits: 1-6

With permission of instructor, advanced students pursue independent research and production of a significant semester-long project. Acceptable for graduate credit with approval.

ART 495 Special Topics in Studio Art Credits: 1-6

In-depth exploration of a special topic in Studio Art. Course may be repeated if topic is unique for each repeated effort. Acceptable for graduate credit with approval.

ART 498Q Special Studies in Art: Internship Credits: 1-6

Advanced students gain invaluable practical experience in a professional setting in the field of art.

ART 499WI Senior Seminar Credits: 3

Capstone course for studio majors in all media. Course addresses contemporary theoretical and practical issues in studio art practice, and prepares students for graduation. Multiple papers, class presentations, and a portfolio preparation are required.

Art History (ART-HIST)

Courses

ART-HIST 110 Introduction to the History of Art: Pyramids to Picasso Credits: 3

This is an introduction to the history of art, with in-depth discussions of painting, sculpture, prints, and architecture. Students will be introduced to significant works from major historical periods; their cultural roles, style and composition, and the artistic processes involved in their creation. Emphasis is placed upon Western art history, with attention paid to important interactions with other world traditions, including the arts of Islam, Japan, and Africa. The comprehensive collections of The Nelson-Atkins Museum of Art contribute an important component to the course.

ART-HIST 110 - MOTR ARTS 100: Art Appreciation

**ART-HIST 201 From Cave Paintings to Cathedrals Credits: 3**

Students will learn to analyze and place in an art historical context Western art and architecture from approximately 35,000 BCE to 1250 CE. Art and architecture from all relevant cultures and religions - pagan, Christian, and Islamic - will be covered; particular emphasis will be placed on the accomplishments of Egyptian and Greek artists.

ART-HIST 201 - MOTR ARTS 101: Art History I



ART-HIST 202 From Michelangelo to Modernism Credits: 3

This course will examine major monuments of Western art and architecture during the late Middle Ages through the Modern period. Art will be examined in its cultural context stressing artistic intent, issues of gender, changing patterns of patronage, and the ascending status of the artist in society.

ART-HIST 202 - MOTR ARTS 102: Art History II

**ART-HIST 264 The Grotesque in Art and Culture Credits: 3**

This course explores the vibrant and subversive role of the grotesque in the visual arts from 1500 to the present day. The grotesque comprises an alternate image tradition that is often overlooked, or even actively suppressed. This course will explore the distinct strands of the grotesque: witty and inspired improvisation, from Michelangelo to Picasso; rowdy and subversive carnivalesque, from Bruegel to Hogarth to DeKooning; and the monstrous and uncanny, from Bosch to Goya to Kahlo.

ART-HIST 303 World Currents of Contemporary Art Credits: 3

This survey course provides an introduction to the densely interconnected trajectories of contemporary art in different parts of the world. It explores the continuities and discontinuities between modern and contemporary art in the context of intensifying transnational exchanges since the 1960s. Students will become familiar with the intersections of contemporary art with everyday life, mass media, politics and technology.

ART-HIST 315 Arts Of African and New World Cultures Credits: 3

This historical survey of ethnographic arts examines the diasporas of African art and the influences of Africans on the arts of new world cultures (in Brazil, Surinam, Cuba, Haiti, and the United States) and Meso-American art and the influence of Meso-Americans on the arts of the Native North American cultures.

ART-HIST 319 Asian Art Credits: 3

The survey will emphasize the philosophical and cultural context of the arts of India, Southeast Asia, China, Korea and Japan. The course will stress the elements that give an underlying unity to the arts as well as those qualities which distinguish the art of each country as unique.

ART-HIST 421 Made in the USA: Latinx Art and Experience Credits: 3

This course focuses on art of and by members of the U.S. Latinx community. Students in this course will engage with the politics of representation, gender, sexuality, race, class, and ethnicity in Latinx art, as well as visual and popular culture.

ART-HIST 469 Sensing, Feeling, Thinking: Contemporary Art and the Mind Credits: 3

Contemporary artists are challenging viewers to reflect on how they perceive, feel and think. This seminar provides an introduction to the mental processes underlying emotion and visual cognition and familiarizes students with contemporary art practices that reveal the dynamic correlations between body, mind and subjectivity.

ART-HIST 470 Art Museums: History and Practice Credits: 3

This course will familiarize students with the history of art museums and collecting practices. It will cover theories of museum government, curating, and object interpretation. Students will explore changes in the functions of art museums and will develop practical skills for future museum employment.

ART-HIST 476 Site-Specific Art: Within and Beyond the Museum Walls Credits: 3

At a time of increased transnational mobility, contemporary artists are conceiving artworks that catalyze an enhanced awareness of the geographical and socio-political conditions of existence and art making. This seminar examines artworks that are produced outside the studio and are inspired by specific natural environments, museum settings and public spaces.

Prerequisites: ART-HIST 303.

ART-HIST 482 Scope & Methods Of Art History Credits: 3

An exploration of the discipline of art history, including theoretical issues, guiding questions and problems, diverse approaches (historical and current), and research tools. The undergraduate capstone course for art history majors.

ART-HIST 493 Directed Studies in Art History Credits: 1-6

With permission of instructor, advanced students pursue independent research and production of a significant semester-long research project. Acceptable for graduate credit with approval.

ART-HIST 495 Special Topics in Art History Credits: 1-6

In depth exploration of a special topic in Art History. Course may be repeated for up to 18 credit hours if topic is unique for each repeated effort. Acceptable for graduate credit with approval.

ART-HIST 497Q Special Studies in Art History: Internship Credits: 1-6

Advanced art history students gain invaluable practical experience in a professional setting in the field of art.

Arts & Sciences - General (A&S)

Courses

A&S 100 Methodologies In Liberal Arts & Sciences: Theories & Application Credits: 3

This three hour course is designed for freshmen and transfer students, to be taken during their first semester of study at UMKC. The curriculum provides students an introduction to the major disciplines and methodologies of the liberal arts and sciences (the humanities, social sciences, and sciences), including sessions on choosing majors and careers. Additional emphases will include learning to use the library, writing and computational skills, oral presentations, cultural diversity, stress management, and study strategies.

A&S 115 Career Possibilities Credit: 1

This course introduces career development as a complex process of self-assessment and decision-making. Students analyze their personal interests motivation, conduct self-assessment, identify their personal values, and discuss ethical considerations as they relate to possible career choices. Visiting professionals will provide insight into career options as students explore possible career paths.

A&S 210 Cross-Cultural Interaction: Experience and Understanding Credits: 3

This course focuses on the social and cultural context of interactional patterns. U.S. and international students are paired in academic activities to encourage mutual understanding and self-awareness. They will draw on a variety of resources and learning modalities to examine aspects of their own and one another's societies, cultures, religions, and family relations. Making use of intercultural theories, students will reflect upon and explore cultural myths and stereotypes and develop a general understanding of cultural similarities and differences.

A&S 215 Career Explorations Credit: 1

The primary focus of this course is to complete an in-depth self-assessment and the generation of personalized list of career paths. Personal values will inform these possibilities, which are then explored through job shadowing, informational interviews, visiting lecturers, and independent career research. Ethical considerations of chosen career paths are explored. Students reflect on the professional experiences of others and relate them to their own personal values.

Prerequisites: A&S 115.

A&S 310 Cross-Cultural Interaction II: Social Relations Credits: 3

This course will match international students with U.S. students to prepare them to interact more effectively in multilingual and/or intercultural settings. Students learn through readings on cultural theory and cultural relations, in-class small group activities, discussions and lectures, how issues of identity, such as age, sexual orientation, and ethnicity; impact cross-cultural interaction. Papers written for this course will help students integrate theory with previous experience, leading to an understanding of oppression in cross-cultural interaction.

Prerequisites: A&S 210.

A&S 315 Career Methods Credit: 1

In this course students begin to map out the realization of their career paths. They analyze their career choices, how these choices inform their life plans, articulate the ethical and moral requirements of these careers, and understand how their personal values and strengths match these requirements. Independent career research and entry preparation along with job shadowing, informational interviews, mock interviews, and other preparations required for the selected career choices are included in this class.

Prerequisites: A&S 215.

A&S 350 Special Topics Credits: 1-4

An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

A&S 400 Special Readings/Topics Credits: 1-6

A&S 415 The Aging Body: Causes and Consequences Credits: 3

This course will explore biological changes that occur with aging. Plasticity, frailty, stress, coping, and chronic illness will be viewed through the bio-psycho-social lens. Biomedical discoveries and implications for the future of aging will be discussed.

A&S 490 Special Topics Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor. By permission only.

A&S 492 Field Practicum In Aging Credits: 3-8

Students spend 180-480 contact hours in a field placement with supervision in a community agency or organization which services or advocates for older persons, and keep a journal documenting and reflecting on the practicum activities and experiences particularly as they relate to gerontological theory and research.

Astronomy (ASTR)

Courses

ASTR 150 Astronomy: Motions of the Cosmos Credits: 3

An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the fundamental laws of gravity and motion crucial to the formation of stars and planetary systems, the growth of black holes and galaxies, and the evolution of cosmic structure.

ASTR 150 - MOTR ASTR 100: Astronomy



ASTR 155 Astronomy: Starlight and Star Stuff Credits: 3

An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the interactions between light and matter crucial to the life and death of stars, the analysis of starlight and interstellar chemistry, and the interpretation of cosmic history.

ASTR 155 - MOTR ASTR 100: Astronomy



ASTR 353 Practical Astronomy Credits: 3

A practical overview of the basic methods of observational astronomy research, including the principles of telescopes, detectors and measurement theory.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

ASTR 355 Stellar Astrophysics Credits: 3

A mathematical and conceptual overview of the observed properties of stars and the fundamental astrophysics of radiative transfer, hydrostatic equilibrium, atomic processes and thermonuclear energy production that govern their structure, atmospheres and remnants.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

ASTR 356 Galaxies Credits: 3

A mathematical and conceptual overview of the observed properties and astrophysics of galaxies highlighting star formation and evolution, the interstellar medium, the Milky Way, galaxy populations and demographics, active galactic nuclei, and galaxy formation and evolution.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

ASTR 465 Cosmology Credits: 3

This course provides a foundation in both physical and observational cosmology. Students will acquire both a mathematical and conceptual understanding of the formation and dynamics of the Universe.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

Bassoon (BASSOON)

Courses

BASSOON 100A Preparatory Applied Study Credits: 2

One hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

BASSOON 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One-half hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

BASSOON 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

BASSOON 101 Freshman Bassoon I Credits: 2-4

BASSOON 102 Freshman Bassoon II Credits: 2-4

BASSOON 201 Sophomore Bassoon I Credits: 2-4

BASSOON 202 Sophomore Bassoon II Credits: 2-4

BASSOON 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

BASSOON 301 Junior Bassoon I Credits: 2-4

BASSOON 302 Junior Bassoon II Credits: 2-4

BASSOON 401 Senior Bassoon I Credits: 2-4

BASSOON 402 Senior Bassoon II Credits: 2-4

Biology (BIOLOGY)

Courses

BIOLOGY 102 Biology and Living Credits: 3

Introduction to structural organization and functional processes of living systems. For non-biology majors only. Does not count toward biology degree.

BIOLOGY 102 - MOTR BIOL 100L: Essentials in Biology with Lab



BIOLOGY 102L Biology and Living Laboratory Credit: 1

Exploration of basic biological concepts through laboratory activities requiring data collection and analysis. For non-majors only; does not count toward Biology degree requirements.

Corequisite: BIOLOGY 102 (or prerequisite).

BIOLOGY 102L - MOTR BIOL 100L: Essentials in Biology with Lab



BIOLOGY 108 General Biology I Credits: 3

Fundamental studies in biology emphasizing the unity and diversity of life. Topics include the basic chemistry of biological processes, cell types and organelles, energy harvesting and energy producing pathways, cell and life cycles, genetics, DNA structure, genes, transcription, translation, natural selection, population genetics, speciation, and phylogenetic analysis.

BIOLOGY 108 - MOTR BIOL 150: Biology



BIOLOGY 108L General Biology I Laboratory Credit: 1

Basic laboratory studies in Biology emphasizing the unity and diversity of life. Structure, function, heredity, development, ecology and evolution will be explored.

Co-requisites: BIOLOGY 108.

BIOLOGY 108L - MOTR BIOL 150L: Biology with Lab



BIOLOGY 109 General Biology II Credits: 3

Fundamental studies in biology emphasizing the unity and diversity of life. Topics include prokaryotes, fungi, invertebrate-vertebrate zoology and phylogeny, human evolution, plant structure and development, animal development and physiology, ecology (population and ecosystems).

BIOLOGY 109L General Biology II Laboratory Credit: 1

Basic laboratory studies in Biology emphasizing the unity and diversity of life. Structure, function, heredity, development, regulation of growth and evolution will be explored.

Co-requisites: BIOLOGY 109.

BIOLOGY 112 Microbiology and Living Credits: 3

Lectures and demonstrations concerning the cell structure, genetics and physiology of microorganisms and the role microorganisms play in the world around man with an emphasis on medical and clinical aspects of the significance of various groups of bacteria, viruses fungi and other microorganisms. This course is intended for nursing and other allied health students and for non-biology majors interested in life sciences and does not count toward Biology major requirements.

BIOLOGY 115 First Year Seminar Credit: 1

This course is designed to provide students with the skills necessary to achieve success at the university. The curriculum includes time management, study, reading, note-taking and test-taking strategies, health and wellness, and student support services. Additional emphasis will include career exploration, including professionalism, writing a resume, and developing plan of study for degree completion.

BIOLOGY 122 Human Genetics Credits: 3

This is a non-majors biology course in human genetics designed for those with little classroom training in the sciences. The focus will be on the nature of human genetic variation and how variation shapes and affects our lives. This includes the structure and function of genes and how genes create traits. The discussion will focus on how genes function in human development through sex determination. The inclusion of human genomic sequencing technology and personal genomics will emphasize several issues related to knowledge and privacy.

BIOLOGY 122 - MOTR LIFS 100G: Essentials in Human Biology - Gene

**BIOLOGY 125L Guided Research in Biology Credits: 2**

An introduction to basic principles and methods of scientific research in the biological sciences. Students will engage in experimental design, use of bioinformatic tools, molecular graphics, and specialized tools related to different biology disciplines to characterize a specific gene or cell system under the guidance of a faculty member. Recommended preparation: BIOLOGY 108.

BIOLOGY 199L Methods in Biological Research Credits: 2

The course will provide an introduction to laboratory safety and common research methods used in modern biological research. It is intended for students that wish to gain research experience in the School or a career in research.

Prerequisites: BIOLOGY 108 or BIOLOGY 109.

BIOLOGY 201 Preparing for Careers in Biology Credit: 1

This course will help students prepare for their post-undergraduate future. Topics will include communication, skills identification and marketing, how to find employment or internship opportunities, a review of the application process for graduate education and the role of undergraduate research.

Prerequisites: Sophomore standing (or higher).

BIOLOGY 202 Cell Biology Credits: 3

Basic concepts of cellular and subcellular structure and function, including supramolecular and organelle structure and organization, bioenergetics, cell growth and cellular communication.

Prerequisites: BIOLOGY 108 (or MOTRBIOL 150L), BIOLOGY 109 (or MOTRBIOL 150LZ), and CHEM 212R, (or CHEM 212R, LS-ANATO 219, LS-ANATO 219L, and LS-MCRB 121).

BIOLOGY 206 Genetics Credits: 3

A modern approach integrating molecular and organismal studies of the general genetics of lower and higher organisms. Chromosomal structure and function, gene transmission, heredity, plasticity and population genetics will be discussed.

Prerequisites: BIOLOGY 108 (or MOTRBIOL 150L), BIOLOGY 109 (or MOTRBIOL 150LZ or MOTRBIOL 100LZ), and CHEM 212R or LS-ANATO 219.

BIOLOGY 217L Human Physiology Laboratory Credit: 1

This course is designed to illustrate the important principles of human physiology in a laboratory setting. Using an organ systems approach, the course will feature microscopic work, audio-visual presentations, and student experiments when possible. For non-majors only; does not count toward biology degree requirements.

Prerequisites: LS-PHYS 117.

BIOLOGY 218 Introductory Anatomy Credits: 3

Description and discussion of the cells, organs, organ systems and basic tissues of vertebrates with special emphasis on their interrelationships in functional anatomy.

Prerequisites: BIOLOGY 102 or BIOLOGY 108 or BIOLOGY 109.

Co-requisites: BIOLOGY 218L.

BIOLOGY 218L Introductory Anatomy Laboratory Credits: 2

Laboratory investigation of cells, tissues, and organs with special emphasis on their interrelationship in vertebrates.

Co-requisites: BIOLOGY 218.

BIOLOGY 250 Careers in Biological & Chemical Sciences I Credit: 1

This course will introduce students to a variety of careers in the biological and chemical sciences. Guest speakers will share information including day-to-day activities on the job, educational requirements, career advancement, and necessary interests and abilities.

BIOLOGY 251 Careers in Biological & Chemical Sciences II Credit: 1

This course will help students prepare for their post-undergraduate future. Topics will include communication, skills identification and marketing, how to find employment or internship opportunities, a review of the application process for graduate education and the role of undergraduate research.

BIOLOGY 285 Special Topics Credits: 1-3

In depth exploration of a topic in biology

BIOLOGY 302 General Ecology Credits: 3

Introduction to the study of populations, communities, and ecosystems by examining the interrelationships between living organisms and their environments. The role of natural selection and evolution will also be considered. Prerequisites: BIOLOGY 108 (MOTR 150L), BIOLOGY 109 (MOTR 150LZ), or BIOLOGY 102 (MOTR 100L).

Prerequisites:**BIOLOGY 302L Ecology Laboratory Credits: 2**

This course provides laboratory and field experience in ecology. The course will cover topics including statistical analysis and data presentation, terrestrial and aquatic sampling, experimental design and scientific writing.

Co-requisites: BIOLOGY 302.**BIOLOGY 303 Invertebrate Zoology Credits: 3**

Taxonomy, evolutionary relationships, behavior, reproduction, morphology and ecology of the invertebrates. Recommended preparation: BIOLOGY 108, BIOLOGY 109, and CHEM 212R.

BIOLOGY 304 Biostatistics 1 Credits: 3

Introduction to the concepts of probability, statistical reasoning, and experimental design in the biological sciences. The course emphasizes the application of inferential statistics to biological experiments including the use of relevant statistical computer packages.

Prerequisites: MATH 110 or STAT 235; or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.**BIOLOGY 305 Marine and Freshwater Biology Credits: 3**

Introduction to the study of marine ecology, deep-sea biology, oceanic nekton, inter-tidal ecology, estuaries, mangroves and salt marshes, as well as ecology of rivers, lakes, streams, wetlands and human impact on aquatic habitats.

Prerequisites: BIOLOGY 108, BIOLOGY 109, CHEM 211.**BIOLOGY 308 Vertebrate Zoology Credits: 3**

Taxonomy, evolutionary relationships, behavior, reproduction, morphology and ecology of the vertebrates.

Prerequisites: BIOLOGY 108, BIOLOGY 109, CHEM 212R.**BIOLOGY 312WL Laboratory in Developmental Biology, Genetics and Cell Biology Credits: 3**

Experimental studies of genetics and development in selected eukaryotic model organisms with an emphasis on the molecular and cellular mechanism of inheritance.

Prerequisites: BIOLOGY 441.**Co-requisites:** BIOLOGY 409.**BIOLOGY 313 Microbiology Credits: 3**

Fundamental and applied aspects of microbial structure, metabolism, genetics and diversity. Experimental approaches to studying the microbial world will be emphasized.

Prerequisites: BIOLOGY 202, BIOLOGY 206.**Co-requisites:** BIOLOGY 441.**BIOLOGY 313L Laboratory in Microbiology Credits: 3**

General microbiological procedures plus advanced work in the areas of microbial physiology and genetics, pathogenic microbiology, virology, applied microbiology and biotechnology.

Co-requisites: BIOLOGY 313, BIOLOGY 441.**BIOLOGY 313WL Laboratory in Microbiology Credits: 3**

General microbiological procedures plus advanced work in the areas of microbial physiology and genetics, pathogenic microbiology, virology, applied microbiology, and biotechnology.

Co-requisites: BIOLOGY 313, BIOLOGY 441.**BIOLOGY 314 Entomology Credits: 3**

Anatomy, physiology and identification of insects with emphasis on their environmental adaptations.

Prerequisites: BIOLOGY 109 (or LS-ANATO 219).**BIOLOGY 316 Principles of Physiology Credits: 3**

Physiological functions and processes of animals at the organ and organ systems levels, including concepts of integrated and homeostatic mechanisms. The relationship between organ function and underlying cellular mechanisms in vertebrates will be emphasized.

Prerequisites: BIOLOGY 202, BIOLOGY 206, BIOLOGY 441.

BIOLOGY 319 Global Health: New and Emerging Infectious Diseases Credits: 3

This course will discuss infectious diseases that are newly identified, or increasing in prevalence throughout the world. Several aspects of each disease will be discussed, including transmission, symptoms, treatment, prevention, and diagnosis. The course is meant for students interested in a health-related career (medicine, dental, pharmacy, public health), but other students with a basic biology background are welcome.

Prerequisites: BIOLOGY 108, BIOLOGY 109 (or BIOLOGY 102).

BIOLOGY 322 General Parasitology Credits: 3

Parasitic protists, worms and arthropods and the disease states they may induce, will be examined in relationship to human, animal and plants hosts.

Prerequisites: BIOLOGY 109 (or LS-ANATO 219).

BIOLOGY 326 Biological Conservation Credits: 3

Applications of ecology and genetics to the conservation of communities and individual species, including discussion of the Endangered Species Act, extinction processes, and the effects of habitat fragmentation.

Prerequisites: BIOLOGY 108, BIOLOGY 109.

BIOLOGY 327 Biogeography and Biodiversity Credits: 2

Evolutionary and climatological effects on the geographic distribution of organisms, including areas of endemism as well as preservation of biodiversity.

Prerequisites: BIOLOGY 108, BIOLOGY 109.

BIOLOGY 328 Histology Credits: 2

Animal tissues and their specialization in the organism, with major emphasis on higher organisms.

Prerequisites: BIOLOGY 202.

BIOLOGY 328L Laboratory in Histology and Cellular Ultrastructure Credits: 3

Examination of structure/function relationships at the subcellular, cellular and organ levels. Both plants and animals will be examined with emphasis on vertebrates.

Co-requisites: BIOLOGY 328.

BIOLOGY 328WL Laboratory in Histology and Cellular Ultrastructure Credits: 3

Examination of structure/function relationships at the subcellular, cellular and organ levels. Both plants and animals will be examined with emphasis on vertebrates.

Co-requisites: BIOLOGY 328.

BIOLOGY 329 Endocrinology Credits: 3

Study of the physiological functions and controls in human and related mammalian systems, with emphasis on endocrine-directed processes that underlie normal and abnormal metabolic and clinical conditions. The course will be presented in traditional lecture format, and focus on the molecular, chemical, membrane and cellular basis of metabolic homeostatic processes in cells, cytoplasmic compartments and primary organ systems.

Prerequisites: BIOLOGY 202.

Co-requisites: BIOLOGY 316.

BIOLOGY 331 Reproductive Biology Credits: 2

Comprehensive overview of current concepts and knowledge regarding male and female reproductive processes, from gametogenesis through early placentation. Includes structural, developmental, physiological and pathophysiological aspects of reproduction.

BIOLOGY 338L Comparative Vertebrate Anatomy Laboratory Credits: 3

This class explores anatomical similarities and differences that exist between the major vertebrate groups and relates aspects of anatomy to evolutionary history and function. Students will gain hands-on experience of anatomy through dissection and examination of several model vertebrates. Recommended preparation: BIOLOGY 108, BIOLOGY 109, and BIOLOGY 109L.

BIOLOGY 346 Plant Biology Credits: 3

An integrative study of growth, development, and reproduction of plants, including structure and function of plant tissues and organs, as well as a survey of the recent advances in genetic engineering, plant defense mechanisms, and medical botany and the usefulness of plants to humans.

Co-requisites: BIOLOGY 202.

BIOLOGY 350 Assisting Undergraduate Learning in Biology Credits: 1-3

This course addresses current issues and pedagogy of teaching biology and providing instructional support for designated undergraduate courses in the School of Biological Sciences. Students meet weekly with the course instructor and assist in the classroom, studio, or laboratory.

Prerequisites: BIOLOGY 108, BIOLOGY 109, BIOLOGY 202, BIOLOGY 206.

BIOLOGY 360L Laboratory in Biochemistry and Molecular Biology Credits: 3

Laboratory studies in biochemistry and molecular biology with an emphasis on modern techniques and quantitative relationships.

Prerequisites: BIOLOGY 441.

BIOLOGY 360WL Laboratory in Biochemistry and Molecular Biology Credits: 3

Laboratory studies in biochemistry and molecular Biology with an emphasis on modern techniques and quantitative relationships.

Prerequisites: BIOLOGY 441.

BIOLOGY 385 Special Topics Credits: 3

In depth exploration of a topic in biology. Repeatable toward the major only when the topic changes.

BIOLOGY 397 Experience Based Education Credits: 1-3

This course will allow students to earn credit for experience gained through educational experiences such as service, shadowing, leadership, employment and study abroad.

BIOLOGY 405 Introduction to Evolution Credits: 3

Discussion of the biological processes that produce organic diversity through phyletic change, including variation, mutation, adaptation, population genetics, natural selection, genetic drift, gene flow, and macroevolution.

Prerequisites: BIOLOGY 206.

BIOLOGY 409 Developmental Biology Credits: 3

Principles of development and differentiation of structure during embryology in animals. Molecular, cellular and organismal level concepts and mechanisms will be considered.

Prerequisites: BIOLOGY 202, BIOLOGY 206.

BIOLOGY 415 Pathophysiology Credits: 3

Pathophysiology will focus on the physiological basis of cellular and tissue function, and the consequences of dysregulated metabolic/cellular expression on essential homeostatic processes in cells, cytoplasmic compartments and primary organ systems. Recommended preparation: BIOLOGY 316.

BIOLOGY 430 Molecular Biology and Genetic Engineering Credits: 3

Molecular aspects of gene structure and function, including macromolecular synthesis, gene regulation, genetic transfer and biotechnology will be discussed in prokaryotes and eukaryotes.

Prerequisites: BIOLOGY 202, BIOLOGY 206.

Co-requisites: BIOLOGY 441.

BIOLOGY 435 Immunology Credits: 3

A study of the cellular and humoral aspects of the immune response, with emphasis upon the mechanisms involved and the relationship of this response to disease processes.

Prerequisites: BIOLOGY 441 and LS-MCRB 121 (or BIOLOGY 313).

BIOLOGY 441 Biochemistry Credits: 3

One semester course covering the properties of organic compounds important to biological systems. Structures, characterization and reactions of common compounds and their relationship to the building blocks of biological systems will be discussed.

Prerequisites: BIOLOGY 202, CHEM 320 (or CHEM 321).

BIOLOGY 442 Neurobiology Credits: 3

Neurobiology will consist of the presentation of theory and data concerning cellular and molecular fundamentals of the nervous system, synaptic mechanisms, sensory-motor systems, and higher-order functions of the nervous system.

Prerequisites: BIOLOGY 316, BIOLOGY 441.

BIOLOGY 445 Evolutionary Ecology Credits: 3

This class explores the scientific concepts and methods underpinning modern understanding of evolutionary ecology as it relates to organisms. Students will gain hands-on experience using techniques that are central to quantitative and qualitative studies of organismal evolutionary ecology.

Prerequisites: BIOLOGY 302, BIOLOGY 405.

BIOLOGY 452 Bioinformatics Credits: 3

Study of the acquisition, storage, retrieval, analysis, modeling, and distribution of information in biomolecular databases. Recent developments in genomics and proteomics and how these databases are used in modern biological research will be emphasized.

Co-requisites: BIOLOGY 441.

BIOLOGY 485 Special Topics Credits: 1-3

In depth exploration of a topic in biology. Repeatable toward the major only when the topic changes.

BIOLOGY 498WI Critical Analysis of Biological Issues Credits: 3

Reading and analysis of scientific literature, including original papers, on a topic of broad biological interest. Critical discussion of experimental methods and results. Writing of scientific reviews and a term paper. Taking the MFAT test is a requirement of this course, and the course satisfies the general education synthesis requirement.

Co-requisites: BIOLOGY 441.

Black Studies (BLKS)

Courses

BLKS 1EA Black Studies Elective Credits: 99
Transfer credit

BLKS 1EB Black Studies Elective Credits: 99
Transfer credit

BLKS 1EC Black Studies Elective Credits: 99
Transfer credit

BLKS 1ED Black Studies Elective Credits: 99
Transfer credit

BLKS 1EE Black Studies Elective Credits: 99
Transfer credit

BLKS 1EF Black Studies Elective Credits: 99
Transfer credit

BLKS 1EG Black Studies Elective Credits: 99
Transfer credit

BLKS 1EH Black Studies Elective Credits: 99
Transfer credit

BLKS 1EI Black Studies Elective Credits: 99
Transfer credit

BLKS 1EJ Black Studies Elective Credits: 99
Transfer credit

BLKS 201 Global Systems and the Origins of Black American Culture and Institutions Credits: 3

This multidisciplinary course examines global capitalism, European contact with Africa, the development of the African Diaspora, and the origins of Black American institutions and culture. Applying a Black studies perspective, the course explores such themes as cultural and gendered oppression, institutional destabilization, economic dislocation, liberation struggles, and creative impulses and aesthetics and the social and historical experiences of Black people in the Americas.

BLKS 302 Conceptual and Theoretical Foundations in African American Studies Credits: 3

This course will provide an in-depth examination of the theoretical and conceptual parameters of African American studies. We will study the evolution of the field, key scholars and creative intellectuals, and seminal categories of thought.

Prerequisites: BLKS 201.

BLKS 315 Arts of African and New World Cultures Credits: 3

This historical survey of ethnographic arts examines the diasporas of African art and the influences of Africans on the arts of new world cultures (in Brazil, Surinam, Cuba, Haiti, and the United States) and Meso-American art and the influence of Meso-Americans on the arts of the Native North American cultures.

BLKS 320 Critical Health Issues in Black Communities Credits: 3

Beginning with the African context and the opposition of chattel slavery, this course examines social, cultural and historical factors affecting the health status of African Americans to the present era.

Prerequisites: BLKS 201.

BLKS 321 The Black Family and Male-Female Relationships Credits: 3

This course examines the historical evolution and current status of the African American family in the United States. Utilizing the African experience as its starting point, the course conveys a broad understanding of the role of the family in human survival and progress. We investigate such issues as male-female relationships, sexual practices, dating, marriage, single parenting, the education and socialization of children, and so on. We also examine an array of social and economic issues, including institutionalized inequality, that affect the viability of today's African American family.

Prerequisites: BLKS 201.

BLKS 325 African American Business Development Credits: 3

This course investigates the various challenges to African American business development and entrepreneurship in the United States. We study the lives of successful, pioneering African American businesswomen and men in order to assess how they managed to transcend the barriers of racism and structured inequality. We explore why certain kinds of enterprises emerged among African Americans and why others did not, and we scrutinize the traditional business problems for African Americans of capitalization, distribution, market penetration, and wealth creation.

Prerequisites: BLKS 201.

BLKS 330 African American Migrations in Literature Credits: 3

The course examines representations of two different trajectories of migration in African American literature: African American journeys from the south to northern and mid-western regions of America, and concurrent migrations of Caribbean people to the US in the early twentieth century.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 331 African American Literature I Credits: 3

This course provides a survey of African American literature from its beginnings to the Harlem Renaissance of the 1920s and 1930s. Areas of interest will include abolitionist literature (especially slave narratives), turn-of-the-century literature and the Harlem Renaissance. This course will examine any or all of the following literary forms: fiction, poetry, drama, autobiography and essay. It will view African American literature in its historical and cultural contexts.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 332WI African American Novel Credits: 3

This course will examine the African American novel in the 19th and 20th centuries; the emphasis will be on the period from the 1920s to the present. The novels will be examined in their historical and cultural contexts.

BLKS 333 African American Literature II Credits: 3

A survey of African American literature from the end of the Harlem Renaissance to the present, covering a range of authors, texts, and contexts.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 334 From Field Shout to Hip Hop: African American Poetic Traditions Credits: 3

This course examines the development of African American poetry from its early forms as field shouts, ballads, and blues to present forms including spoken word and hip hop. Includes authors such as Phillis Wheatley, Paul Lawrence Dunbar, Langston Hughes, Gwendolyn Brooks, Tupac Shakur, and Jessica Care Moore.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 335 Stages Toward Freedom: African American Dramatic Traditions Credits: 3

This course explores the development of African American dramatic traditions from the eighteenth century through the Harlem Renaissance Black Arts Movement, to current postmodernism. Includes authors such as W.W. Brown, Zora N. Hurston, Amiri Baraka, Sonia Sanchez, August Wilson, Suzan-Lori Parks.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 337 The Civil Rights Movement in African American Literature Credits: 3

This course examines how African American literature shaped ideas about freedom, rights, citizenship and race in the civil rights movement. It draws on a variety of literary forms-speeches, essays, autobiographies, fiction, drama, poetry and film-to explore the movement's impact on communities and cultures as well as its various debates and competing visions.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 338 Women's Literature in Africa and the African Diaspora Credits: 3

This course is a comparative examination of the variety of literary works produced by women of African descent in the United States, the Caribbean and Africa. Students will explore the cross-cultural implications of texts in light of the intersections of gender, race and class.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 349 Symbols and Codes from the Diaspora: African American Visual Arts Survey Credits: 3

This course provides an examination of the theoretical and conceptual parameters of African and African American visual aesthetics. Through the writings of key scholars in African American aesthetics, students will study symbolic forms and patterns from various African cultures throughout the Diaspora and investigate formal image categories within African Diaspora visual culture.

Prerequisite: BLKS 201.

BLKS 351 African American Art History: Part I, 1600-1960 Credits: 3

This course presents a comprehensive survey of African American visual art from 1600 through 1960. Critical issues in early American art history highlight the expressions of African American artists and scholars. Students will investigate artistic expressions of this period.

Prerequisite: BLKS 201.

BLKS 3EA UL Black Studies Elective Credits: 99

Transfer credit

BLKS 3EB UL Black Studies Elective Credits: 99

Transfer credit

BLKS 3EC UL Black Studies Elective Credits: 99

Transfer credit

BLKS 3ED UL Black Studies Elective Credits: 99

Transfer credit

BLKS 3EE UL Black Studies Elective Credits: 99
Transfer credit

BLKS 3EF UL Black Studies Elective Credits: 99
Transfer credit

BLKS 3EG UL Black Studies Elective Credits: 99
Transfer credit

BLKS 3EH UL Black Studies Elective Credits: 99
Transfer credit

BLKS 3EI UL Black Studies Elective Credits: 99
Transfer credit

BLKS 3EJ UL Black Studies Elective Credits: 99
Transfer credit

BLKS 403WI Writing for African American Studies Credits: 3

This course instructs students in how to produce advanced knowledge in the field of African American studies. It provides training in the construction of quality research papers for graduate, scholarly, and professional work and exposes students to a wide array of scholarly journals, databases, and authoritative resources in African American studies. Each time the courses taught, students will develop their research around a specific topic defined by the instructor.

BLKS 404 Research Seminar Credits: 3

This course introduces the logic, theory, and techniques of empirical research and applies them to African American Studies. It exposes students to a variety of research approaches in order to examine their utility for producing knowledge within the field.

Prerequisite: BLKS 201.

BLKS 410 African American Art History: Part II, 1960-Present Day Credits: 3

This course presents a survey of African American visual arts from 1960 to the present. Visual arts include new media and processes for Diaspora artists. Students investigate contemporary artists within African Diaspora visual culture.

Prerequisite: BLKS 201.

BLKS 458 Slave Narratives: Race, Gender, and Writing Freedom Credits: 3

A truly American, home grown genre and powerful force in the development of American political and social realities, the African American Slave Narrative is an established, recognized influence in the development of African American and American literary history. In this course you will have the opportunity to explore the historical trajectory of the Slave Narrative, looking at early formulations of its structure, purpose and conventions—especially in terms of gender and race, subsequent various permutations, and the eventual development of the Neo-slave Narrative as its resurrection, which adds to the complexity and theoretical impact of the literary autobiography from black perspectives.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 480 Special Topics/Seminar Credits: 1-3

In-depth exploration of special topics in Black Studies. When available, topics will be announced prior to registration. Course may be repeated for up to six credit hours.

Prerequisite: BLKS 201.

BLKS 490 Directed Study/Research Credits: 1-3

Individual research and learning projects supervised by a faculty member. Course may be repeated for up to six credit hours.

Prerequisite: BLKS 201.

BLKS 496 Internship in Black Studies Credits: 1-3

This Internship course presents an opportunity for undergraduate students to integrate their academic studies in the discipline of Black Studies with community service and engagement. As a student intern within a business or professional organization in the urban Metropolitan community, the student gains critical information about the processes and procedures of this business entity in relation to African American community members.

Prerequisite: Departmental consent.

BLKS 5XX Grad Black Studies Elective Credits: 99
Transfer credit

BLKS 5XY Grad Black Studies Elective Credits: 99
Transfer credit

Cello (CELLO)

Courses

CELLO 100A Preparatory Applied Study Credits: 2

One hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

CELLO 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

CELLO 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

CELLO 101 Freshman Cello I Credits: 2-4

CELLO 102 Freshman Cello II Credits: 2-4

CELLO 201 Sophomore Cello I Credits: 2-4

CELLO 202 Sophomore Cello II Credits: 2-4

CELLO 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

CELLO 301 Junior Cello I Credits: 2-4

CELLO 302 Junior Cello II Credits: 2-4

CELLO 401 Senior Cello I Credits: 2-4

CELLO 402 Senior Cello II Credits: 2-4

Chemistry (CHEM)

Courses

CHEM 111 Physical Basis Of Chemistry Credits: 3

An introductory course in the basic principles applicable to chemistry for students who intend to take but are not adequately prepared to take CHEM 211. The emphasis is on quantitative relationships and problem solving. NOTE: This course does not count towards a Chemistry major or minor.

Prerequisites: Departmental consent.

CHEM 115 Elements Of Chemistry I Credits: 4

A one-term course in general chemistry with special emphasis on organic chemistry and biochemistry. A terminal course that does not meet requirements as a prerequisite for any higher level chemistry course. NOTE: This course does not count towards a Chemistry major or minor.

Co-requisites: CHEM 115L.

CHEM 115L Elements Of Chemistry, Laboratory I Credit: 1

A one-term course in general chemistry with special emphasis on organic chemistry and biochemistry. A terminal course that does not meet requirements as a prerequisite for any higher level chemistry course. NOTE: This course does not count towards a Chemistry major or minor.

Co-requisites: CHEM 115.

CHEM 160 Chemistry, Society, And The Environment Credits: 3

This course is intended to offer a survey of chemical and scientific concepts surrounding current issues. The emphasis will be on the application of fundamental chemical knowledge to allow a full understanding of these issues in the context of currently known facts and theories. Through classroom discussion and application of the scientific method, the ramifications of the issues will be examined. Topics will include pollution, the importance of the chemical industry, its responsibilities to society, and other items of current scientific and environmental interest. NOTE: This course does not count towards a Chemistry major or minor.

CHEM 160L Laboratory For Chemistry, Society, And The Environment Credit: 1

This course is offered in support of CHEM 160. It will consist of field activities, experiments, and demonstrations to reinforce the concepts and ideas presented in that course. NOTE: This course does not count towards a Chemistry major or minor.

CHEM 206 Human Nutrition Credits: 3

Introduction to nutrition for health and wellness and the use of chemical energy in the breakdown and synthesis of biomolecules. Nutrition as it applies to a variety of life situations from infancy to older adults. Learning encompasses elements of anatomy and physiology related to nutrition and health. NOTE: This course does not count towards a Chemistry major or minor.

CHEM 211 General Chemistry I Credits: 4

Stoichiometry, gas laws, thermochemistry, atomic structure, molecular shapes and bonding theories. Recommended preparation: working knowledge of College Algebra.

Co-requisites: CHEM 211L.

CHEM 211 - MOTR CHEM 150L: Chemistry I with Lab

**CHEM 211L Experimental General Chemistry I Credit: 1**

Introduction to the laboratory techniques used in studying the chemical properties of substances. Some quantitative techniques are included.

Co-requisites: CHEM 211.

CHEM 211L - MOTR CHEM 150L: Chemistry I with Lab

**CHEM 212LR Experimental General Chemistry II Credit: 1**

Introduction to analysis and synthesis. Descriptive chemistry of the more common elements.

Prerequisites: CHEM 211 and CHEM 211L (each with a grade of C- or better).

Co-requisites: CHEM 212R.

CHEM 212R General Chemistry II Credits: 4

Liquids and solids, solutions, equilibrium, kinetics, electrochemistry and thermodynamics. Introductory course to all advanced work in chemistry.

Prerequisites: CHEM 211 and CHEM 211L (each with a grade of C- or better).

Co-requisites: CHEM 212LR.

CHEM 311 Laboratory Safety And Health I Credit: 1

An introduction to laboratory safety and health. Topics to be discussed include good laboratory practice; laboratory hazards; safe chemical handling, storage and disposal; first aid; protective equipment; and federal regulations.

Prerequisites: CHEM 320 or CHEM 321.

CHEM 320 Elementary Organic Chemistry Credits: 4

This one-semester course covers all fundamental principles of organic chemistry, including modern bonding theory, analytical techniques, physical properties, and chemical reactions. This course is designed to satisfy requirements for students in the UMKC Six-Year Medical Program or certain Biology B.A. majors. This course is not recommended for pre-medical, pre-dental, pre-pharmacy or other pre-health students.

Prerequisites: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

Co-requisites: CHEM 320L.

CHEM 320L Experimental Organic Chemistry Credit: 1

Elementary organic chemistry experiments to teach basic laboratory operations.

Prerequisites: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

Co-requisites: CHEM 320.

CHEM 321 Organic Chemistry I Credits: 3

The two terms (CHEM 321, CHEM 322R) constitute an integrated unit in which the chemistry of aliphatic, aromatic, and some heterocyclic compounds are studied. The study begins with simple monofunctional compounds and ends with polyfunctional natural products.

Prerequisites: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

Co-requisites: CHEM 321L.

CHEM 321L Organic Chemistry Laboratory I Credit: 1

Introduces the student to basic techniques and procedures in isolation, purification, and characterization of organic compounds and simple reactions used in the organic chemistry laboratory. The student will also be trained in the proper way to write a scientific laboratory report.

Prerequisites: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

Co-requisites: CHEM 321.

CHEM 322L Organic Chemistry Laboratory II Credit: 1

An extension of CHEM 321L. This course builds from the basic techniques, procedures, and writing to more advanced organic operations.

Prerequisites: CHEM 321 and CHEM 321L (or equivalents; each with a C- or better).

Co-requisites: CHEM 322R.

CHEM 322R Organic Chemistry II Credits: 3

Continuation of CHEM 321.

Prerequisites: CHEM 321 and CHEM 321L (each with a grade of C- or better).

Co-requisites: CHEM 322L.

CHEM 330 Elementary Physical Chemistry Credits: 3

An introductory course in the principles of physical chemistry for students who have not had calculus.

Prerequisites: CHEM 320 or CHEM 322R (each with a grade of C- or better).

CHEM 341 Analytical Chemistry I: Quantitative Analysis Credits: 4

Principles of gravimetric, volumetric, electrolytic, and other methods of analysis.

Prerequisites: CHEM 212R and 212LR (each with a C- or better).

CHEM 341WI Analytical Chemistry I: Quantitative Analysis Credits: 4

Principles of gravimetric, volumetric, electrolytic, and other methods of analysis.

Prerequisites: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

CHEM 345R Instrumental Analysis Credits: 3

An introductory course on the use of instruments for chemical analysis with particular reference to applications of interest to medical technologists and other students in the sciences. Emphasis will be placed on optical, electrochemical and separation methods.

Prerequisites: CHEM 341WI (with a grade of C- or better).

CHEM 367 Bioorganic Chemistry Credits: 3

An examination into the current topics at the interface between chemistry and biology. Emphasis will be on the current literature and will include such topics as nucleic acid chemistry, protein chemistry, and carbohydrate chemistry.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 382 Inorganic And Organic Synthesis Credits: 2

A number of inorganic, organic, and organometallic compounds will be prepared using a variety of synthetic techniques.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 387 Environmental Chemistry I Credits: 3

A survey of how chemical principles can be applied to the environment. Included will be topics in aquatic chemistry, atmospheric chemistry and chemistry of the geosphere and soil.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 390 Special Topics In Chemistry Credits: 1-3

This course will focus on an area of chemistry of contemporary significance. The amount of credit is to be determined by arrangement with the department. May be repeated for credit when the topic varies but no more than three hours of credit may be applied to major course requirements. Recommended preparation: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

Prerequisites: Departmental consent.

CHEM 392 Chemistry Internship/Practical Training Credits: 1-3

Practical work in chemistry in an industrial, academic or other professional setting. Prior to the start of work, the department must approve the internship/practical training.

Prerequisites: CHEM 212R and CHEM 212LR (each with a C- or better).

CHEM 395 Directed Readings In Chemistry Credits: 1-3

Intensive readings in areas of joint interest to the enrolled student and the cooperating faculty member. Readings may not duplicate or substitute for current course offerings. Recommended preparation: CHEM 322R and CHEM 322L (each with a grade of C- or better).

Prerequisites: Departmental consent.

CHEM 399 Intro To Research Credits: 1-3

Special problems to introduce undergraduate chemistry majors to research methods. A comprehensive written report is required and a copy of the report is to be retained in the chemistry office. Recommended preparation: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

Prerequisites: Departmental consent.

CHEM 410 Chemical Literature Credit: 1

A systematic introduction to the efficient use of the chemical literature. Topics will include both classical search methods and computer search methods.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 431 Physical Chemistry I Credits: 3

A first course in physical chemistry having a calculus base. This course emphasizes thermodynamics with an introduction to the basic principles of quantum mechanics.

Prerequisites: MATH 250; and PHYSICS 220 or PHYSICS 250.

CHEM 432 Physical Chemistry II Credits: 3

A second course in physical chemistry having a calculus base. This course emphasizes the quantum mechanics description of atoms and molecules, molecular spectroscopy, statistical mechanics, and kinetics.

Prerequisites: CHEM 431 (with a grade of C- or better).

Co-requisites: CHEM 437WI.

CHEM 434 Molecular Spectroscopy Credits: 3

A theoretical introduction to molecular spectroscopy and its relation to structure. Electronic, vibrational and rotational spectra of chemical systems will be discussed.

Prerequisites: CHEM 432 (with a grade of C- or better).

CHEM 437WI Experimental Physical Chemistry I Credits: 3

Experimental methods in physical chemistry. One hour lecture and six hours laboratory each week. Satisfies writing intensive requirements for the B.A. or B.S. degree.

Co-requisites: CHEM 432.

CHEM 442R Analytical Chemistry II: Instrumental Analysis Credits: 3

The experimental and theoretical aspects of optical and electrochemical, chromatographic and other physicochemical methods of analysis.

Prerequisites: CHEM 341WI (with a grade of C- or better).

CHEM 445 Introduction To Principles Of Forensic Investigation Credits: 2

A survey of the physicochemical forensic techniques employed in the detection, examination, processing, preservation and court presentation of evidence.

Prerequisites: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

CHEM 451R Inorganic Chemistry Credits: 3

Modern concepts and theories of inorganic chemistry.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 471 Introduction To Polymer Chemistry Credits: 3

Survey of organic and inorganic monomers and polymers; the occurrence, synthesis, structures and properties of natural and synthetic polymers; discussion of general properties of plastics, elastomers, fibers, resins, and plasticizers.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 480 Computer Applications To Chemical Problems Credits: 3

The course will survey the field of computational chemistry, concentrating on methods, programs and general utility to the research chemist. The student will learn the principles of the theory underlying the methods and will use selected software to carry out chemical calculations.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 490 Special Topics In Chemistry Credits: 1-3

This course will focus on an area of chemistry of contemporary significance. The amount of credit is to be determined by arrangement with the department. May be repeated for credit when the topic varies but no more than three hours of credit may be applied to major course requirements.

Prerequisites: CHEM 431 (with a grade of C- or better).

CHEM 495 Directed Readings In Chemistry Credits: 1-3

Intensive readings in areas of joint interest to the enrolled student and the cooperating faculty member. Readings may not duplicate or substitute for current course offerings. Recommended preparation: CHEM 431 with a grade of C- or better.

Prerequisites: Departmental consent.

CHEM 499 Senior Research Credits: 1-9

The student is given an original research problem and will be held responsible for all previous experience in working toward its solution. A well-written, comprehensive, and well documented research report is required, and a copy of the report is to be retained in the Chemistry department. Recommended preparation: CHEM 431 with a grade of C- or better.

Prerequisites: Departmental consent.

CHEM H206 Human Nutrition Credits: 3

Introduction to nutrition for health and wellness and the use of chemical energy in the breakdown and synthesis of biomolecules. Nutrition as it applies to a variety of life situations from infancy to older adults. Learning encompasses elements of anatomy and physiology related to nutrition and health.

CHEM H212R Honors: General Chemistry II Credits: 4

Liquids and solids, solutions, equilibrium, kinetics, electrochemistry and thermodynamics. Introductory course to all advanced work in chemistry.

CHEM H321 Honors: Organic Chemistry I Credits: 3

The two terms (CHEM H321, CHEM H322R) constitute an integrated unit in which the chemistry of aliphatic, aromatic, and some heterocyclic compounds are studied. The study begins with simple monofunctional compounds and ends with polyfunctional natural products.

CHEM H321L Organic Chemistry Laboratory I - Honors Credit: 1

Introduces the student to basic techniques and procedures in isolation, purification, and characterization of organic compounds and simple reactions used in the organic chemistry laboratory. The student will also be trained in the proper way to write a scientific laboratory report.

CHEM H322L Organic Chemistry Laboratory II Credit: 1

An extension of CHEM 321L. This course builds from the basic techniques, procedures, and writing to more advanced organic operations.

Prerequisites: CHEM 321 and CHEM 321L (each with a C- or better).

Co-requisites: CHEM 322R.

CHEM H322LR Organic Chemistry Laboratory II-Honors Credits: 2

A more intense version of CHEM 322L. See course description for CHEM 322L.

Prerequisite: CHEM 321L.

CHEM H322R Honors: Organic Chemistry II Credits: 3**CHEM H399 Introduction To Research Credits: 1-3**

Special problems to introduce undergraduate chemistry majors to research methods. A comprehensive written report is required and a copy of the report is to be retained in the chemistry office. May be taken only after consultation with a member of the chemistry staff.

Prerequisites: CHEM 212R.

CHEM H499 Senior Research - Honors Credits: 1-9

Course frequency subject to enrollments, staffing and financial exigency.

Chinese (CHINESE)

Courses

CHINESE 110 Elementary Chinese I Credits: 5

Introduction to the sound system of modern Chinese, aural comprehension, oral expression, basic structural patterns, writing systems.

CHINESE 110 - MOTR LANG 105: Foreign Language I

**CHINESE 120 Elementary Chinese II Credits: 5**

Dialogue practice and conversation, reading of simple stories and essays, comparative study of Chinese and English grammar and syntax.

Prerequisites: CHINESE 110.

CHINESE 120 - MOTR LANG 106: Foreign Language II**CHINESE 211 Second Year Chinese I Credits: 3**

Introductory readings of colloquial Chinese, literature, conversation, simple composition, and comparison between written and spoken styles in modern Chinese.

Prerequisites: CHINESE 120 or equivalent.

CHINESE 221 Second Year Chinese II Credits: 3

Readings of modern Chinese with emphasis on expository writings, analysis of syntactic structure, composition and translation.

Prerequisite: CHINESE 211 or equivalent.

Civil Engineering (CIV-ENGR)

Courses

CIV-ENGR 111 First Year Cornerstone Credit: 1

An exploration of the diverse emphasis specific career opportunities of Civil Engineers, with a goal of providing students the needed fundamental skills, knowledge and resources for identifying the most appropriate career path(s) consistent with the student's interests, skills, and objectives.

CIV-ENGR 113 Engineering Measurements Credit: 1

This course provides a fundamental introduction to the elements of surveying. Basics including terminology, coordinate systems, equipment, legal descriptions, and calculations will be taught in the classroom. Field laboratory sessions will introduce the students to setting up basic equipment, running a level loop, and laying out a site based on plan designs.

CIV-ENGR 190 Special Topics Credits: 1-3

Selected introductory topics in the area of computing. May be repeated for credit when topic varies.

CIV-ENGR 275 Engineering Statics Credits: 3

Fundamentals of statics; static equilibrium; internal forces; introduction to elements of mechanics of elastic materials, and properties of areas.

Prerequisites: PHYSICS 240.

CIV-ENGR 276 Strength Of Materials Credits: 3

The course introduces and emphasizes the concepts and analysis methods for stress and strain, torsion, bending and shear stresses in beams, combined stresses, and deflection theory using a calculus based methodology. Introduction to buckling and energy methods may be included.

Prerequisites: CIV-ENGR 275.

CIV-ENGR 318 GIS for Engineers Credits: 3

This course covers the fundamental concepts and methods for use of GIS software used to solve engineering applications and problems. The course uses module based practical learning to apply and integrate foundational knowledge, develop the skills required to model various types of imagery data, incorporate this data into projects for management and design, and provide the skills necessary for students to depict ideas and design graphically. A personal computer capable of running the software is required for the course. Non-engineering majors by instructor permission only.

Prerequisites: SCE Student.

CIV-ENGR 319 Engineering Computation and Statistics Credits: 3

A review of descriptive statistics, statistical distribution functions and application to engineering problems. Introduction to hypothesis testing, analysis of variance, correlation/regression and design of factorial experiments.

Prerequisites: MATH 268 or MATH 220.

CIV-ENGR 321 Structural Analysis Credits: 4

This course introduces the basic analysis and computer methods that are required to analyze basic structural elements and simple structures. Topics covered in this course include design loads, analysis of statically determinate beams, frames and trusses, shear and moment diagrams, influence diagrams, beam deflections, statically indeterminate structures (beams and frames), displacement methods, introduction to energy and matrix methods.

Prerequisites: CIV-ENGR 276.

CIV-ENGR 323 Structural Steel Design Credits: 3

Basic principles of structural steel design. Design of beams, axially loaded members, columns, and bolted and welded connections.

Prerequisites: CIV-ENGR 321.

CIV-ENGR 335 Soil Mechanics Credits: 3

Detailed study of physical and mechanical properties of soil governing its behavior as an engineering material. Machine Shop Safety is required prior to taking this class.

Prerequisites: CIV-ENGR 276, CHEM 211, CHEM 211L.

CIV-ENGR 342 Water and Wastewater Treatment Processes Credits: 3

Methods for determining and characterizing water quality, effects of pollution on streams and lakes, and an introduction to engineering systems for the distribution, collection and treatment of water and wastewater.

Prerequisites: CIV-ENGR 351 or MEC-ENGR 351; and CHEM 211 and CHEM 211L.

CIV-ENGR 351 Fluid Mechanics Credits: 3

Concepts of the statics and dynamics of fluids, with emphasis on principles of continuity, momentum and energy. Boundary layers, dimensional analysis and drag are covered briefly. Thorough treatment of pipe flow.

Prerequisites: CIV-ENGR 275.

Co-requisites: MATH 345 or MEC-ENGR 272.

CIV-ENGR 357 Engineering Hydraulics Credits: 3

Analysis and design of closed conduit systems for water supply; fundamentals of open channel flow; principles of pumping and hydropower generation; transients and control of surge pressures in pipelines.

Prerequisites: CIV-ENGR 351 or MEC-ENGR 351.

CIV-ENGR 378WI Civil Engineering Materials Credits: 3

This course provides students with a working knowledge of the design and performance of Asphaltic Concrete (AC) and Portland Cement Concrete (PCC) mixtures through understanding the properties and requirements of the component materials and their effects on subsequent performance. An understanding of the design, production process, construction, durability, and operations and maintenance will be provided. A significant portion of this course requires hands-on laboratory testing and analysis. Roadway and highway pavements will provide a primary context within which these concrete systems will be studied. Machine Shop Safety is required prior to taking this course.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 276.

CIV-ENGR 390 Engineering Coop/Internship Credits: 0

Students may participate in structured Engineering Coop/Internship under the supervision of employer. They must carry out significant professional responsibilities and whatever additional assignments are determined by the employer.

Prerequisites: Departmental consent.

CIV-ENGR 400 Problems Credits: 1-4

Directed investigation of civil engineering problems.

Prerequisites: Departmental consent.

CIV-ENGR 401ES Special Topics in Civil Engineering Credits: 3

Hydraulic conductivity measurements. Seepage analysis and control. Earth dam and embankment design. Computer applications.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 401HA Hydrologic Analysis and Design Credits: 3

Practical implementation of hydrologic and hydraulic system design in accordance with published design criteria and using methods and numerical modeling accepted by local, state, and national government agencies.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 401SD Special Topics In Civil Engineering Credits: 3

Study of soil behavior under cyclic and dynamic loading conditions. Foundation design for vibratory loadings. Introductory earthquake engineering including dynamic ground response for determination of dynamic soil properties. Evaluation of soil liquefaction potential during earthquakes by both laboratory and in situ field methods. Design consideration for embankments and earth retaining structures under seismic loading conditions. Construction blasting and vibration effects on underground systems.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 401SV Topics in Civil Engineering Credit: 1

This course provides a fundamental introduction to the elements of surveying. Basics including terminology, coordinate systems, equipment, legal descriptions, and calculations will be taught in the classroom. Field laboratory sessions will introduce the students to setting up basic equipment, running a level loop, and laying out a site based on plan designs.

CIV-ENGR 404 Project Management of Integrated Design and Construction Credits: 3

Provide a body of knowledge that includes the principles, knowledge areas, skills, and tools applicable to successful project management for the performance of integrated design and construction of capital projects, specifically as applicable to the post-award period. This post-award period is the time from the formal project award by the owner through project design and construction, testing, commissioning, close-out and completion of the project warranties.

CIV-ENGR 405 Capital Project Delivery Methods Credits: 3

Provide a body of knowledge that acquaints students with the capital project delivery methods in both public and private business sectors of the U.S design – construction industry. Project delivery means how a capital project comprising both design and construction is planned, procured, contracted and implemented by an owner to achieve desired objectives. Delivery methods discussed in this class include traditional design – bid- build, design – build, design-build plus added services such as operations and maintenance, CM @ Risk and other approaches. Roles and responsibilities of owners, owner consultants, and design and construction firms are presented and discussed.

CIV-ENGR 406 Construction Project Risk Management Credits: 3

Risk management skill sets are necessary tools for the successful project manager. Project Management Institute's (PMI) 6 steps of project risk management constitute the basis of the content, which includes an expanded knowledge of risk identification, qualitative and quantitative risk analysis, risk control, contract risks, and risk transfer options. Business and project risks such as client selection, project planning, and project execution, will be considered as well as legacy risks that remain with the business and participants beyond the project completion. Different risk management strategies will be discussed, including risk avoidance, risk mitigation, and risk transfer.

Prerequisites: Senior Standing.

CIV-ENGR 409 Fundamentals of Engineering Review Credit: 1

This course consists of a series of lectures and is intended as a review class for all the subjects included in the Fundamentals of Engineering exam. Classes specifically focus on the review of equations and formulas included in the reference handbook published by NCEES.

CIV-ENGR 411 Civil Engineering Systems Design I Credits: 2

Comprehensive and realistic design project using the systems approach. Design choices and their effect upon the environment. Design constraints include constructability, minimization of environmental impact and cost-effectiveness. Managerial and professional aspects of design practice.

Prerequisites: CIV-ENGR 467 and CIV-ENGR 497.

Co-requisites: CIV-ENGR 422WI and CIV-ENGR 432.

CIV-ENGR 412 Civil Engineering Systems Design II Credits: 3

Continuation of CIV-ENGR 411.

Prerequisites: CIV-ENGR 411 and departmental consent.

CIV-ENGR 415 Engineering Leadership and Ethics Credits: 3

Analysis of leadership, including 360-degree assessment of students' leadership. Discussion of leadership cases and application to engineering careers. Frequent analysis of engineering ethics cases using the NSPE Code.

CIV-ENGR 417 Advanced Structural Analysis Credits: 3

The course is designed as a continued study of structural analysis methods with emphases on indeterminate structures (trusses, beam/columns, and frames), advanced analysis methods, and introduction to nonlinear structural effects including geometric nonlinearity and inelasticity. Advanced structural analysis methods including force, displacement, matrix, energy, and limit analysis methods will be introduced and practiced. Both computer based and hands-on analysis will be involved.

Prerequisites: CIV-ENGR 321

CIV-ENGR 421 Matrix Methods of Structural Analysis Credits: 3

The basic components of this class are matrix theories and applied computer analysis methods using a computer-based structural analysis software. These include: (1) study of matrix formulation of direct stiffness method, virtual work principle and formulation of displacement-based frame elements, theories and significance of geometric and material nonlinearity; (2) Sap2000-based analysis of 2D/3D trusses and 2D/3D frames considering different loading and material/geometric nonlinearity.

Prerequisites: CIV-ENGR 321.

CIV-ENGR 422WI Reinforced Concrete Design Credits: 3

Basic principles of reinforced concrete design. Design of beams for flexure and shear; design of short and slender columns. Bond stress development. Footing design.

Prerequisites: CIV-ENGR 321.

CIV-ENGR 423 Advanced Structural Steel Design Credits: 3

Design of steel structures and bridges. Topics include composite beams, plate girder design, and moment resistant connections.

Prerequisites: CIV-ENGR 323.

CIV-ENGR 425 Prestressed Concrete Credits: 3

Design and behavior of prestressed concrete structures; material and system of pretensioned and post tensioned systems; prestress losses; flexure, shear, bond, deflections and partial prestress in determinate structures; indeterminate beams-introduction.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 427 Advanced Reinforced Concrete Design Credits: 3

Advanced topics in the design of footings, retaining walls, two-way floor slabs, torsion and continuous structures, shear friction, strut and tie design, precast design.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 429 Design of Structures for Blast and Fire Credits: 3

General overview of Blast Design; risk assessment and design criteria; simplifies Blast Effects Analysis; ground shock, material response; antiterrorism design considerations; weapons effects and mitigation; internal explosions; progressive collapse analysis; and introduction to Fire Design.

CIV-ENGR 431 Fundamentals of Geomaterial Characterization Credits: 3

A geomaterial is any construction material comprised primarily of soil. This course overviews state-of-the-art instrumental techniques for analysis of the physio-chemical properties of soils, aggregates, hydraulic concrete, and asphaltic concrete. Evaluation techniques will be applied to determining beneficial reuse opportunities for industrial by-product materials from the Kansas City region.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

CIV-ENGR 432 Foundation Engineering Credits: 3

Design of basic foundation structures, footings, retaining walls, pile foundations, dams.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 436 Advanced Soil Mechanics Credits: 3

Theoretical soil mechanics as applied to solution of specific engineering problems.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 442 Hydraulic Structures Credits: 3

A review of the history and hydraulic design procedures for a variety of hydraulic structures including spillways, water measurement structures, canal structures and energy dissipation structures.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 446 Limnology Credits: 3

Physical, biological and chemical issues important in surface fresh waters. Includes carbonate chemistry, algal assay and thermocline analysis.

Prerequisites: CHEM 211, MATH 345.

CIV-ENGR 447 Contracts and Law for Engineers Credits: 3

This course covers a broad range of substantive legal topics giving the student a grounding in the legal implications of certain situations that they may encounter during their careers. The course includes coverage of basic contract law, environmental regulations and compliance, construction law, antitrust law, intellectual property law, civil procedure, employment law, business entities (corporate law) product liability and criminal law and procedure. The objective of the course is to provide students with a fundamental understanding of the wide range of federal and state laws governing behavior in our complicated and rule of law driven society.

Prerequisites: Senior standing.

CIV-ENGR 449 Environmental Compliance, Auditing and Permitting Credits: 3

This course provides a high level overview of the most important statutes that have been enacted to protect the environment. The course covers regulation of hazardous waste, the Clean Air and Clean Water Acts, the Resource Conservation and Recovery Act, the All Appropriate Inquiry Rule and the law addressing sites contaminated with hazardous substances and the technology options employed to remediate those sites. In addition, the course provides coverage of environmental audits and emergency planning for extremely hazardous substances, the regulation of underground storage tanks, safe drinking water and the National Environmental Policy Act among other statutes.

Prerequisites: Senior standing.

CIV-ENGR 452 Hydraulics of Open Channels Credits: 3

This is a first course in the fundamentals of open channel (free surface) water flow. Over ninety-nine percent of all the water that is moved on the planet's surface is by free surface flow. Study of free surface flow is essential to the study of storm water drainage systems, flood control, water and wastewater treatment and the study of the form and processes of river evolution. This class provides the fundamental physical principles of free surface flow as a prelude to a significant number of other topics that pertain to engineering and geomorphic analysis.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 453 Hydraulics and Variability of Rivers Credits: 3

Introduction to the concepts of alluvial channel behavior, evolution and change due to natural and man-induced modifications to streams and watersheds. Numerous case studies of river behavior are studied from the perspective of hydraulics, geomorphology and sediment transport.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 454 River Stability and Scour Credits: 3

Bridge hydraulics, stream stability, scour at bridge piers and abutments, hydraulic modeling of floods, countermeasures for protection of bridge infrastructure.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 456 Urban Hydrology Credits: 3

Analysis of urban drainage systems in accordance with published municipal criteria. This course is an in-depth course for senior undergraduate students interested in the hydrological sciences and for graduate students specializing in water resources. Specifically this course will focus on the engineering procedures and techniques specified by municipalities to design and maintain efficient, safe, storm drainage systems. This course also focuses on the unique issues associated with estimating and designing for rainfall/runoff in urban metropolitan areas, including channel and reservoir routing of floods through stream channels, retention structures, culverts, and storm sewers.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 463 Construction Law Credits: 3

This course introduces professional, ethical, and legal concepts of the professional practice of engineering, and the role of the consulting engineer, specifically in the A/E/C industry during the design, procurement, and construction processes. A conceptual framework is developed for understanding the industry standard agreements (AIA, EJCDC, ConCensus) and the various participants roles and duties in project execution. The engineer's "professional standard of care" is examined and revisited throughout the semester, specifically what it means to be a "Professional Engineer". Emphasis is placed on project and contract management and the applicable law.

CIV-ENGR 466 Green Building and Sustainable Infrastructure Credits: 3

This class will discuss various green rating systems for buildings and infrastructure. Upon completion of this course students will be prepared for the LEED Green Associate Exam. The course will also discuss infrastructure project sustainability from a life cycle perspective. A semester project will involve stormwater management using "green" techniques and methods to mitigate the urban heat island. Upon completion of the course, students will better understand what sustainability means and how it applies in the context of our built environment and have a good idea of how technology will impact our sustainable future.

Prerequisites: Junior standing.

CIV-ENGR 467 Introduction to Construction Management Credits: 3

Structure of the construction industry; construction drawings and specifications; estimating and bidding; construction contracts, bonds and insurance; planning and scheduling of construction operations; project management; computer techniques.

CIV-ENGR 468 Construction Planning and Scheduling Credits: 3

This course is intended to provide an in-depth examination of the construction planning and scheduling process, as it relates to civil engineering projects. Topics will include planning and scheduling of construction operations by the critical path method, Network diagramming, scheduling computations, and time-cost trade-offs. Manpower and equipment leveling. Computer and noncomputer techniques.

Prerequisites: CIV-ENGR 467.

CIV-ENGR 469 Construction Methods and Equipment Credits: 3

Introduction to methods used to plan, construct, and manage heavy civil projects. Topics will include development, project control, equipment productivity, earthmoving fundamentals, formwork design, and other issues in heavy civil projects.

Prerequisite: CIV-ENGR 467.

CIV-ENGR 470 Corrosion Engineering Credits: 3

This course will cover the physical interaction of metallic materials with their environments, called corrosion. Corrosion is an electrochemical process and the thermodynamics and kinetics of corrosion processes will be discussed. Students will be expected to identify different forms of corrosion and be able to select appropriate materials for their working environment to prevent corrosion related problems. Second half of the class will concentrate on corrosion of metals in concrete and prevention methods.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 471 Advanced Portland Cement Concrete Credits: 3

This course will cover topics such as cement chemistry, concrete proportioning, aggregates, mineral and chemical admixtures, fresh and hardened properties of concrete, and durability of concrete. Design and proportioning of concrete mixtures for desired fresh and hardened properties will be emphasized. Specialty concrete types such as high strength/high performance concrete, lightweight concrete, pervious concrete, high volume fly ash concrete, and fiber reinforced concrete will also be covered.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 473 Durability of Civil Engineering Materials Credits: 3

This course will explore the identification, causes of, and remediation of material-related durability deterioration in civil engineering projects. The primary focus will be on reinforced concrete, plain concrete, and soil for a variety of applications. Course content will be delivered primarily through laboratory activities and handouts. Lab activities will use advanced analysis techniques and help the students identify and measure deterioration mechanisms. Various non-destructive evaluation techniques will be discussed. Students have hands on experiences with samples production, data collection, and data analysis for all of the lab activities.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

CIV-ENGR 475 Seismic Design of Structures Credits: 3

Introduction to basic analysis and design principles for the seismic design of buildings (concrete, steel, wood). General seismic principles, codes and loads, static lateral force procedure, dynamic lateral force procedure, topics in rigidities of buildings.

Prerequisites: CIV-ENGR 323 (or CIV-ENGR 422WI), and MEC-ENGR 285.

CIV-ENGR 484 Pavement Materials Design, Maintenance, and Rehabilitation Credits: 3

Traffic loading and volume, stress and deflection, characterization of pavement materials, design of flexible and rigid pavements, design of overlays, evaluation of pavement performance, maintenance techniques, and rehabilitation options.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

CIV-ENGR 487 Applied Finite Element Analysis Credits: 3

The study of advanced simulation techniques for the solution to engineering problems. The use of Finite Element Method toward solving mechanical, structural, vibration and potential flow problems will be explored. Current commercial simulation tools will be used extensively.

Prerequisites: MEC-ENGR 272 and MEC-ENGR 130.

CIV-ENGR 491 Internship Credits: 6

For International students who must register to cover off-campus employment which is approved as related to their degree by their departmental advisor and ISAO.

Prerequisites: Departmental consent.

CIV-ENGR 497 Engineering Hydrology Credits: 3

Fundamental concepts of hydrology in engineering; computation principles of runoff from rainfall; measurement of hydrologic quantities; quantitative and statistical estimation of design stream-flow magnitude and frequency; principles of unsteady routing of hydrographs.

Prerequisites: CIV-ENGR 319; and CIV-ENGR 351 or MEC-ENGR 351.

Clarinet (CLARINET)

Courses

CLARINET 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

CLARINET 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

CLARINET 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

CLARINET 101 Freshman Clarinet I Credits: 2-4

CLARINET 102 Freshman Clarinet II Credits: 2-4

CLARINET 201 Sophomore Clarinet I Credits: 2-4

CLARINET 202 Sophomore Clarinet II Credits: 2-4

CLARINET 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

CLARINET 301 Junior Clarinet I Credits: 2-4

CLARINET 302 Junior Clarinet II Credits: 2-4

CLARINET 401 Senior Clarinet I Credits: 2-4

CLARINET 402 Senior Clarinet II Credits: 2-4

Classics (CLASSICS)

Courses

CLASSICS 119 Myth and Literature Credits: 3

A study of classical myth including readings from Homer to Ovid, analysis of selected myths in later literature, art, and music, and a study of contemporary definitions and approaches to myth.

CLASSICS 119 - MOTR LITR 201: Mythology



CLASSICS 131 Seven Wonders and Beyond: Archaeological Wonders of the Ancient World Credits: 3

This is a survey of the archaeology of Egypt and the Near East, the Aegean cultures of Crete and Mycenae, and the world of classical Greece and Italy. In addition, archaeological wonders of Europe and the New World will be discussed.

CLASSICS 210 Foundations Of Ancient World Literature I Credits: 3

This course studies ancient world literature such as The Descent of Inanna, Egyptian love poetry, Hebrew Scriptures, the epics of Homer and Virgil, the Analects of Confucius, and the wisdom of Laozi. The course also considers ancient creation epics such as the cosmic battle between Marduk and Tiamat, the Metamorphosis of Ovid, and the great Indian epic The Ramayana.

CLASSICS 210 - MOTR LITR 200A: World Lit-Beg w/Antiquity End 1660



CLASSICS 300 Special Topics Credits: 1-3

A course about a selected field, genre or individual figure from the ancient world that is not part of the program's regular offerings. May be repeated for credit.

CLASSICS 300CY Ancient World in Cinema Credits: 3

This course will explore the tradition of depicting the ancient Mediterranean world in film from the early silent era to the present. Topics to be covered include the ways that filmmakers respond to literary and historical sources from the ancient world, interact with the artistic tradition of films about the ancient world, the relation of these films to other works by the same creative personnel (directors, actors, writers, producers, etc.), and the political and cultural contexts in which the films were released.

CLASSICS 300CZ Archaeology Of Ancient Disasters Credits: 3

Remarkable human achievements are revealed by archaeological research, but the human past was frequently shaped as well by disasters of natural and human origin. Drawing on case studies that include data from the geosciences, archaeological excavations, and historical sources, this class examines how earth processes, the biosphere, and human cultural behavior were all sources of catastrophe. The study of ancient disasters not only gives us a wider understanding of human history, it may offer lessons for coping with future catastrophes.

CLASSICS 340AWI Classical Literature In Translation Credits: 3

This course will focus on representative authors and works from the Greek and Roman Classical periods, such as Homer, Sophocles, Euripides, Aeschylus, Aristophanes, Plato, the Greek Lyrics, Virgil, Horace, Juvenal, Ovid and Plautus.

CLASSICS 369 Introduction to Prehistoric and Classical Archaeology Credits: 3

An introduction to archaeological research methods that traces human origins and cultural development from the earliest fossil evidence to the threshold of written history and civilization. This class emphasizes the evolutionary and cultural developments that allowed our ancestors to colonize the continents and develop lifeways involving hunting and gathering, farming and urbanism.

CLASSICS 384 Frauds, Myths and Mysteries in Archaeology Credits: 3

Using archaeological hoaxes, myths, and mysteries from around the world – including local and regional examples - students will use science to make good judgments about information they receive in today's world. This course will demonstrate how science approaches questions about human antiquity and will show where pseudoscience falls short. (Lecture/on-line asynchronous).

CLASSICS 391WI Ancient Greek and Roman Medicine Credits: 3

This course explores the practice of medicine in the Ancient Greek and Roman Worlds from 800 BCE until 300 CE. Students will read primary sources in English and will also be introduced to Greek and Latin grammar and medical vocabulary so that they can understand and study essential terms from the history of medicine in their original language.

CLASSICS 471 Ancient Greece Credits: 3

This course begins with a survey of the pre-classical Minoan and Mycenaean civilizations and then describes the rise of prominent Greek city-states (with particular emphasis upon the evolution of Sparta and the political, social and cultural contributions of Athens). The course concludes with the rise of Macedon and Alexander's conquests and significance.

CLASSICS 499 Senior Tutorial Credits: 3

A three-hour comprehensive reading and research tutorial leading to the writing of a senior paper. It consist of tutorial sessions and independent research leading to a major paper using original source materials.

Communication Studies (COMM-ST)

Courses

COMM-ST 110 Fundamentals Of Effective Speaking And Listening Credits: 3

An introduction to the dimensions of effective platform speaking with special emphasis on developing critical listening skills. Lecture, performance, and discussion.

COMM-ST 110 - MOTR COMM 110: Fundamentals of Public Speaking

**COMM-ST 140 Principles Of Communication Credits: 3**

An interdisciplinary introduction to the study of contemporary communication studies including a consideration of intrapersonal, interpersonal and public communication.

COMM-ST 140 - MOTR COMM 100: Introduction to Communications

**COMM-ST 203 Introduction to Journalism Credits: 3**

Introduction to the styles and techniques of reporting and writing basic news through assignments in straight news, features and in-depth stories. Exposure to the history and principles of American journalism. Practical application in writing news and news feature articles.

COMM-ST 212 Argumentation And Debate Credits: 3

A study of the nature of logical discourse generated through the preparation and presentation of oral argument within the framework of the debate format. Lecture, performance and discussion.

COMM-ST 212 - MOTR COMM 220: Argumentation Debate

**COMM-ST 220 Introduction: Modern Communications Media Credits: 3**

A comprehensive survey of the content, structure and control of the communications media in American society--newspaper, motion pictures, radio and television; providing an informational frame of reference that will enable discerning students to formulate and apply useful critical concepts in evaluating America's media environment.

COMM-ST 220 - MOTR SBSC 100: Intro to Mass Communications

**COMM-ST 230 Introduction to Film Studies Credits: 3**

The course is an introduction to the study of film as an art form and industrial practice. Students will study the basics of film analysis, cinematic formal elements, genre, narrative structure and the cultural functions of cinema.

COMM-ST 230 - MOTR FILM 100: Introduction to Film Studies

**COMM-ST 250 Introduction to Film and Video Production Credits: 3**

This course teaches the fundamentals of media making using digital video. Students will learn techniques in pre-production planning, camera, sound, and editing by creating a series of short videos. Students will also learn to think analytically about film, and to apply insights about what gives an image impact and meaning to their own work. It is the foundation and prerequisite for all film and video production courses in the department.

COMM-ST 260P Introduction To Web Communications Credits: 4

This four credit hour web-based multimedia course will examine the process of critically evaluating information delivered on the Internet. It is designed as an introduction for adults and students who use Internet information for work and/or school. The process of critically evaluating Internet information will be described in four modules: traditional evaluation techniques; searching and researching strategies; Internet evaluation techniques and Internet evaluation resources.

COMM-ST 270 Introduction to Digital and Mobile Journalism Credits: 3

An introduction to the practices and principles of creating video, combined with audio, graphics, and data information, by newsgathering in the field, for both current and emerging mobile, non-broadcast, digital and social media platforms.

COMM-ST 277 Interpersonal Communication Credits: 3

An intensive analysis of the dimensions of intrapersonal and interpersonal communication designed to identify the philosophies and methods which underwrite effective human communication.

COMM-ST 277 - MOTR COMM 120: Interpersonal Communication

**COMM-ST 300CY Ancient World in Cinema Credits: 3**

This course will explore the tradition of depicting the ancient Mediterranean world in film from the early silent era to the present. Topics to be covered include the ways that filmmakers respond to literary and historical sources from the ancient world, interact with the artistic tradition of films about the ancient world, the relation of these films to other works by the same creative personnel (directors, actors, writers, producers, etc.), and the political and cultural contexts in which the films were released.

COMM-ST 308 Introduction To The Study Of Human Communication Credits: 3

This course serves to introduce students to the basic theories, perspectives and methodologies used (historically and currently) in the study of speech, interpersonal and mass communication.

COMM-ST 311 Radio & Television Performance Credits: 3

A study of the specialized radio and television performing and operating situations and techniques simulated and evaluated in studio sessions. Lecture, discussion and performance.

COMM-ST 312 Advanced Public Speaking Credits: 3

Advanced study of rhetorical theory and its application to the presentation and criticism of public discourse.

Prerequisites: COMM-ST 110.

COMM-ST 317 Persuasion Credits: 3

A study of the rhetorical, psychological and ethical principles of influencing and controlling individuals and groups, and of the methods of adapting to various attitudes and audiences through the preparation, presentation and evaluation of persuasive speeches. Lecture, discussion and performance.

Prerequisites: COMM-ST 110.

COMM-ST 323 Concepts of the Hero in Ancient Literature and World Cinema Credits: 3

This course explores how concepts of heroism are related to the principles of values and civic duty in a wide range of ancient world cultures and contemporary world cinemas. Students will also demonstrate an understanding of how these values impact individual heroes and their interactions with others in their society.

COMM-ST 339 Introduction to Film Theory Credits: 3

A survey of the history of theoretical and critical approaches to film theory/philosophy. Students will be introduced to major foundational and contemporary theoretical approaches to cinema that may include but are not limited to formalism, realism, auteurism, psychoanalysis, genre studies, structuralism, feminism, semiotics, cultural studies, post-structuralism, queer theory and digital studies.

COMM-ST 341WI Rhetorical Theory And Criticism Credits: 3

Writing intensive. An analysis of significant public discourse within the context of social protest and political rhetoric with attention to applying methods of communication criticism in evaluating the effectiveness of persuasive advocacy aimed at social change.

COMM-ST 343 Group Dynamics Credits: 3

A study of strategies and communication relationships unique to non-dyadic situations, with an emphasis on the integral structure of leadership, roles, norms and task functions.

COMM-ST 344 Communication In Organizational Settings Credits: 3

An examination of the major elements of interpersonal, group, and oral communication competence essential to human interaction in organizational settings. The course focuses on developing communication competencies and increasing theoretical understanding of the communication process within the organizational context.

COMM-ST 344WI Communication In Organizational Settings Credits: 3

An examination of the major elements of interpersonal, group, and oral communication competence essential to human interaction in organizational settings. The course focuses on developing communication competencies and increasing theoretical understanding.

Prerequisites: COMM-ST 110 or COMM-ST 308.

COMM-ST 345 German Film Credits: 3

This course introduces students to the important contributions of German films to the development of movies as a unique literary art form. The class will cover important terms and concepts in film theory, the specifically German context of film, and important themes and periods in German film history. Taught in English with subtitled films.

COMM-ST 346 Art of the Short Film Credits: 3

Art of the Short Film examines the social, economic and aesthetic histories of narrative, documentary and experimental short form films from the birth of cinema to today.

COMM-ST 347 Topics in Film Genre Credits: 3

A topics course that examines the history and theory of film genres. Repeatable up to six hours when the topic changes.

COMM-ST 348 The Art of the Interview Credits: 3

This course will introduce students to the styles and techniques of conducting professional interviews with the goal of eliciting insightful, thoughtful answers fit for print or broadcast. Students will prepare QA interviews and articles for publication while gaining the confidence needed to work in professional newsrooms or office settings.

COMM-ST 351WI Fundamentals Of Writing For The Media Credits: 3

Analysis of individual differences and common characteristics of copy for eye and ear, with emphasis on the application of both verbal and visual imagery in the process of communicating the writer's ideas and intentions. Weekly written assignments and critical analysis of the student's work.

COMM-ST 353 Covering Urban Latinx Communities Credits: 3

This course focuses on journalistic methods of reporting Latinx communities in urban areas and bringing the voice of the Latinx communities into news stories. It covers topics on immigration, health care, policy, cultural diversity, race, legal issues, and education. Skills taught in this course will prepare students to cover the Latinx communities in urban areas and beyond.

COMM-ST 354 Introduction to Screenwriting Credits: 3

An introduction to the form and language of the motion picture screenplay. Students will learn to create a workable blueprint for a movie and undertake an in-depth examination of visual storytelling. This will include understanding the basics of dramatic structure, scene and sequence construction and the role of dialogue. Emphasis will be placed on students mastering the accepted movie industry format of the screenplay. They will also adapt a short story and revise it after giving and receiving feedback in small groups.

COMM-ST 355WI The New Feature Writing Credits: 3

An intensive practicum in the art of writing feature stories with a special emphasis on shorter stories that will grab reader interest in an era of short-attention spans.

Prerequisites: COMM-ST 203 or ENGLISH 203.

COMM-ST 356 U News Practicum Credits: 3

This course is workshop-based for students producing UMKC's weekly newspaper, U News. It also focuses on contemporary issues in American journalism and engaging with the university community.

Prerequisites: COMM-ST 203 or ENGLISH 203.

COMM-ST 363 Radio Production I Credits: 3

A study of the techniques of producing audio material for use in radio, in concerts, on film, on television and in the recording studio.

COMM-ST 373 Intermediate Media Production Credits: 3

An intermediate-level production course emphasizing hands-on skills in cinematography and lighting, sound, and editing.

Prerequisites: COMM-ST 250.

COMM-ST 376 History Of The Film Industry Credits: 3

A history of the development of the American film industry from 1900 to the end of the studio era. The course will stress such issues as studio production, censorship, the economics of production and the selling of mass culture through the film medium. Term paper required.

COMM-ST 380 Contemporary Media Topics Credits: 3**COMM-ST 381 Narrative Production Credits: 3**

This course covers the creative, technical, and practical aspects of short-form narrative film production.

Prerequisites: COMM-ST 250.

COMM-ST 383 Cross-Cultural Journalism & Mass Media Credits: 3

Cross-Cultural Journalism Mass Media provides journalistic tools for traditional and new media coverage of diverse ethnic, gender, ability and ideological groups inside and outside the United States. The critical role of diverse voices in a democracy will be discussed. Students at UMKC and the Missouri School of Journalism participate in joint lectures transmitted by UMKC and MU instructors from their respective campuses.

COMM-ST 384 Documentary Film History Credits: 3

Documentary Film History is an overview of the history and theory of documentary cinema. The course surveys the documentary tradition with special attention to the relationship between content and style and the issues central to documentary film making, including ethical and legal questions, the relationship between representation and power and the ways in which film speaks to notions of truth and truth telling.

COMM-ST 385 Documentary Production Credits: 3

This course is designed to familiarize students with the basics of documentary production from an artistic, ethical, and practical results-oriented perspective.

Prerequisites: COMM-ST 250.

COMM-ST 386 Animation Credits: 3

This course provides an introduction to animation production techniques and an overview of the history of American animation arts. We will address both stop-motion and computer animation using industry standard software.

Prerequisites: COMM-ST 250.

COMM-ST 387 Strategic Communication Research Credits: 3

This course will examine different research methods and research stages in advertising and public relations, including quantitative and qualitative research methods. Students will learn how to plan, conduct, and evaluate strategic communication research. Students are also expected to develop a greater appreciation for the role that research plays in effective campaigns.

COMM-ST 388 Media Ethics Credits: 3

This course is designed to sensitize the ethical considerations the underlie the conventions and practices of print, broadcast, and internet media. By placing traditional and new media in a wider intellectual context than is generally possible under the daily demands of producing news, information, and entertainment, it seeks to produce a larger sense of media as industry and as a career choice.

COMM-ST 390 Forensic Activities Credits: 1-4

Participation in the intercollegiate forensic program. A practicum in debate, discussion, oratory and other forensic activities.

COMM-ST 392 Topics in World Cinema Credits: 3

A variable topics course focused on the histories and theories of international cinemas. Repeatable up to 6 hours when the topic changes.

COMM-ST 393 Topics in Sound & Cinema Credits: 3

A variable topics course that focuses on the histories and aesthetics of sound in cinema. Repeatable up to 6 hours when the topic changes.

COMM-ST 394 Topics in Gender and Cinema Credits: 3

A course focused on the relationship between popular culture, film history and the construction of gender and sexuality. Repeatable up to 6 hours when the topic changes.

COMM-ST 400 Special Studies Credits: 1-3

(A-N) This is an upper-level course on a subject which is not a part of the regular department offering. The course results from one or more of the following: (1) the expressed desire of students (2) the broadened or refocused scholarship of a member of the communication studies faculty (3) the temporary presence of a scholar whose specialization is not reflected in the department's regular offerings (4) the conclusion by the department that the course meets a community need (5) the effort of the Communication Studies faculty to provide an interdisciplinary approach to an era or topic.

COMM-ST 406CD CC: Film Adaptation Credits: 3

The class will explore the process of adapting both fiction and non-fiction literary works into motion pictures. Students will examine the original literary source, then the interim screenplay and finally the completed motion picture.

COMM-ST 411 Seminar in Film and Media Arts Credit: 1

This course covers special topics and professional practices within Film and Media Arts. Course is repeatable. Required of B.A. in Film and Media Arts majors for every semester enrolled.

Prerequisites: B.A. in Film and Media Arts Major.

COMM-ST 415 Global Journalism: Cultures, Trends, & Conflicts Credits: 3

This course examines media coverage of international issues including the dissemination of news and information throughout the world. The course has both a practical and academic focus. It introduces students to best practices of global journalism and to the enormous challenges of covering world events and issues. Research on global media trends are applied to current reporting methods and include diverse international perspectives. The course assists students who plan to pursue careers in global journalism and allied fields like international non-profit agencies or non-governmental organizations. The course also prepares students to become effective communicators in global communities.

Prerequisites: COMM-ST 314.

COMM-ST 431 Colloquium In Interpersonal Dynamics Credits: 3

An examination of the practical application of communication principles and theories, with focus on one of the following: health, organizational, nonverbal, intrapersonal, conflict management, computer mediated, or intercultural communication.

COMM-ST 432 Press, Politics And Public Policy Credits: 3

An advanced course in the study of the press and political establishments in the formation of public policy.

COMM-ST 439 Egghead: Student Advertising Agency Credits: 3

This course operates as a faculty-supervised advertising/design agency that works with clients to produce visual marketing materials.

Prerequisites: ART 337.

COMM-ST 441 Applications of Interpersonal Communication Theory Credits: 3

This course examines interpersonal communication theory as it pertains to a variety of interpersonal relationships. The course employs class discussions of theory and assignments that apply those theories to real life interactions.

Prerequisites: COMM-ST 277.

COMM-ST 444WI Intercultural Communication Credits: 3

A consideration of communication phenomena in multicultural settings. A study of the public forum with an emphasis on the interpersonal aspects of international, intercultural, and co-cultural communication.

Prerequisites: Junior standing.

COMM-ST 446 Principles Of Advertising Credits: 3

A survey of advertising as an industry and a career field, examining its history and development in America, and its application in mass and special media. Specific procedures are studies for linking the development of advertising strategies, messages and campaigns to the marketing process, and for evaluation and selection of appropriate media to carry the advertising message.

COMM-ST 447 Interactive and Social Media Advertising Credits: 3

This course examines advertising on the Internet as a form of interactive communication, with a special focus on social media and search engines. It addresses basic concepts, current issues, and the development of interactive advertising strategies and plans. The coverage includes interactivity, pricing models, online targeting strategies, search engine optimization and advertising, social media advertising, and online video advertising.

COMM-ST 448 Principles Of Public Relations Credits: 3

An overview, presenting the function, purposes, procedures and practices of public relations, its role in society, industry, government and politics, and its potential as a career field. This is a survey course with primary emphasis on theory, supplemented with applied techniques.

COMM-ST 453 Urban Journalism Practicum Credits: 4

This course engages student journalists to produce stories with an urban focus across radio, online, and television platforms. By practicing convergence journalism, students gain practical story-telling experience for professional news organizations.

Prerequisites: COMM-ST 203 or ENGLISH 203.

COMM-ST 454 Advanced Screenwriting Credits: 3

This course provides students with advanced theory in narrative screenwriting, training in industry standard script analysis (called "coverage") and story editing. Students will be required to draft, revise and workshop a short film screenplay or will focus on a feature screenplay, delivering a draft and revision of the first act and a detailed outline for the rest of the script. Students will workshop feature screenplays in small groups, emphasizing the art of constructive story editing.

Prerequisites: COMM-ST 354.

COMM-ST 456 Electronic Journalism Credits: 3

A practical approach to the practices and principles of broadcasting news media, including preparing copy for microphone and camera, editing wire copy, reporting public affairs and public relations, and an intensive scrutiny of the concepts of freedom and responsibility as they apply to the press and current legislation.

COMM-ST 457 Client-Based Media Production Credits: 3

This course teaches the process of creating media for a professional client. Students will take on specialized crew positions and work together to plan, write, direct, shoot, edit, and distribute a short video for a local non-profit client.

Prerequisites: COMM-ST 250.

COMM-ST 466 Advanced Electronic Journalism Credits: 3

An advanced study of television and Internet news gathering, field production and performance for electronic media.

Prerequisites: COMM-ST 456.

COMM-ST 471 Advanced Media Production Credits: 3

An advanced course in media production techniques focused on the creation of a significant individual media work and professional development.

Prerequisites: COMM-ST 373.

COMM-ST 473 Directing Actors and Scenes Credits: 3

This intensive workshop class seeks to deepen the student director's understanding of the acting process and provide ways of clearly and creatively communicating with actors. The course will deepen students' understanding of blocking scenes and designing camera coverage. It will explore the role of the director as a guiding creative force in the making of a film through collaboration and provide techniques for scene analysis and preparation. Students will cast, rehearse and present a live performance for their final project and design appropriate camera coverage.

Prerequisites: COMM-ST 250.

COMM-ST 483 Research Seminar In Communication Studies Credits: 3

This is the departmental capstone course and is required for majors in their last semester of their senior year. The course summarizes and extends student's theoretical and applied understanding of the role of communication competence in the work place and beyond. The course also focuses on refining student's research competencies and their appreciation of the cultural role of modern communication methods.

Prerequisites: Senior standing.

COMM-ST 484 Communication Studies Activities Credits: 1-4

Internships opportunities for advanced students involved in community and campus activities. Student must receive approval of advising professor in semester prior to enrollment. No more than four hours with any one project.

COMM-ST 492 Advertising Campaigns Credits: 3

The course content focuses on branding, re-branding or development of an identity program, and combines advertising planning with creative execution. Students will learn how to develop advertising/marketing/creative campaign plans for a specific client(s), conceptualize, design and develop all creative aspects including but not limited to logo/identity, copy, advertising, website development, app design, etc., and complete a presentation of the plans/briefs and final creative developments of the plans/briefs and creative to the client(s).

Prerequisites: Sophomore standing.

COMM-ST 498 Special Problems In Communication Studies Credits: 1-3

Research and/or projects for advanced upper class students. Student must receive approval of advising professor in semester prior to enrollment. No more than three hours with any one instructor.

Computer Science (COMP-SCI)

Courses

COMP-SCI 100 Computer Fundamentals and Applications Credits: 3

The course covers essential computer concepts and skills. The emphasis is on using the computer as a tool to enhance productivity. Topics include basic computer concepts such as what to look for when buying a computer and how to avoid hackers and viruses when operating one. Students will also learn how to create word processing, spreadsheet, database, and presentation documents using the Microsoft Office suite of applications. The course prepares students to succeed in both college and business by enabling them to write reports, analyze and chart data, prepare presentations and organize large data sets.

Prerequisites: MATH 110 (or higher) or ALEKS score of 51 (or higher); or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

COMP-SCI 101 Problem Solving and Programming I Credits: 3

Problem solving, algorithms, and program design. Use of structured programming, lists, control structures, recursion, objects and files in Python. Introduction to graphical interface programming. Coding, testing and debugging using a modern development environment.

Prerequisites: MATH 110 or MATH 120 (or higher) or ALEKS score of 51 (or higher); ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

Co-requisites: COMP-SCI 101L.

COMP-SCI 101L Problem Solving & Programming I Lab Credit: 1

Programming exercises and demonstrations to reinforce concepts learned in COMP-SCI 101 and provide additional practice in Python programming.

Prerequisites: MATH 110 or MATH 120 (or higher); ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

Co-requisites: COMP-SCI 101.

COMP-SCI 191 Discrete Structures I Credits: 3

Mathematical logic, sets, relations, functions, mathematical induction, algebraic structures with emphasis on computing applications.

Prerequisites: MATH 110 or MATH 120 (or higher) or ALEKS score of 51 (or higher); or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

COMP-SCI 201L Problem Solving and Programming II - Lab Credit: 1

Programming exercises and demonstrations to reinforce concepts learned in COMP-SCI 201R and provide additional practice in C++ programming.

Prerequisites: COMP-SCI 101.

Co-requisites: COMP-SCI 191 and COMP-SCI 201R.

COMP-SCI 201R Problem Solving and Programming II Credits: 3

Problem solving and programming using classes and objects. Algorithm efficiency, abstract data types, searching and sorting, templates, pointers, linked lists, stacks and queues implemented in C++.

Prerequisites: COMP-SCI 101.

Co-requisites: COMP-SCI 191 and COMP-SCI 201L.

COMP-SCI 281R Introduction to Computer Architecture and Organization Credits: 3

Digital Logic and Data Representation, process architecture and instruction sequencing, memory hierarchy and bus-interfaces and functional organization.

Prerequisites: COMP-SCI 101, COMP-SCI 191.

COMP-SCI 291 Discrete Structures II Credits: 3

Recurrence relations and their use in the analysis of algorithms. Graphs, trees, and network flow models. Introduction to Finite state machines, grammars, and automata.

Prerequisites: COMP-SCI 191.

COMP-SCI 303 Data Structures Credits: 3

Linear and hierarchical data structures, including stacks, queues, lists, trees, priority queues, advanced tree structures, hashing tables, dictionaries and disjoint-set. Abstractions and strategies for efficient implementations will be discussed. Linear and hierarchical algorithms will be studied as well as recursion and various searching and sorting algorithms. Programming concepts include Object Orientation, concurrency and parallel programming. Several in-depth projects in C++ will be required.

Prerequisites: COMP-SCI 191, COMP-SCI 201R, and COMP-SCI 201L.

COMP-SCI 304WI Ethics and Professionalism Credits: 3

Societal and ethical obligations of computer science, information technology, and electrical/computer engineering practice. Topics include obligations of professional practice, electronic privacy, intellectual property, ethical issues in networking, computer security, computer reliability, and whistle-blowing.

Prerequisites: Departmental consent.

COMP-SCI 371 Database Design, Implementation and Validation Credits: 3

This course discusses in detail all aspects of database management systems. It covers in detail database design, implementation, and validation. In addition to these, it briefly covers implementation, tuning, database security, and implementation. The course is suitable for undergraduates and professionals alike.

Prerequisites: COMP-SCI 303.

COMP-SCI 394R Applied Probability Credits: 3

Basic concepts of probability theory. Counting and measuring. Probability, conditional probability and independence. Discrete, continuous, joint random variables. Functions of random variables. Sums of independent random variables and transform methods. Random number generation and random event generation. Law of large numbers, central limit theorem, inequalities. Their applications to computer science and electrical and computer engineering areas are stressed.

Prerequisites: COMP-SCI 201R and COMP-SCI 201L (or E&C-ENGR 216), MATH 220, and STAT 235 (or E&C-ENGR 241).

COMP-SCI 404 Introduction to Algorithms and Complexity Credits: 3

A rigorous review of asymptotic analysis techniques and algorithms: from design strategy (such as greedy, divide-and-conquer, and dynamic programming) to problem areas (such as searching, sorting, shortest path, spanning trees, transitive closures, and other graph algorithms, string algorithms) arriving at classical algorithms with supporting data structures for efficient implementation. Throughout, the asymptotic complexity is studied in worst case, best case, and average case for time and/or space, using appropriate analysis techniques (recurrence relations, amortization). Introduction to the basic concepts of complexity theory and NP-complete theory.

Prerequisites: COMP-SCI 291 and COMP-SCI 303.

COMP-SCI 420 Introductory Networking and Applications Credits: 3

This introductory course examines the systems aspects of the different LAN/MAN/WAN models, including topics such as protocols, network operating systems, applications, management and wireless communication systems. It also examines how the different models are interconnected using bridges and routers.

Prerequisites: COMP-SCI 303.

COMP-SCI 421A Foundations of Data Networks Credits: 3

This introductory course examines the analytical aspects of data communications and computer networking. Topics cover protocol concepts and performance analysis that arise in physical, data link layer, MAC sub layer, and network layer.

Prerequisites: COMP-SCI 291, COMP-SCI 303, COMP-SCI 394R.

COMP-SCI 423 Client/Server Programming and Applications Credits: 3

Fundamentals of Client/Server programming using socket interface; features of network programming including connection oriented and connectionless communication in multiple environments (Windows, UNIX, and Java); other client/server mechanisms, such as RPC and RMI) and formal object environments designed to facilitate network programming (CORBA, COM and Beans).

Prerequisites: COMP-SCI 303, COMP-SCI 431.

COMP-SCI 424 Software Methods and Tools Credits: 3

This course covers a number of software methods and tools that are widely used in industry. These methods include architecture patterns and styles, software frameworks, unit testing, and version control. The covered software tools include Microsoft Project, IBM Rational Systems Modeler, Eclipse Plug-ins, JUnit, Subversion, and GIT. The course emphasizes practice. Students will use these methods and tools to develop a software system from the initial planning to final deployment.

COMP-SCI 431 Introduction to Operating Systems Credits: 3

This course covers concurrency and control of asynchronous processes, deadlocks, memory management, processor and disk scheduling, x86 assembly language, parallel processing, security, protection, and file system organization in operating systems.

Prerequisites: COMP-SCI 303, COMP-SCI 281R.

COMP-SCI 441 Programming Languages: Design and Implementation Credits: 3

This course covers programming language paradigms (object-oriented programming, functional programming, declarative programming, and scripting) and design tradeoffs in terms of binding, visibility, scope, lifetime, type-checking, concurrency/parallelism, and abstraction. It also covers programming language specification, grammar, lexical analysis, exception handling, and runtime considerations.

Prerequisites: COMP-SCI 303.

COMP-SCI 449 Foundations of Software Engineering Credits: 3

The course introduces concepts of software engineering (e.g. definitions, context) and the software development process (i.e. life cycle). Students will get a solid foundation in agile methodology, software requirements, exceptions and assertions, verification and validation, software models and modeling, and user Interface design. Various software architectures will be discussed.

Prerequisites: COMP-SCI 303.

COMP-SCI 451R Software Engineering Capstone Credits: 3

The course will focus on the requirements and project planning and managing of medium sized projects with deliverables of each phase of the software life cycle. Additional studies of system integration and architecture, software modeling, requirements specifications, configuration management, verification, validation, software evolution and quality and finally measurement, estimation and economics of the software process.

Prerequisites: COMP-SCI 303, COMP-SCI 449.

COMP-SCI 456 Human Computer Interface Credits: 3

Design of human-computer interfaces considering the psychological and physical abilities of the user. User interface design from a functional and ergonomic perspective. Contents organization, visual organization, navigation. Use of graphical user interface (GUI) and the development of high quality user interfaces.

Prerequisites: COMP-SCI 449.

COMP-SCI 457 Software Architecture: Requirements & Design Credits: 3

Introduction to requirements and design engineering with emphasis on organization and presentation of system requirements and designs for customers, users and engineers; validation of requirements and design with needs of system customer; examination of requirement and design changes during the lifetime of a system; transformation of informal ideas into formal detailed descriptions; examination of the different stages in the design process including architectural design, interface design and data structure design, database design, program and transaction design; examination of domain modeling criteria and examination of design quality attributes; non-functional attributes and project resource allocation.

Prerequisites: COMP-SCI 303.

COMP-SCI 458 Software Testing and Verification Credits: 3

Introduction to principles and techniques of software testing and verification for quality assurance in software development processes.

Prerequisites: COMP-SCI 303.

COMP-SCI 461 Introduction to Artificial Intelligence Credits: 3

This course provides an overview of the field of artificial intelligence. Topics include guided and unguided search, adversarial search, generation and use of heuristics, logic programming, probabilistic reasoning, and neural networks. Application areas studied include game playing, automated proofs, expert systems, and data mining. Recommended preparation: One or more of COMP-SCI 394R, COMP-SCI 404, or an advanced programming elective.

Prerequisites: COMP-SCI 303.

COMP-SCI 465R Introduction to Statistical Learning Credits: 3

This course provides a practical introduction to analytical techniques used in data science and prepares students for advanced courses in machine learning. Topics covered include multivariate distributions, information theory, linear algebra (eigenanalysis), supervised/unsupervised learning, classification/regression, linear/non-linear learning, introduction to Bayesian learning (Bayes rule, prior, posterior, likelihood), parametric/non-parametric estimation.

Prerequisites: COMP-SCI 394R.

COMP-SCI 470 Introduction to Database Management Systems Credits: 3

This course covers database architecture, data independence, schema, Entity-Relationship (ER) and relational database modeling, relational algebra and calculus, SQL, file organization, relational database design, physical database organization, query processing and optimization, transaction structure and execution, concurrency control mechanisms, database recovery, and database security.

Prerequisites: COMP-SCI 303.

Co-requisites: COMP-SCI 431.

COMP-SCI 479 Introduction to Computer Vision Credits: 3

Image is an essential form of information representation and communication in modern society. This course focuses on topics of computer vision, teaching computers how to understand images. Introductory topics include image formation, color and texture features, homograph, key points detection, aggregation, subspace methods in image modeling, and deep learning based image segmentation and classification, with applications in photography, media and entertainment, education, defense and medicine. The course is project based and emphasis hands on experiences for students to solve real world problems.

Prerequisites: E&C-ENGR 484.

COMP-SCI 490 Special Topics Credits: 3

Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

Prerequisites: Junior standing.

COMP-SCI 490CR Special Topics Credits: 1-3

Special topics in Computer Science.

COMP-SCI 490R Special Topics Credits: 1-3

Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

COMP-SCI 491 Internship Credits: 6

Students may participate in structured internships under the joint supervision of an employer and a faculty member. The student must carry out significant professional responsibilities that also have academic merit. The number of credit hours is based on the quality of the academic experience. Available for credit/no credit only and students must be in good standing with at least 18 credit hours of CS/IT counting towards the degree.

Registration by consent number only: petition forms for CS/IT491 Internships are available in the office of CSEE Division and on the web.

Prerequisites: Junior standing, Departmental consent.

COMP-SCI 497 Directed Readings Credits: 1-3

Readings in an area selected by an undergraduate student in consultation with a faculty member. Arrangements must be made prior to registration.

Prerequisites: Departmental consent.

COMP-SCI 498 Research Seminar Credits: 1-3

Undergraduate research based on intensive readings from the current research literature under the direction of a faculty member. Arrangements must be made prior to registration.

Prerequisites: Departmental consent.

COMP-SCI 499 Undergraduate Research Credits: 1-3

Completion of project, including a final written report, under the direction of a faculty member. A prospectus must be accepted prior to registration.

Prerequisites: Departmental consent.

Conservatory (CONSVTY)

Courses

CONSVTY 101C Voice Class I Credits: 2

A course in the fundamentals of correct voice productions; breathing, breath control, study of vowel forms and consonants. Elementary songs. Poise, posture, and stage presence. This course covers two points of view: development of the student's own voice and the pedagogy of voice-class instruction. A voice audition is required before registration.

CONSVTY 103 Fundamentals of Music Theory for Musicians Credits: 2

An introduction to the rudiments of music theory and aural skills. Designed primarily as a review course for Conservatory students. Non-music majors who desire an accelerated theory fundamentals class may also enroll in this course with the approval of the instructor.

CONSVTY 103 - MOTR MUSC 101: Music Fundamentals



CONSVTY 103N Fundamentals of Music Credits: 3

An introduction to the basic elements of music and music notation, including the study of melody, rhythm, scales and keys, triads, 7th chords, the piano keyboard and the musical staff. Designed primarily for those interested in learning about music but with little or no formal study of music theory.

CONSVTY 104 Jazz Improvisation I Credits: 2

A systematic approach to the art of jazz improvisation. Emphasis upon performance as well as analysis.

CONSVTY 108 Beginning Piano for Non-Music Majors Credits: 2

A class for non-music majors to acquire basic piano skills. Popular arrangements and group techniques designed to encourage students to play the piano for pleasure.

CONSVTY 110 Keyboard Skills I Credit: 1

Group instruction focused on developing basic keyboard skills in sight-reading, transposition, harmonization, accompanying, improvisation, technique, and repertoire. Music theory concepts will be reinforced through keyboard applications.

CONSVTY 111 Introduction to Collaboration for Pianists I Credit: 1

Introductory study of collaborative techniques and vocal and instrumental literature with piano collaboration, for piano students. The class is designed to introduce students to basic principles of collaborative piano playing.

CONSVTY 112 Introduction to Collaboration for Pianists II Credit: 1

Continuing study of basic collaborative techniques and vocal and instrumental literature with piano collaboration for piano students. The class is designed to develop basic principles of collaborative piano playing for piano students. Continuation of Introduction to Collaboration for Pianists I.

Prerequisites: CONSVTY 111.

CONSVTY 114 Keyboard Skills I for Piano Majors Credit: 1

Techniques of sight reading, transposition, improvisation and open-score reading.

CONSVTY 115 Keyboard Skills II for Piano Majors Credit: 1

Continuation of CONSVTY 114.

CONSVTY 118 Electronica Credits: 3

An overview of the vast body of music that falls under the label "electronica". Course consists of a historical survey as students acquire language to talk about music, learn how technology informs the creation of the music, and summarize musical trends and cultural influences on the music. Final project is the creation of a piece of electronica using a musical app on a mobile device or a computer.

CONSVTY 120 Music Appreciation Credits: 3

Designed for the general University student with little or no music background (non-music majors) and required for Dance Majors. An emphasis on the basic elements of music and the historical and stylistic periods, illustrated by examples from different genre, such as instrumental and vocal ensembles, large and small, solo literature for voice and instruments, and dance. Three class sessions a week with frequent live performance and guest speakers.

CONSVTY 120 - MOTR MUSC 100: Music Appreciation



CONSVTY 120N Music Appreciation Credits: 3

A distance learning class designed for the general University student with little or no music background (non-music majors). Video lectures, interviews, performances, and discussion threads, are all delivered online. Course emphasizes historical and stylistic periods, genres, and music listening. Interviews with guest professors and performances of Conservatory faculty and students are included. Students may access the course at any time of the day or night, but exams must be taken on campus unless otherwise arranged.

CONSVTY 123 Keyboard Skills II Credit: 1

Continued group instruction focused on developing basic keyboard skills in sight-reading, transposition, harmonization, accompanying, improvisation, technique, and repertoire. Music theory concepts will be reinforced through keyboard applications. Recommended preparation: CONSVTY 110.

CONSVTY 125 History and Development of Rock and Roll Credits: 3

Designed for students with little or no music background, the course is an exploration of American popular music from early Rhythm and Blues and Country Western through Woodstock. Examines in detail the social/racial issues most important to the music and the cultural history of twentieth-century America. The course features online video lectures and numerous interviews with professors and scholars from other disciplines, presenting a perspective of the influence of this music on nearly every area of American life. Students are required to participate in online discussion groups as part of the class. Music majors may enroll for music elective credit.

CONSVTY 125 - MOTR MUSC 100RP. Music Appreciation-Rock/Pop**CONSVTY 126 Introduction to World Music Credits: 3**

Introduction to World Music provides tools and paths for you to see the world differently and to enhance diversity by exploring musical traditions from around the world, many of which exist in Kansas City. Through lectures, videos, and live performances, Introduction to World Music will provide insight into the musical cultures of Africa, North America, the Caribbean, India, East Asia, Korea and Latin America and transform your view of our rapidly changing society. Open to all students.

CONSVTY 126 - MOTR MUSC 102: World Music**CONSVTY 133 Beginning Composition I Credits: 3**

Introduction to the compositional process, including notation, calligraphy and score preparation, styles and forms, and related topics. A weekly one-hour lab is required.

CONSVTY 133A Beginning Composition I for Non-Composition Majors Credits: 2

An introductory course in music composition, with exercises in instrumentation, notation, orchestration, form, melodic construction, harmony, counterpoint, and rhythm. Discussion and analysis of current works, trends and techniques in music composition. Final project is an original composition. A weekly one-hour lab is required.

CONSVTY 133B Beginning Composition I for Prospective Composition Majors Credits: 3

A class for students wishing to work toward major status in the music composition program. Exercises and projects as in 133A, with an extra hour per-week of in-depth, guided exercises and portfolio development. A weekly one-hour lab is required.

CONSVTY 134 Beginning Composition II Credits: 3

Continuation of CONSVTY 133.

Prerequisites: CONSVTY 133.

CONSVTY 134A Beginning Composition for Non-Composition Majors II Credits: 2

A weekly one-hour lab is required.

Prerequisites: CONSVTY 133A (with a grade of C or better).

CONSVTY 134B Beginning Composition for Prospective Composition Majors II Credits: 3

Continuation of CONSVTY 133B. Exercises and projects as in CONSVTY 134A, with an extra hour per-week of in-depth, guided exercises and portfolio development. A weekly one-hour lab is required.

Prerequisites: CONSVTY 133B (with a grade of C or better).

CONSVTY 138 Music Therapy Foundations Credits: 2

This course provides students with foundational information pertaining to the music therapy profession. Course topics include the history of music therapy, populations that music therapists serve, and an introduction to the use of music in therapeutic settings.

CONSVTY 141 Musicianship I Credits: 4

Musicianship I focuses on diatonic harmony through an integration of theory and aural skills. It covers a music fundamentals review, principles of chord construction, four-part writing and harmonic syntax, as well as the application of concepts in analytical assignments and projects, dictation, and singing. Particular attention is given to the development of critical writing skills and the creation of stylistic compositions.

Prerequisites: CONSVTY 103 (with a C or higher) or entrance by placement exam.

Co-requisites: CONSVTY 110.

CONSVTY 142 Musicianship II Credits: 4

Continuation of CONSVTY 141 with attention to phrase structure, small forms, and an introduction to chromaticism including such topics as applied chords, simple modulation, and modal mixture. Particular attention is given to the development of critical writing skills and the creation of stylistic compositions.

Prerequisites: CONSVTY 141 (with a grade of C or better).

Co-requisites: CONSVTY 123.

CONSVTY 185B Foreign Language For Singing II Credits: 2

A course for Italian diction. Emphasis is placed on sung rather than conversational pronunciation. Required for BM voice.

CONSVTY 185C Foreign Language For Singing III Credits: 2

A course for German diction. Emphasis is placed on sung rather than conversational pronunciation. Required for BM voice.

CONSVTY 185D Foreign Language For Singing IV Credits: 2

A course for French diction. Emphasis is placed on sung rather than conversational pronunciation. Required for BM voice.

CONSVTY 202 Basic Techniques of Audio Recording I Credits: 3

A study of the philosophy, history, and development of audio recording. Practical application of recording techniques and development of recording skills.

CONSVTY 203 Basic Techniques of Audio Recording II Credits: 3

Continuation of study of recording techniques and development of recording skills.

Prerequisites: CONSVTY 202 (with a grade of C or better).

CONSVTY 204 Jazz Improvisation II Credits: 2

Prerequisites: CONSVTY 104 (with a grade of C or better).

CONSVTY 210A Clinical Experience: I Credit: 1

Clinical Experience I.

CONSVTY 210B Clinical Experience: II Credit: 1

Primarily assists the site coordinator with some leadership responsibilities.

CONSVTY 210C Clinical Experience: III Credit: 1

Equal assisting and leading responsibilities on-site

CONSVTY 210D Clinical Experience: IV Credit: 1

Some assisting and primarily leading responsibilities on-site.

CONSVTY 210E Clinical Experience: V Credit: 1

Clinical Experience V.

CONSVTY 210F Clinical Experience VI Credit: 1

Clinical Experience VI.

CONSVTY 223 Keyboard Skills III Credit: 1

Group instruction focused on developing intermediate keyboard skills in sight-reading, transposition, harmonization, accompanying, improvisation, technique, and repertoire. Music theory concepts will be reinforced through keyboard applications. Recommended preparation: CONSVTY 123.

CONSVTY 233 Intermediate Composition I Credits: 3

Continuation of CONSVTY 134. A weekly one-hour lab is required.

Prerequisites: CONSVTY 134.

CONSVTY 233A Intermediate Composition for Non-Composition Majors I Credits: 2

Continuation of CONSVTY 134A. A weekly one-hour lab is required.

Prerequisites: CONSVTY 134A.

CONSVTY 234 Intermediate Composition II Credits: 3

Continuation of CONSVTY 233.

Prerequisites: CONSVTY 233 (with a grade of C or better).

CONSVTY 234A Intermediate Composition for Non-Composition Majors II Credits: 2

Continuation of CONSVTY 233A. A weekly one-hour lab is required.

Prerequisites: CONSVTY 233A.

CONSVTY 235 Digital Media for Composing Credits: 3

This course is designed to give students a thorough grasp of studio hardware and software used in composing with digital audio and other media. Topics include digital audio, mixing, MIDI, and synthesis techniques, as well as working with other contemporary media such as video. In addition to three 50-minute lecture/demo sessions per week, 3-5 hours minimum of in-studio work time is expected. Open to anyone regardless of musical training.

CONSVTY 236 Music Performance Systems Credits: 3

Course builds upon studio techniques gained in Digital Media for Composing to conceptualizing and practicing the computer as an instrument. Students will be exposed to a variety of live performance systems which could include Ableton Live, MAX, PD, and other languages based on the expertise of the instructor. The outcome of the class is for students to perform a concert with the computer and/or other technology as their instrument. In addition to three 50-minute lecture/demo sessions per week, 3-5 hours minimum of in-studio time is expected. Open to anyone regardless of musical training.

Prerequisites: CONSVTY 235.

CONSVTY 238 Woodwind Techniques and Pedagogy Credit: 1

This course will discuss the fundamentals of playing and teaching woodwind instruments in an authentic setting. In order to achieve this, students are required to develop some performance ability as well as teaching techniques and strategies for each particular woodwind instrument. Basic principles, such as embouchure formation and development, fingerings, transposition, intonation, teaching materials, and teaching techniques will be covered. Flute, Clarinet, Saxophone, Oboe and Bassoon will be discussed during this course.

CONSVTY 239 Brass Techniques and Pedagogy Credit: 1

This course will discuss the fundamentals of playing and teaching brass instruments in an authentic setting. In order to achieve this, students are required to develop some performance ability as well as teaching techniques and strategies for each particular brass instrument. Basic principles, such as embouchure formation and development, fingerings, transposition, intonation, teaching materials, and teaching techniques, will be covered. Trumpet, French Horn, Trombone, Baritone, and Tuba will be discussed during the course.

CONSVTY 241 Musicianship III Credits: 4

Continuation of CONSVTY 142. Study of harmonic structures such as Neapolitan and augmented sixth chords, chromatic modulation, and symmetry. Detailed examination of larger forms and genres such as sonata, rondo, art song, and fugue. Particular attention is given to the development of critical writing skills and the creation of stylistic compositions.

Prerequisites: CONSVTY 142 (with a grade of C or better).

CONSVTY 242 Musicianship IV Credits: 4

Study of late-nineteenth century chromaticism and analytical and compositional methods of twentieth and twenty-first century music, including set theory and twelve-tone theory. Particular attention is given to the development of critical writing skills and the creation of stylistic compositions.

Prerequisites: CONSVTY 241 (with a grade of C or better).

CONSVTY 270 Marching Band & Jazz Ensemble Techniques Credit: 1

This course is designed to prepare pre-service teachers with pedagogical and organizational techniques for marching band and jazz ensembles in the schools. The course will include developing practical rehearsal techniques for teaching body manipulation in space, designing and evaluating marching band field design and maneuvers, jazz ensemble pedagogy, jazz improvisation pedagogy, and the use of appropriate materials. A field experience component will further student interaction with an active band program that will allow continued examination and development of a philosophy on the role of marching band and jazz ensembles within the school curriculum.

CONSVTY 278 Music Teaching Matters: A Professional Beginning Credits: 3

A Professional Beginning allows students to explore the professional world of teaching music. Students will begin the process of thinking and acting as professional music educators using readings, discussions, presentations, field experiences, interviews, reflections, and opportunities to practice the skill of teaching.

Prerequisites: CONSVTY 123 and CONSVTY 142.

CONSVTY 285 Elementary Music Methods Credits: 3

Laboratory course for classroom teachers in which principles of instructional design will be applied to music teaching. Students who have extensive music background may elect CONSVTY 385 in place of CONSVTY 285.

CONSVTY 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

CONSVTY 301B Men's Chorus Credit: 1**CONSVTY 301C Bella Voce Credit: 1****CONSVTY 301E Opera Theater Ensemble Credits: 0**

An introduction to opera performance techniques for opera chorus/ensemble. Major literature for opera choruses may also be surveyed. Course participants are required to perform in the chorus of a UMKC Opera production. This course can be taken at any time during the BM Voice Performance student's degree, and will count towards the requirement of 2 semesters of performing in a UMKC opera production.

Prerequisites: Vocal Audition.

CONSVTY 301F Opera Production Credits: 0

An introduction to the non-performance, production-related aspects of Opera. Students will assume various production responsibilities in a UMKC Opera. Students will be overseen by Opera and Theatre faculty and receive instruction related to the student's designated production responsibility. This course requirement can be fulfilled at any time during the BM - Voice Performance degree, but not in the same semester the student registers for CONSVTY 301E (Opera Theatre Ensemble) and/or CONSVTY 319 (Opera Role).

CONSVTY 301G Ensemble for Composers Credit: 1

Observation, score analysis, non-performance participating during a semester's rehearsals and performance by a participating Conservatory ensemble. Students a.) keep journals that are periodically reviewed and graded by the composition faculty, and b.) meet with composition faculty periodically to review and discuss issues raised in the ensemble settings.

Prerequisites: CONSVTY 234 (with a grade of C or better).

CONSVTY 301H Musica Nova Credit: 1**CONSVTY 302 Orchestra Credit: 1**

Required of all qualified music majors and open to all interested students by audition.

CONSVTY 303B Jazz Band Credit: 1

The Jazz Band comprises saxophone, trombone, trumpets and rhythm section students and performs traditional, modern, and original music. The ensemble is open to all UMKC students by audition.

CONSVTY 303C Percussion Ensemble Credit: 1**CONSVTY 303E Jazz Workshop Credit: 1**

Jazz Workshop

CONSVTY 303G Jazz Orchestra Credit: 1

The Jazz Orchestra comprises saxophone, trombone, trumpets and rhythm section students of the highest level in the Conservatory and performs repertoire of the highest caliber available. The curriculum is well balanced between traditional, modern, and original music and requires advanced musical and technical facility amongst its members. The class is open to all UMKC students by audition.

CONSVTY 303J Large Ensemble Rhythm Section Workshop Credits: 2

This weekly private lesson includes the study of advanced concepts used to compose spontaneously. Includes the analyses of harmonic progressions, applications of scales and rhythmic interpretation.

CONSVTY 303K Piano Accompanying Credit: 1

This course is designed to improve undergraduate piano students' collaborative piano skills through intensive coaching. The class will investigate the historical/stylistic context of each work covered, as well as issues common to the musical genre, instrument type, or time period of each assigned piece. Issues inherent to collaborative piano playing will be explored, including score preparation, pedaling, voicing, balance, practice and rehearsal techniques, orchestral reductions, ensemble skills, and professional issues.

Prerequisites: CONSVTY 112.

CONSVTY 303MP Improvisational Music/Media Performance Ensemble Credits: 2

IMP Ensemble explores improvisation in the broadest definition, where listening and responding become a way of real-time creation. IMP is a think-tank of people willing to risk and fail quickly, so a show can go on, using any new individual media to explore the boundaries of the medium and improvisation. No particular instrumental skill is needed, only an open mind. Non Conservatory students by instructor approval.

CONSVTY 304 Jazz Improvisation III Credits: 2

Jazz Improvisation III.

Prerequisites: CONSVTY 204 (with a grade of C or better).

CONSVTY 305A Principles Of Chamber Music Credit: 1

Collaborative music-making in groups of like-instruments (piano ensembles, flute quartets, sax quartets, etc., plus beginning experiences in string quartets, woodwind and brass quintets, etc.). Weekly coaching.

CONSVTY 305E Principles Of Chamber Music Credit: 1

Collaborative music-making in groups of like-instruments (piano ensembles, flute quartets, sax quartets, etc., plus beginning experiences in string quartets, woodwind and brass quintets, etc.). Weekly coaching.

CONSVTY 305H Chamber Orchestra Credit: 1**CONSVTY 305J Chamber Music Guitar Credit: 1****CONSVTY 306A Conservatory Wind Ensemble Credit: 1**

A select concert band ensemble, modeled on Frederick Fennell's Eastman Wind Ensemble concept, designed for high-level, artistic, public performances of major literature for winds and percussion. Membership in the Wind Ensemble is open to any student who qualifies through audition.

CONSVTY 306C Wind Symphony Credit: 1

The Wind Symphony comprises wind, brass and percussion students of the highest level in the Conservatory and performs repertoire of the highest caliber available to the medium. The curriculum is well balanced between traditional, modern, and chamber music and requires advanced musical and technical facility amongst its members. The class is open to all UMKC students by audition.

CONSVTY 307A Canticum Novum Credit: 1

CONSVTY 307A - MOTR PERF 102C: Music Performance-Choir



CONSVTY 307B University Singers Credit: 1

Mixed chorus specializing in choral-orchestral literature. May be repeated for credit. Open by audition to University students, regardless of major.

CONSVTY 307B - MOTR PERF 102C: Music Performance-Choir



CONSVTY 307C Conservatory Singers Credit: 1

CONSVTY 307C - MOTR PERF 102C: Music Performance-Choir



CONSVTY 308A Conservatory Concert Choir Credit: 1

CONSVTY 309 Audio Recording III Credits: 3

Continuation of study of recording techniques and music production skills.

Prerequisites: CONSVTY 203 (with a grade of C or better).

CONSVTY 310 Keyboard Skills IV Credit: 1

Group instruction focused on developing intermediate keyboard skills in sight-reading, transposition, harmonization, accompanying, improvisation, technique, and repertoire. Music theory concepts will be reinforced through keyboard applications. The Piano Proficiency Exam is administered as part of this course.

Prerequisites: CONSVTY 223 (with a grade of C or better).

CONSVTY 311 Jazz Theory Credits: 2

The basics of written jazz harmony and its nomenclature will be addressed. Topics covered will include chords, harmonic progressions, reharmonization, voice leading, dissonance, melody, transcription, analysis and the study of form(s). Notation will be addressed throughout. Students will acquire the fundamentals to pursue jazz improvisation, arranging and composition on a more informed level.

CONSVTY 315 Music Therapy Piano Techniques Credits: 2

Course covers techniques of leading piano stylists from early ragtime to the present. Includes listening, analysis, arranging, and performing. A piano proficiency exam is required.

CONSVTY 316 Music Therapy Guitar Techniques Credits: 2

Course covers techniques of leading guitar styles from the 1920's to present. Includes listening, analysis, transcription, and performing.

Prerequisites: CONSVTY 373G (with a grade of C or better).

CONSVTY 317 Music Therapy Ensemble and Improvisation Techniques Credits: 3

Playing and Improvising in free form and from a variety of popular genres from Swing to the present day.

Prerequisites: CONSVTY 316 (with a grade of C or better).

CONSVTY 318 Jazz Ear Training and Listening Credits: 2

This course offers the student basic fundamental techniques needed to improve aural perceptions in both the translation of hearing into writing and the performance of reading into singing and playing in the jazz idiom. Introduction and practice in singing, aural recognition and writing of intervals and short, simple melodies. Also including rhythm, memory and improvisational drills.

Prerequisites: CONSVTY 329 (with a grade of C or better).

CONSVTY 319 Opera Role Performance Credit: 1

Preparation, rehearsal and performance of a role in an opera production at UMKC. This course may count toward the 2 semester opera performance requirement for the BM in Vocal Performance degree. Credit for non-performing duties such as assistant directing or assistant stage managing may be available with approval of the Vocal Studies faculty and the current Stage Director.

Prerequisites: Vocal Audition.

CONSVTY 325 Piano Pedagogy I Credits: 2

Instructional strategies for teaching the beginning piano student including methods, materials, repertoire, technique and the use of music technology. Various aspects of establishing and managing a piano studio will also be addressed.

CONSVTY 325A Piano Pedagogy - Supervised Teaching I Credit: 1

Supervised practicum designed to demonstrate lesson planning and activities for beginning students through the observation of experienced teachers and various supervised teaching experiences.

CONSVTY 326 Piano Pedagogy II Credits: 2

Instructional strategies for teaching the intermediate and advanced piano student, including methods, materials, repertoire, technique, and the use of music technology.

Prerequisites: CONSVTY 325 (with a grade of C or better).

CONSVTY 326A Piano Pedagogy - Supervised Teaching II Credit: 1

Supervised practicum designed to demonstrate lesson planning and activities for students of various levels through observation of experienced teachers and various supervised teaching experiences.

Prerequisites: CONSVTY 325A (with a grade of C or better).

Co-requisites: CONSVTY 326.

CONSVTY 329 Advanced Ear Training Credits: 2

Study of atonal and highly chromatic tonal aural problems, complex rhythms, and recognition of instruments. May be repeated for credit.

Prerequisites: CONSVTY 242 (with a grade of C or better).

CONSVTY 331 Instrumentation Credits: 2

An introduction to the instruments of the symphony orchestra and rudiments of scoring. Classification of instruments and learning to write for all Western transposing instruments.

Prerequisites: CONSVTY 242.

CONSVTY 331A Orchestration I Credits: 3

An introduction to the instruments of the symphony orchestra and rudiments of scoring. Meets concurrently with CONSVTY 331; the third credit hour is required for music composition and music theory majors.

Prerequisites: CONSVTY 242 (with a grade of C or better).

CONSVTY 333 Advanced Composition Credits: 3

May be repeated for credit.

Prerequisites: CONSVTY 234 (with a grade of C or better).

CONSVTY 335 Electronic Music Composition Credits: 3

This course focuses on creating an original music composition in any style utilizing the full range of digital audio or MIDI hardware, software and techniques available to the student. In addition to weekly meetings arranged with the instructor, 5-8 hours per week of studio time is required. May be repeated for credit.

Prerequisites: CONSVTY 235 or CONSVTY 236 (with a grade of C or better).

CONSVTY 341 Principles of Arts Business Credits: 3

This Arts Business course is in an online format and will provide an overview of the many different careers and business practices in the arts industries. The course content will highlight the variables considered when creating, selling, and marketing a variety of items in different mediums.

CONSVTY 341A Arts Entrepreneurship Credits: 3

This course will teach students how to design a business model, refine that business model, and take action. This course will take students through several models and frameworks that can be used to create new ventures (for-profit, not-for-profit, social ventures), create value within existing organizations, and pursue an entrepreneurial career in the arts.

CONSVTY 342 This is Your Brain on Music Credits: 3

This is an introductory course on the connections among music, the brain, and learning. The course provides a basic understanding of the relationship between the brain, music, and human behavior in the physiological, motor, social, emotional, and cognitive domains.

CONSVTY 344 Anatomy for Music Therapy Practice Credits: 2

This course is an introduction to basic human anatomy and pathology with an emphasis on applicability to multiple aspects of music therapy practice.

Prerequisites: Music Therapy Major.

CONSVTY 351 History of Music in Western Civilization I Credits: 3

A chronological study of music in Western civilization with emphasis on periods and styles from early times to the death of Bach. Outside listening required.

Prerequisites: CONSVTY 242 (with a grade of C or better).

CONSVTY 352 History of Music in Western Civilization II Credits: 3

A chronological study of music in Western civilization from 1750 to the present. Outside listening required.

Prerequisites: CONSVTY 351 (with a grade of C or better).

CONSVTY 352WI History of Music in Western Civilization II-Writing Intensive Credits: 3

A chronological study of music in Western Civilization from 1750 to the present. Outside listening and writing projects required.

CONSVTY 353A History And Development Of Jazz I Credits: 3

History of Jazz from its beginning through the present, using recordings, films and musical examples. Emphasis on the major historical trends in Jazz, including Early Jazz, Ragtime, Dixieland, Swing, Bebop, Cool Jazz, Hard Bop, Free Jazz, Jazz-Rock Fusion and modern developments. This course makes use of the Marr Sound Archive, and is appropriate for all students throughout the UMKC Campus.

CONSVTY 353WI History and Development of Jazz II Credits: 3

This course aims to contextualize jazz within the musical culture of the twentieth century. It is designed to develop the students understanding of jazz from a writing and research perspective. This course concentrates on the lives, bands, and works of people who have been instrumental in the development of the various jazz styles. In-depth analysis of major jazz figures including Louis Armstrong, Duke Ellington, Count Basie, Charlie Parker, Dizzy Gillespie, Thelonious Monk, Clifford Brown, Sonny Rollins, John Coltrane, Miles Davis, Wayne Shorter, and many others. This course is most appropriate for Jazz Studies majors, and other conservatory students with some jazz background and knowledge of the fundamentals of music. This course makes use of the Marr sound Archive.

Prerequisites: CONSVTY 353A (with a grade of C or better).

CONSVTY 357 Choral Literature Credits: 2

Includes listening and analysis as they relate to programming and educational issues in choral ensemble setting. May be repeated for credit.

Prerequisites: CONSVTY 380 (with a grade of C or better).

CONSVTY 358 Wind Band Literature and Lab Credits: 2

Designed for the student working with beginning and intermediate levels of wind/percussion students. Includes critical analysis and evaluation of literature and literature selection as it relates to educational issues and programming in wind/percussion ensemble settings. Includes an application phase in a wind band rehearsal/performance setting providing opportunities realistic opportunities for observation and teaching.

Co-requisites: CONSVTY 381.

CONSVTY 359 String Literature Credits: 2

Includes listening and analysis as they relate to programming and educational issues in string ensemble settings. May be repeated for credit.

Prerequisites: CONSVTY 381 (with a grade of C or better).

CONSVTY 361 Piano Literature I Credits: 3

A survey of study through analysis, reading, listening and performance of literature for stringed keyboard instruments from the Renaissance period to 1850. Special attention given to the development of instruments, forms, techniques, performance practices and idiomatic styles.

CONSVTY 362 Piano Literature II Credits: 3

A study through analysis, reading, listening, and performance of piano repertoire from 1850-present day. Special attention given to the development of instruments, forms, techniques, performance practices and idiomatic styles.

CONSVTY 363 Music Therapy in Wellness and Intergenerational Settings Credits: 3

This course provides students with foundational information pertaining to the music therapy profession. course topics include the history of music therapy, populations that music therapists serve and an introduction to the use of music in therapeutic settings.

CONSVTY 364 Yeah, Yeah, Yeah: The Cultural and Musical Impact of the Beatles Credits: 3

This course will explore the career and music of the Beatles by examining their impact on popular culture in Britain and the United States. Students will learn about popular song forms, recording techniques, and lyric writing and analysis. They will also employ video and audio media for projects, and engage with readings that approach the Beatles both historically and culturally.

CONSVTY 366 Clinical Foundations II Credits: 3

This course provides the music therapy clinical student practice of direct services, procedures, and documentation of the music therapy treatment process (assessment, setting goals, and objectives, treatment plan, interventions, data collection, and evaluation). Students will participate in supervision and clinical experiences within the context of community-dwelling older adult populations.

Prerequisites: CONSVTY 395, Music Therapy Major.

CONSVTY 367 Music Therapy Capstone Credit: 1

This seminar course assists students in creating a research or clinical-based capstone project.

Prerequisites: CONSVTY 435 (with a grade of C or better).

CONSVTY 368 Orchestral Literature for Trumpet Credit: 1

Intended to introduce students to the standard repertoire for orchestral trumpet; class meets once weekly for an hour. Students will be expected to prepare and play approximately a dozen works per semester, rotating parts in a full trumpet section.

CONSVTY 369 Clinical Skills Lab Credit: 1

This course provides students with development, practice, and mastery of clinical music therapy skills. Course topics include, clinical musicianship, repertoire development, and group leadership skills.

CONSVTY 370 Choral/Vocal Techniques Credits: 2

Laboratory applications of vocal pedagogy, ensemble rehearsal technique, literature selection, and performance practice. Students will participate in singing and observation activities in a large ensemble setting with an emphasis on critical analysis of technical and pedagogical issues.

Prerequisites: CONSVTY 380 (with a grade of C or better).

CONSVTY 373E Instrumental Techniques Percussion Credit: 1

CONSVTY 373G Instrumental Techniques Guitar Credit: 1

CONSVTY 373N Survey Of Wind And Percussion Instruments Credit: 1

An overview of basic wind and percussion instruments used in public school settings. Includes embouchure formation, hand position, sound production, and pedagogical issues encountered in beginning situations.

CONSVTY 373P Survey Of String Instruments Credit: 1

An overview of basic string instruments used in public school settings. Includes hand position, bowing, sound production, and pedagogical issues encountered in beginning situations.

CONSVTY 376 Collaborative Piano I Credit: 1

Study of collaborative techniques and vocal literature.

CONSVTY 377 Collaborative Piano II Credit: 1

Continuation of CONSVTY 376.

Prerequisites: CONSVTY 376.

CONSVTY 378 Instrumental Ensemble Rehearsal Techniques & Lab Credits: 2

Laboratory applications of large instrumental ensemble (strings, winds, percussion) pedagogy, ensemble rehearsal technique, and performance practice. Students will participate in playing, observation, rehearsal activities in a large ensemble setting with an emphasis on critical analysis of technical pedagogical issues and ensemble performance preparation. Includes an off-campus course meeting.

Prerequisites: CONSVTY 358, CONSVTY 381 and Large Ensemble (each with a grade of C or better).

Co-requisites: CONSVTY 383.

CONSVTY 378L Instrumental Ensemble Rehearsal Lab Credit: 1

Laboratory applications of wind/percussion pedagogy, ensemble rehearsal technique, literature selection, and performance practice. Students will participate in playing, observation, and rehearsal activities in a large ensemble setting with an emphasis on critical analysis of technical pedagogical issues and ensemble performance preparation. This course may meet off-campus.

Prerequisites: CONSVTY 358, CONSVTY 381, large ensemble requirement (each with a grade of C or better).

Co-requisites: CONSVTY 383.

CONSVTY 379A Music Therapy Clinical Applications - Group Leading Techniques Credits: 2

This course provides an opportunity for music therapy students to apply learned skills to musical situations they will encounter as music therapists. Course will include a range of group leading skills applicable for varied music therapy settings and with distinct populations including special education, older adults, medical, neurologic, and wellness.

Prerequisites: CONSVTY 138, CONSVTY 373G.

CONSVTY 379B Music Therapy Clinical Applications - Music Therapy Interventions Credits: 2

This course provides an overview of music therapy techniques (i.e. songwriting, lyric analysis, relaxation, music videos, and rhythmic stimulation) as utilized with various ages and populations for therapeutic goal achievement. Course content includes leadership, musical, and therapeutic relationship skills as well as community project components for skill application.

Prerequisites: CONSVTY 379A.

CONSVTY 379C Music Therapy Clinical Applications: Music Therapy Singing Techniques Credit: 1

This course provides students with specific training in singing varied vocal styles that apply to the diverse musical settings they will encounter as professional music therapists.

Prerequisites: CONSVTY 379A, CONSVTY 379B.

CONSVTY 379D Music Therapy Clinical Applications - Music Therapy Repertoire Credit: 1

This course provides a survey of song repertoire used within music therapy practice across various client/patient populations, and within different therapeutic interventions. The study of accompaniment skills necessary to play suggested repertoire is also included.

Prerequisites: CONSVTY 379A, CONSVTY 379B, CONSVTY 379C.

CONSVTY 380 Basic Conducting - Choral Credits: 2

A study of the basic techniques of all rhythms, patterns, subdivision of beats, dynamics, starting, stopping, and giving cues through conducting in class. Elementary study of the score as to form and harmonic content will be discussed.

Prerequisites: CONSVTY 242 (with a grade of C or better).

CONSVTY 381 Basic Conducting - Instrumental Credits: 2

A study of the basic techniques of all rhythms, patterns, subdivision of beats, dynamics, starting, stopping, and giving cues through conducting in class. Elementary study of the score as to form and harmonic intent will be discussed.

Prerequisites: CONSVTY 242 (with a grade of C or better).

CONSVTY 382 Choral Conducting Credits: 2

A study of choral techniques including voice tryouts, placement, attack, release, blend, vocal development, diction, and rehearsal techniques through actual experience of conducting in class.

Prerequisites: CONSVTY 380 (with a grade of C or better).

Co-requisites: CONSVTY 387.

CONSVTY 383 Instrumental Conducting Credits: 2

A study of instrumental conducting techniques through actual conducting situations in instrumental groups. Primary objective will be the study of instrumental rehearsal techniques.

Prerequisites: CONSVTY 381 (with a grade of C or better).

Co-requisites: CONSVTY 386.

CONSVTY 385 Elementary Music Methods Credits: 3

Basic principles of curriculum planning for music education, investigation of current methods and approaches, and practical teaching experience in laboratory setting. For music majors and non-majors who have extensive musical backgrounds.

Prerequisites: CONSVTY 242, CONSVTY 411C (each with a grade of C or better).

CONSVTY 386 Secondary Music Methods - Instrumental Credits: 3

The organization, scheduling and program building techniques of middle school and high school band and orchestral programs. Areas of study will include curriculum, pedagogical techniques, classroom management, music library organization, budgeting procedures, and basic instrumental techniques.

Co-requisites: CONSVTY 383, CONSVTY 411B.

CONSVTY 387 Secondary Music Methods - Choral Credits: 3

The organization, scheduling and program building techniques of middle school and high school choral programs. Areas of study will include curriculum, pedagogical techniques, classroom management, music library management, budgeting procedures, and basic vocal techniques.

Co-requisites: CONSVTY 382, CONSVTY 411B.

CONSVTY 390 Analysis Credits: 3

Analysis offers students the opportunity to learn and apply multiple analytical techniques to complete movements and larger pieces of music by focusing on the study of pitch, rhythm, form, aesthetics, and issues of performance.

Prerequisites: CONSVTY 242 (with a grade of C or better).

CONSVTY 395 Clinical Foundations I Credits: 3

This course provides the clinical student practice of direct services, procedures, and documentation of the music therapy treatment process (assessment, setting goals and objectives, treatment plan, interventions, data collection, and evaluation). Students will participate in supervision and clinical experiences within the context of community-dwelling older adult populations.

CONSVTY 399A Omni Ensemble (A) Credit: 1

Omni ensemble focuses on the fundamental principles of playing violin, viola, cello, and bass effectively within an ensemble setting. The curriculum is centered on the tenets of fine musicianship, including expressivity, characteristic tone, precise intonation, and healthy posture. The Omni ensemble provides instruction and group playing experience to all members of the UMKC community who demonstrate basic proficiency on a string instrument, and to Conservatory of Music and Dance students studying a secondary string instrument.

CONSVTY 399B Omni Ensemble (B) Credit: 1

Omni ensemble focuses on the fundamental principles of playing violin, viola, cello, and bass effectively within an ensemble setting, and this course is designed to refine students' performance skills on a secondary string instrument and teaching skills through planning and leading rehearsal segments. The central goals of the course are to: refine skills needed to teach effectively in a string ensemble setting; recognize strengths and weaknesses as a string player and teacher of string players; and implement strategies to continue to improve teaching.

CONSVTY 399C Omni Ensemble (C) Credits: 2

Omni ensemble focuses on the fundamental principles of playing violin, viola, cello, and bass effectively within an ensemble setting. The curriculum is centered on the tenets of fine musicianship, including expressivity, characteristic tone, precise intonation, and healthy posture. The central goals of the course are recognition of strengths and weaknesses as a string player; implementation of strategies to improve performance through daily practice; and refinement of expressivity, tone, intonation, and posture on a primary string instrument.

CONSVTY 404 Jazz Improvisation IV Credits: 2

This class is a continuation of Jazz Improvisation III. This course features in-depth analyses of the blues and free improvisation focusing on rhythm changes and bi-tonal/polytonal chords. Course includes an in-depth analysis of styles from Dixieland to contemporary jazz. A strong emphasis is placed on solo construction and development of individual styles.

Prerequisites: CONSVTY 304 (with a grade of C or better).

CONSVTY 405 Philosophical and Pragmatic Foundations of Music Education Credits: 3

This course experience guides students in developing philosophical and social/historical frameworks along with practical skills to assist them in addressing varied opportunities and challenges as a music educator in contemporary American schools.

CONSVTY 407 Audio Intern Program Credits: 1-3

Practical recording experience interning with Conservatory recording and music production labs with one lecture weekly.

CONSVTY 407A Music Therapy Principles and Applications Credits: 3

This course provides knowledge of music therapy services for people with behavioral, neurological, motor, and medical problems. Course content will focus on population characteristics and needs, literature on music therapy to address these needs and applications to clinical work in music therapy.

Prerequisites: CONSVTY 395, CONSVTY 366.

CONSVTY 408 Music in Therapy: Adults Credits: 3

Lecture and clinical demonstration of theory and practice of music therapy with adult clients.

Co-requisites: CONSVTY 369.

CONSVTY 409 Music in Therapy: Children Credits: 3

Lecture and clinical demonstrations of theory and practice of music therapy with children.

Co-requisites: CONSVTY 369.

CONSVTY 410 Internship Credit: 1

A minimum of 900 hours of supervised clinical experience at a Rostered site approved by the American Music Therapy Association or an Affiliate site approved by UMKC Conservatory Music Therapy faculty, to be taken after all other course work for the music therapy degree, excepting any advanced coursework, is completed.

CONSVTY 410A Advanced Music Therapy Principles and Applications Credits: 3

This course provides knowledge of music therapy services for wellness as well as people with emotional, social, and behavioral problems. Course content will focus on population characteristics and needs, literature on music therapy to address these needs and applications to clinical work in music therapy. Additionally, instruction in music therapy program development and implementation will be provided.

Prerequisites: CONSVTY 407A.

CONSVTY 411A Field Experience in Music Credit: 1

To introduce music students to a critical examination of the complex nature of teaching, learning, children, and the music classroom/ensemble setting. Students will be expected to spend 30 hours observing, participating, planning and teaching in an assigned music classroom environment during the semester.

CONSVTY 411B Field Experience in Music Credit: 1

To introduce music students to secondary school settings and further develop observation, planning and teaching skills. Students will be expected to spend 30 hours in a middle/ junior high school music classroom and 30 hours in a high school music classroom for a total of 60 hours during the semester.

Prerequisites: CONSVTY 411A (with a grade of C or better).

Co-requisites: CONSVTY 386 (or CONSVTY 387).

CONSVTY 411C Field Experience in Music Credit: 1

To introduce music students to elementary school music settings and continue to refine observation, planning and teaching skills in secondary school music settings. Students will be expected to spend 30 hours in an elementary school music classroom and 30 hours in either a middle school/junior high or high school music classroom.

Prerequisites: CONSVTY 411B (with a grade of C or better).

Co-requisites: CONSVTY 385.

CONSVTY 412A Student Teaching Music in Elementary School Credits: 3-12

Observation, planning and teaching in an elementary music classroom setting. Students will be expected to spend a minimum of seven weeks teaching full-time under supervision.

Prerequisites: CONSVTY 411C (with a grade of C or better).

CONSVTY 412B Student Teaching Music in Secondary School Credits: 3-12

Observation, planning and teaching in a middle school/junior high or high school music classroom setting. Students will be expected to spend a minimum of seven weeks teaching full-time under supervision.

Prerequisites: CONSVTY 411C (with a grade of C or better).

CONSVTY 417 Opera Workshop Credit: 1

Introduction to stagecraft, movement and acting for opera. Special emphasis on creating active aria, recitative and art song performances.

CONSVTY 417E Scene Study Credit: 1

Preparation, rehearsal and performance of scenes from opera, operetta and music theatre. Scenes will be determined and assigned based on student's needs and development. One-act operas may also occasionally be produced in this class.

Prerequisites: Voice Audition.

CONSVTY 417F Opera Role Preparation and Audition Techniques Credit: 1

Students will work on specific audition techniques for the operatic solo singer, which may include dramatic interpretation of repertoire, stage movement, resume building, and other aspects to assist the performer in the audition process.

Prerequisites: CONSVTY 417 (with a grade of C or better).

CONSVTY 421A Music Theory Review For Graduate Students Credits: 1-3

An intensive review with emphasis placed on analysis.

CONSVTY 421B Aural Skills Review for Graduate Students Credits: 1-3

An intensive review of ear training and sight singing.

CONSVTY 421C Musicianship Enrichment Credits: 1-2

An intensive review of the essential skills and ideas necessary to attain fluency in Western music theory with an emphasis on analysis and aural skills.

Prerequisites: Must be a graduate music student in the Conservatory.

CONSVTY 422A Music History Review (early) Credits: 1-3

Graduate-level review of music in Western civilization from antiquity to 1750. Outside listening is required.

CONSVTY 422B Music History Review (Late) Credits: 1-3

Graduate-level review of music in Western civilization from 1750 to the present. Outside listening is required.

CONSVTY 422C Music History Review Credits: 1-3

Graduate-level review of music in Western civilization from antiquity to the present. Outside listening is required.

CONSVTY 423 Business Jazz And Commercial Music Credits: 3

An introduction to the various elements of the music industry, including production, marketing, unions, contracts, broadcasting, licensing agreements and copyrights.

CONSVTY 425A Arranging for Choral Groups Credits: 2

Practice in transcribing vocal music of the current pop idiom. Analysis and writing in contemporary harmonic idioms. Stylistic analysis of solo and choral writing in operettas and musical plays. Scoring for mixed voices, men's voices, and women's voices.

Prerequisites: CONSVTY 242 (with a grade of C or better).

CONSVTY 425B Arranging Instrumental Credits: 2

Arranging Instrumental.

Prerequisites: CONSVTY 242 (with a grade of C or better).

CONSVTY 426B Jazz Arranging for Small Ensembles Credits: 2

This course will teach the art of Calligraphy as well as the techniques of arranging and orchestration for small jazz ensembles for up to five horns. The course will also include an in-dept study of basic voicings, instrumental sonorities, and some extended forms using intensive listening and score study. UMKC combos, or top Kansas City professionals, will perform final assignments.

Prerequisites: CONSVTY 311 (with a grade of C or better).

CONSVTY 426D Jazz Arranging for Big Bands Credits: 2

This course is a continuation of Jazz Arranging for small ensembles. It will cover the basics of arranging and orchestration techniques for big bands. It includes an in-depth study of basic voicing and instrumental sonorities using intensive listening and score study. The students will have a chance to hear their final arrangements performed at the end of the semester by the Concert Jazz Band.

Prerequisites: CONSVTY 426B (with a grade of C or better).

CONSVTY 427 18th-Century Counterpoint Credits: 2

Analysis and writing in 18th century style and forms including canon, invention and fugue.

Prerequisites: CONSVTY 242 (with a grade of C or better).

CONSVTY 428 Introduction to Post-Tonal Theory Credits: 3

Analysis and writing in contemporary styles.

Prerequisites: CONSVTY 242 (with a grade of C or better).

CONSVTY 431 Orchestration Credits: 3

A detailed study of the scores of major orchestral and wind ensemble works, plus the application of orchestrational concepts in the creation or orchestration of an original piece of music.

Prerequisites: CONSVTY 331 or CONSVTY 234 (with a grade of C or better).

CONSVTY 433 Composition Recital Credits: 3

Preparation and performance of the student's original compositions at one or more concerts sponsored by UMKC Conservatory of Music, with a total of 50 to 60 minutes performance time.

Prerequisites: CONSVTY 333 (with a grade of C or better).

CONSVTY 434 Composition Capstone Credits: 3

Preparation and performance of the student's original compositions at one or more events sponsored by UMKC Conservatory, with a total of 50 to 60 minutes of performance time.

Prerequisites: CONSVTY 433.

CONSVTY 435 Psychological Foundations of Music Credits: 3

The study of the psychological aspects of music including perception, cognition, affect, and preference. An introduction measurement and experimental research including statistical techniques.

CONSVTY 437 Computer Literacy for Musicians Credit: 1

Computing skills for the music teacher. Study of the computer as a tool for music majors who will teach in public school music classes, direct ensembles, or teach at the college or university level. Hands-on practice with file creation and editing, graphics and character set generation, data analysis, preparation of computer based instruction, and data retrieval. For upper level undergraduate and graduate students.

CONSVTY 440 Jazz Keyboard Techniques I Credit: 1

This course is designed for jazz majors to develop skills needed to harmonize tunes at the piano and effectively comp in the mainstream jazz group. It is meant to give the student an organized approach for exploring any harmonic style at the keyboard. Co-requisites: CONSVTY 142.

Prerequisites: CONSVTY 110; must be a jazz major.

CONSVTY 441 Jazz Keyboard Techniques II Credit: 1

This course builds upon techniques in accompaniment, improvisation, and composition at the keyboard begun in CONSVTY 440 (Jazz Keyboard Techniques I) with a move toward more advanced repertoire and harmonic complexity.

Prerequisites: CONSVTY 440 - Jazz Keyboard I

CONSVTY 450 Music and Film Credits: 3

Designed for the general university student, this course will survey the use of music in cinema. It will include sections on music, technology, the film medium and the various ways in which music adds to the cinematic experience. Music majors may enroll for elective credit.

CONSVTY 454 Advanced Seminar in Music Theory Credits: 3

Advanced Seminar in Music Theory offers a rotating option of topics in advanced music theory drawn from the research interests and expertise of the music theory faculty.

Prerequisites: CONSVTY 390 (with a grade of C or better).

CONSVTY 457 Vocal Literature I Credits: 2

Literature for the solo voice. A course covering the literature from 1600 to present times, illustrated by recordings and members of the class and the instructor. Required for B.M. voice majors.

CONSVTY 458 Vocal Literature II Credits: 2

A continuation of CONSVTY 457.

CONSVTY 471 Jazz/Commercial Music Pedagogy Credits: 2

This course is designed to develop skills in the teaching of jazz and commercial music. Students will be exposed to a variety of materials, techniques and philosophies and trained in various techniques of rehearsing and conducting jazz ensembles, including the study of scores and recordings of different styles and rehearsal of the Conservatory's jazz ensembles. Includes an emphasis on structuring jazz and studio music curriculum at the College level.

Prerequisites: CONSVTY 381 (with a C or better).

CONSVTY 490 Independent Study Credits: 1-3

Intensive reading, research projects, creative work, or special performance in the student's major field, selected by the student in consultation with the appropriate faculty.

CONSVTY 491B Pedagogical Practices I Voice Credits: 2**CONSVTY 491K Pedagogy of Music Theory Credits: 3**

Pedagogy of Music Theory

CONSVTY 491N Pedagogy of Instrumental Music Credit: 1

A study of the pedagogical materials and methods used in teaching applied instrumental music.

CONSVTY 497 Seminar-Workshop in Music Credits: 1-4

Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497AR Seminar-Workshop In Music Credits: 1-4

CONSVTY 497HDJ Seminar-Workshop In Music Credits: 1-4
Seminar-Workshop In Music

CONSVTY 497JIM Seminar-Workshop in Music Credits: 1-4

Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497PL Seminar Workshop In Music Credits: 1-4

CONSVTY 498 Research Problems Credits: 2

Individual study under the direction of a faculty adviser, leading to the writing of a formal paper. A public, non-graded presentation of the paper with performance examples is required.

Counseling Psychology and Counselor Education (CPCE)

Courses

CPCE 230 Effective Interpersonal Communication Credits: 3

Theory, and research on interpersonal relationships; students will learn effective communication skills, including understanding verbal and nonverbal behavior, listening, and empathy.

CPCE 425 Positive Psychology Credits: 3

Introduction to current theory and empirical research in positive psychology. Topics explored include happiness, self-esteem, empathy, friendship, optimism, love, achievement, strengths, mindfulness, spirituality, and hope.

Criminal Justice and Criminology (CJC)

Courses

CJC 101 Introduction To Criminal Justice Credits: 3

This introductory overview course is designed to familiarize students with the three main components of the adult criminal justice system: police, courts, and corrections. The course will investigate the viewpoints of offenders, victims, social scientists, the general public, and workers in the system on diverse issues of social control, criminal behavior, treatment and punishment.

CJC 101 - MOTR CRJS 101: Introduction to Criminal Justice



CJC 280 Gangs and Crime Credits: 3

This course will provide students with an overview of what is known about street gangs. Specifically, the course will cover definitional issues, gang organization and structure, gang culture, gang member onset and desistance, among other issues related to criminal street gangs. This course will also encourage students to think critically about communities, crime, and group formation.

CJC 282 Criminal Justice & Criminology in Popular Media Credits: 3

This course examines criminology and criminal justice as it is represented in popular film to explore critically the impact media has on the public's perception of the criminal justice system, the origin of criminal behavior, and the broad sociological constructs of criminology. A key focus is the media's power to shape criminal justice policy and practice.

CJC 301 Theoretical Criminology Credits: 3

A comprehensive examination of the major criminology theories, their philosophical assumptions, and the socio-historical context in which they were articulated.

CJC 302 Methods of Criminological Research Credits: 3

A seminar which explores the interrelationships between sociology theory, research methods, and statistics. May focus on major contemporary issues building on and integrating knowledge obtained in previous courses.

CJC 303 Introduction to Statistics in Sociology and Criminal Justice Credits: 3

A first course in the statistical analysis of quantitative data. Course emphasizes descriptive statistics, probability theory, parameter estimation, bivariate hypothesis testing, and computer applications.

Prerequisites: MATH 110 or MATH 116 or STAT 115 or MOTRMATH 110 or higher level math (with a grade of C- or higher); or ALEKS Score of 61 or higher.

CJC 332 Race, Class and Justice Credits: 3

This course examines the intersection of race and class as it relates to crime and justice. Specifically, the course focuses on race and class in relation to criminological theory and the application of justice system practices and policies.

CJC 335 Blackness as Threat Credits: 3

This course examines from a criminological and socio-legal perspective the historical and contemporary influence of race on perceptions of threat/danger, violence, and justice. The class focuses particularly on the experiences of African Americans in these regards, using recent high-profile cases as empirical lenses through which to discuss this topic.

CJC 338 Immigration and Crime Credits: 3

This course examines concerns regarding a purported connection between immigration and crime in the United States. We will begin through an examination of how immigrants have become increasingly criminalized, shaping an overlap between immigration and criminalization. This class explores the threat narrative regarding the Latinx population, generally, and explore gender disparities in these depictions of Latina women compared to Latino men. Discussions will incorporate details about the immigrant population in the Kansas City metropolitan area and look at examples of how local community agencies and activists are working to address human rights issues.

CJC 351 Policing In The Community Credits: 3

The purpose of this class is to introduce the student to police operations and the effectiveness of different police programs. The material discussed in class focuses on empirical evaluations of police effectiveness, and the role of the police in today's society. This class is divided into four broad areas: the nature and effectiveness of patrol; criminal investigations; special operations including crackdowns, responses to domestic assaults, and hot spot policing; and the latest crime prevention strategies, such as community oriented policing and problem solving.

CJC 354 Policing in America Credits: 3

A comparison of law enforcement and peace-keeping functions of the police provides a basic theme for the course, with examination of several topics related to police accomplishing these functions. Some of the topics covered include police discretion, police professionalism, the police officer as a bureaucratic agent, and police-community relations.

CJC 357 Crime Scene Investigation Credits: 3

This course will examine contemporary issues in crime scene investigation and its relevance to the criminal justice system. It will include an overview of legal issues, proper evidence collection techniques, and the preservation of evidence. Several different types of crime scenes will be explored.

CJC 361 Principles & Practices of Criminal Courts Credits: 3

The course examines the American criminal judicial system, including the history, philosophy, and changing nature of criminal courts. The activities of lawyers, judges, and related professionals are emphasized, and current topics involving the criminal court are discussed.

CJC 364 The Supreme Court And The Criminal Process Credits: 3

Course examines recent Supreme Court decisions on the constitutional aspects of the administration of justice. Topics include the nationalization of the Bill of Rights and jurisdiction with an emphasis on problems involving the Fourth, Fifth, Sixth, Eighth, and 14th Amendments.

CJC 370 Principles Of Corrections Credits: 3

This course explores adult institutional and community-based corrections in the United States. Major areas examined include the evolution of corrections, the process of correctional reform, adult offenders and prison culture, treatment and rehabilitation of offenders, intermediate sanctions, and correctional workers.

CJC 371 Community Corrections Credits: 3

This course will examine intermediate sanctions in the United States, such as probation, halfway houses, boot camps, among others. Specifically, the origin and proliferation of the use of corrections in the community will be explored in depth. The effectiveness of several major community correctional strategies will be explored through a review of the research literature base. Several issues will be highlighted including (but not limited to) ethical constraints, political problems, and treatment effectiveness in light of the use of community sanctions.

CJC 381 Advocacy and Crisis Intervention Credits: 3

This course focuses on the dynamics of sexual violence, advocacy skills, and how communities respond. The course will examine sexual violence in America, dynamics and trauma response to sexual violence, advocacy skills, and the role of community responders, including new strategies for response.

CJC 382 Human Trafficking Credits: 3

This course is designed to equip prospective Criminal Justice professionals with a comprehensive, trauma informed understanding of the issue of human trafficking, as it exists within the context of a modern, developed society. Students will learn the elements of a comprehensive strategy to address this crime; identification, exit, restoration, legal reforms, and prevention.

CJC 385 Victimology Credits: 3

This course addresses the study of crime, criminals and victims. It examines the relationship between victims and offenders. Special treatment is given to criminological as well as victimological theories. A segment of the course will address the sporadic nature of juvenile crime. The course will examine viable strategies to reduce levels of victimization. In the final analysis the course will offer crime prevention strategies.

CJC 390 New Dimensions In Criminal Justice Credits: 3

Examination of contemporary topics, issues or problems related to the development of justice and/or operations in response to criminal and related behaviors addressed by the justice system. May be repeated for credit when the topic changes.

CJC 395 Criminal Justice and Criminology Career Exploration Credits: 3

The course examines opportunities in US Criminal Justice and Criminology within law enforcement, courts, and corrections, local, state, federal, private sector and academia. Students will learn ethics and professionalism, securing internships, preparing for interviews, effective networking and career-building.

CJC 430 Women, Crime And Criminal Justice Credits: 3

This course will focus on the experiences of women and girls with crime in America. The primary areas studied will be females as victims, offenders, and professionals in the criminal justice system. Various criminological theories and research will also be examined in light of gender.

CJC 431 Hate & Bias Crimes Credits: 3

The purpose of this course is to examine the development and enforcement of hate crime law within our legal system. Discussion focuses on the causes and consequences of hate crimes, the constitutional issues associated with bias crime statutes, and the effectiveness of formal and informal social controls for eliminating hate and bias crimes.

CJC 481 Restorative Justice Credits: 3

This course is an introduction to the concept of restorative justice. The course examines the roots of the concept, its theoretical perspective, and its applications in juvenile justice, mediation and correctional settings.

CJC 488 Mentoring Juvenile Justice System-Involved Youth Credits: 3

Youth mentoring experience in a juvenile justice setting with required training and classroom study. Requires successful background check completion.

CJC 490 Directed Studies In Criminal Justice And Criminology Credits: 1-5

Individual research and study in the student's field of interest as approved and directed by major professors. The work involves examination and reporting of selected problems affecting the various agencies of our legal system. Only two of the 490 sequence courses and up to 3 credit hours can be applied to the major. A. Law Enforcement B. Court Operations and Administration C. Corrections D. Legal Theory and Philosophy E. Criminological Theory F. Sociology of Law.

CJC 491 Internship In Criminal Justice Credits: 3-6

Intern experience under faculty supervision in local, state, federal or private agencies working with justice system involved offenders.

Prerequisites: Junior or Senior CJC student.

CJC 492 Topics In Criminal Justice Credit: 1

Specialized, short courses with focused examination of particular topics germane to the study of the justice system. May be repeated for credit.

CJC 495WI Capstone: Criminal Justice And Criminology Credits: 3

This course is designed to integrate student's program of study in the major of criminal justice and criminology. The class examines current conditions of the justice system with respect of race, gender and social class.

Prerequisites: Senior CJC student.

Curriculum and Instruction (EDUC-C&I)

Courses

EDUC-C&I 497 Individual Study Credits: 1-6

Guided study of a selected topic in curriculum and instruction.

Dance (DANCE)

Courses

DANCE 107 Dance Production I Credit: 1

A study of the fundamentals of dance production including sound design and recording techniques, video and video editing, lighting design for dance, stage make-up, and costume design and construction. Laboratory projects will be coordinated with actual dance productions.

DANCE 108 Dance Production II Credit: 1

Continuation of DANCE 107.

DANCE 118 Analysis of Movement Credit: 1

This course in movement analysis will explore various aspects of modern dance. The topics that will be introduced are related to: the differences between ballet vocabulary and modern dance vocabulary, the reason and method behind the creation of modern dance, codified modern dance techniques versus non-codified modern dance techniques, Laban Movement Analysis, the principles of the Graham technique versus folding/unfolding, the Doris Humphreys technique and Lester Horton's fortification. Class discussions, readings, and examples of various works will be used to analyze these topics. Basic improvisational techniques will be utilized to explore these topics.

DANCE 120 Ballet Pedagogy and Analysis Credit: 1

A study of ballet pedagogy, the structure of classical ballet steps, and analysis of movement including basic anatomy, vocabulary and the aesthetics of ballet.

DANCE 141B Ballet Technique and Theory I Credits: 3

Fundamentals of technique of classical ballet at the intermediate level with attention given to strengthening, stretching, anatomical alignment, and developing the ballet aesthetic. This course includes pointe work. Non-Majors by audition.

DANCE 141M Modern Dance Technique and Theory I Credits: 3

This intermediate level dance course is based on the technique and theory of Lester Horton and fundamental elements of Martha Graham. Designed to fortify, stretch, and strengthen the body, the technique is codified into a series of studies designed to cover a wide range of movement vocabulary. Non-Majors by audition.

DANCE 142B Ballet Technique And Theory II Credits: 3

Continuation of DANCE 141B.

DANCE 142M Modern Dance Technique and Theory II Credits: 3

Continuation of DANCE 141M.

DANCE 213C Men's Class I Credit: 1

This course is designed to meet the needs of the male dancer and will focus on developing the technique, strength, and agility needed for a professional career.

DANCE 213D Men's Class II Credit: 1

Continuation of DANCE 213C.

DANCE 216 Composition I Credits: 2

An introduction to dance composition focused on the exploration of improvisation, spatial design, sources of movement, and the basic elements of space, time, shape, and motion with additional emphasis on dynamics, rhythm, and sound sources for choreography. With these skills, students are building a foundation and developing tools in creating choreography.

DANCE 218A Composition II Credits: 2

Continuation of Composition I, further exploring of the fundamentals of choreography including locomotion studies, categories of motion, axial movement and sequential and non-sequeter movement. Focusing on the development of solo works and developing choreographic process.

DANCE 218B Composition III Credits: 2

An introduction to the fundamentals of choreography, including the development of dance compositions through the exploration and definition of specific studies, including floor design, shape design, motion design, and time design. Restricted to dance majors.

DANCE 241B Ballet Technique And Theory III Credits: 3

Continuation of DANCE 142B at the intermediate/advanced level including pointe. Restricted to dance majors.

DANCE 241M Modern Dance Technique And Theory III Credits: 3

Continuation of DANCE 142M, on the intermediate/advanced level. Restricted to dance majors.

DANCE 242B Ballet Technique And Theory IV Credits: 3

Continuation of DANCE 241B, at the intermediate/advanced level including pointe work.

DANCE 242M Modern Technique And Theory IV Credits: 3

Continuation of DANCE 142M, on the intermediate/advanced level.

DANCE 260 Jazz I Credit: 1

A study of Western Theatrical Dance focusing on Jazz and Afrp-Caribbean based forms.

DANCE 261 Jazz II Credit: 1

Continuation of DANCE 260 with a more in deapth study of Western Theatrical Dance focusing on Jazz and Afro-Caribbean based dance forms.

DANCE 301 Dance Science and Kinesiology Credits: 3

Dance Science and Kinesiology is a study of the body which relates specifically to the needs of dancers. Emphasis is placed upon an understanding of the skeletal system, the muscular system, their specific importance to dance technique, kinesiology, and dance injuries and prevention.

DANCE 303 Pilates Credit: 1

A non-impact body conditioning method based on principles of abdominal and scapular stabilization. Introduction to the essential and intermediate mat work, which consists of non-weight bearing exercises. Designed to give the student an understanding of the principles and muscular emphasis behind the Pilates method. Proper alignment, full range of motion, and patterned breathing will be emphasized.

Prerequisites: DANCE 301.

DANCE 304 Fundamentals of Body Alignment and Pilates Credit: 1

A course that is designed for students to develop a greater understanding of body alignment and how to strengthen body alignment through muscular conditioning and Pilates. Non-impact body conditioning exercises that focus on proper alignment, full range of motion, muscular strengthening, core strengthening, muscular imbalances, patterned breathing, and injury prevention will be emphasized. Developing total body strength, alignment, and flexibility through a series of researched dance specific exercises that are carefully designed to reach all muscle groups are presented.

Prerequisites: DANCE 301.

DANCE 305 History Of Dance I Credits: 3

A study of the development of Western theatrical dance forms, from its roots in the European court through the 20th century. Beginning with a brief overview of "early dance," emphasis will be placed on the study of Renaissance theatre spectacles to the rise of the professional dancer culminating with the 20th century contemporary ballet. This course includes outside reading and writing intensive requirements.

DANCE 306 History Of Dance II Credits: 3

Continuation of DANCE 305 exploring the development of dance as a 20th century Western theatre dance form. Development of modern dance, modern dance pioneers, modern dance development in Europe, African-American contribution to modern dance, modern dance influence on the ballet and the Avant-Garde and Post Modern movements will be studied. Outside reading and writing intensive requirements included.

DANCE 307 Every Body Dances Credits: 3

From Dancing with the Stars and So You Think You Can Dance to Dancing in One World. This classroom—based lecture course will explore what dance is and why people dance from a cultural and historical perspective. The course will include reading, video viewing, lectures, discussions, and participation in dance experiences.

DANCE 310 Conservatory Dance Ensemble Credit: 1

A course designed for the performance component of the BFA degree. Students develop and refine professional performance skills through a diverse repertory of choreographic works and backstage theatre activities. All aspects of a complete performance experience including rehearsals, backstage operations, crew activities, sound operation, stage management, costume management, videography, and company class are developed, culminating with fully produced theater performances, special projects, collaborations, and lecture demonstrations.

Prerequisites: DANCE 107, DANCE 108.

DANCE 313A Partnering/Pas De Deux I Credit: 1

This course is designed to meet the needs of the 300/400 level ballet student and will teach the elementary skills of partnering such as turns, lifts, promenades, and balances.

Prerequisites: DANCE 341B (or higher).

DANCE 313B Partnering/Pas De Deux II Credit: 1

Continuation of DANCE 313A.

Prerequisites: DANCE 341B (or higher).

DANCE 319A Composition IV Credits: 2

An intermediate course in Dance Composition focusing on choreographic clarity and intent. Topics such as abstraction, motif and development, and prop and costumes will be explored.

Prerequisites: DANCE 218B.

DANCE 319B Composition IV Credits: 2

An advanced course in Dance Composition focusing on choreographic clarity and intent. Topics such as motif and development, props, music and costumes will be explored. Focus on group work exploration.

Prerequisites: DANCE 218B.

DANCE 341B Ballet Technique And Theory V Credits: 3

Continuation of DANCE 242B, at the advanced level including pointe work. Restricted to dance majors. Repeatable up to 6 credit hours.

DANCE 341M Modern Dance Technique And Theory V Credits: 3

Continuation of DANCE 242M on the advanced level. Restricted to dance majors. Repeatable up to 6 credit hours.

DANCE 342B Ballet Technique And Theory VI Credits: 3

Continuation of DANCE 341B. Repeatable up to 6 credit hours.

DANCE 342M Modern Dance Technique And Theory VI Credits: 3

Continuation of DANCE 341M. Repeatable up to 6 credit hours.

DANCE 403A Modern Technique For Non-Majors Credit: 1**DANCE 404A Ballet Technique Non-Majors I Credit: 1**

The applied and theoretical study of ballet including traditional ballet vocabulary. Written assignments required.

DANCE 405A Modern Dance Repertory I Credit: 1

Modern Dance Repertory is an advanced course for modern dance majors to study and perform the repertoire and works of renowned contemporary choreographers. It is a parallel to the Ballet Variations course which teaches the repertoire of ballet master works.

Prerequisites: DANCE 341M (or higher).

DANCE 405B Modern Dance Repertory II Credit: 1

Continuation of DANCE 405A.

Prerequisites: DANCE 341M (or higher).

DANCE 405C Modern Dance Repertory III Credit: 1

Continuation of DANCE 405B.

Prerequisites: DANCE 341M (or higher).

DANCE 405D Modern Dance Repertory IV Credit: 1

Continuation of DANCE 405C.

Prerequisites: DANCE 341M (or higher).**DANCE 413A Advanced Pas De Deux I Credit: 1**

Advanced pas de deux is designed to meet the needs of the 400 level ballet student with emphasis placed on perfecting advanced partnering skills. Students will have opportunity to learn pas de deux from great ballets giving students the experience and stamina of dancing entire pas de deux. The course provides coaching on both a stylistic approach and a technical approach to the performance of materials presented in class.

Prerequisites: DANCE 441B (or higher).**DANCE 413B Advanced Pas De Deux II Credit: 1**

Continuation of DANCE 413A.

Prerequisites: DANCE 441B (or higher).**DANCE 414A Men's Variations I Credit: 1**

Men's Variations is designed for the male ballet dancer. Students will have the opportunity to learn and perform renowned variations from the Romantic, Classical, and Neo-Classical periods of ballet. This class will give the male student a true professional coaching experience in their training as they prepare for stage.

Prerequisites: DANCE 341B.**DANCE 414B Men's Variations II Credit: 1**

Continuation of DANCE 414A.

Prerequisites: DANCE 341B.**DANCE 415A Variations I Credit: 1**

Variations is designed for the 400 level ballet student. The course will teach female variations to the pre-professional student. Students will have the opportunity to learn and perform renowned variations from Romantic, Classical and Neo-Classical periods of ballet. Students will also work in traditional practice tutus/costumes in order to give them a true professional experience in their training as they prepare for the stage.

Prerequisites: DANCE 342B.**DANCE 415B Variations II Credit: 1**

Continuation of DANCE 415A.

Prerequisites: DANCE 342B.**DANCE 416A Dance Forms I Credit: 1**

Dance Forms I is a two-part course that allows a more diverse study of dance technique styles. The first portion of this course is the study of Hip Hop. Emphasis is placed on Hip Hop vocabulary, style, and culture. The second portion of the course offers Contemporary Dance based on the techniques of ballet and modern movement using collective information as a tool to apply movement investigation.

Co-requisites: DANCE 341M.**DANCE 416B Dance Forms II Credit: 1**

Dance Forms II is a continuation of Dance Forms I offering another two-part course that allows a more diverse study of dance technique styles. The first portion of this course is the study of dances from the African Diaspora, based movement of dances from Continental Africa, the Caribbean, and the Americas. The second portion of the course is Acting for Dancers, which explores imaginative means of communication through purely physical terms.

Prerequisites: DANCE 416A.**DANCE 428 Professional Experience IV Credits: 4**

Continuation of DANCE 427 – Professional Experience III.

Prerequisites: DANCE 427.**DANCE 441B Ballet Technique And Theory VII Credits: 3**

Continuation of DANCE 342B at the pre-professional level including pre-professional pointe work. Restricted to dance majors. Repeatable up to 9 credit hours.

DANCE 441M Modern Dance Technique And Theory VII Credits: 3

Continuation of DANCE 342M at the pre-professional level. Additionally, this course is designed to prepare the student for auditioning and acquiring a performing career. Longer combinations with an emphasis on quick retention of material presented in class will be stressed. Restricted to dance majors. Repeatable up to 9 credit hours.

DANCE 442B Ballet Technique And Theory VIII Credits: 3

Continuation of DANCE 441B, on the pre-professional level including pre-professional pointe work. Repeatable up to 9 credit hours.

DANCE 442M Modern Dance Technique And Theory VIII Credits: 3

Continuation of DANCE 441M on the pre-professional level. Repeatable up to 9 credit hours.

DANCE 493 Senior Capstone Project I Credit: 1

The first semester of the Senior Capstone Project includes planning, organization, and preparation of the final senior project of performance and choreography. Utilization of production techniques, creation or selection of repertoire of a solo work, and beginning the creation of original choreographic work in group form utilizing the tools previously developed from the student's work in composition will be presented during two scheduled showings during the semester. Recommended preparation: DANCE 319B and appropriate technique levels.

DANCE 494 Senior Capstone Project II Credit: 1

A continuation of DANCE 493, the second semester of the Senior Capstone Project, is the culmination and juried public performance of a fully produced concert on the main stage to fulfill the requirements of the BFA in Dance. The student will present an original choreographic group work. In addition, the student will perform in two different dance idioms; including a solo that is self-choreographed or an approved masterwork.

Prerequisites: DANCE 493.

Decision Science and Operations Management (DSOM)

Courses

DSOM 211 Business Analytics I Credits: 3

Business Analytics I is an engaging, interactive course, ensuring the student has relevant, useful analytic skills applicable in both coursework and workplace. The student will learn in an interdisciplinary fashion, by analyzing practical business scenarios from Accounting, Finance, Marketing, Operations, and Supply Chain Management. The student will become proficient in spreadsheet use for data administration, analysis, and visual presentation. The statistical analysis focus in Business Analytics I is on descriptive and predictive measures, equipping the student for analysis, reporting, and business forecasting.

Prerequisites: MATH 110 with a grade of C- or higher; or MATH 120 or higher with a grade of C- or higher; or ALEKS Score of 61 or higher; or ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher.

DSOM 309 Intermediate Business Statistics Credits: 3

This course emphasizes statistical applications in business, and students will complete research projects using one or more multivariate statistical techniques. Topics covered will include statistical software (such as SAS or SPSS), multiple regression, Chi-Square, analysis of variance, non-parametric methods, multidiscriminant analysis, factor analysis, and a brief introduction to structural equation models.

Prerequisites: MATH 206 and STAT 235.

DSOM 311 Business Analytics II Credits: 3

Business Analytics II explores data science, including database access/query, big data, cloud computing, and the internet of things (IoT). The student will consider business ethics, information security, and privacy concerns in today's virtual/gig economy. The student will learn to integrate data from outside sources into various platforms, including Excel, Tableau, and Domo. The student will learn prescriptive analytics and will practice useful optimization methods. Practical interdisciplinary business exercises will draw from Accounting, Finance, Marketing, Operations, and Supply Chain Management, for future use.

Prerequisites: DSOM 211 or STAT 235 or STAT 115 or MOTRMATH 110 and completion of 45 hours.

DSOM 326 Production/Operations Management Credits: 3

This course presents an introduction to the concepts, models, and methods of operations management. Students will study approaches to planning, scheduling, and controlling product and service facilities, processes, cost, quality, quantity, production, capacity, inventory, and distribution requirements. Computer applications and computer-based operations control systems will be introduced as a means to effectively manage the operations functions of both product and service organizations.

Prerequisites: ECON 202 and STAT 235 and completion of 45 hours.

DSOM 340 Supply Chain and Operations Management Credits: 3

The student will become familiar with and appreciate the concepts, models, methods, and technologies of supply chain and operations management in modern enterprises. Students will become familiar with the integrated view of procurement, operations and logistics management. Students will also understand the management of the flow of products from raw material sourcing and acquisition through delivery to the final user. Students will also become familiar with the modern technologies used in supply chain and operations management.

Prerequisites: DSOM 211 (or STAT 235 or STAT 115 or MOTRMATH 110) and ECON 202 and completion of 45 hours.

DSOM 346 Service Industry Analytics Credits: 3

This course presents an introduction to the concepts, models, and methods of decision making in service operations management. Students will study approaches to project management, decision analysis, scheduling, queuing systems, optimization/allocation models, forecasting, and profitability analysis. Computer applications and computer-based operations control systems will be introduced as a means to effectively manage the operations functions of service organizations.

Prerequisites: DSOM 326 or DSOM 340.

DSOM 431 Quality Management and Process Improvement Credits: 3

A study of planning and managing effective quality and processes in organizations. Students are expected to master important quality management and process improvement tools including Six Sigma, Statistical Process Control, TQM, Theory of Constraints, and other contemporary tools via appropriate software, case studies, and projects.

Prerequisites: DSOM 309 or DSOM 311; and DSOM 326 or DSOM 340.

DSOM 432 Spending Analytics, Contracts, and Risk Management Credits: 3

Students will advance to competency their understanding of the role of contracting, sourcing and supply management to support firm strategies. A comprehensive review of the process of costing, pricing, supplier evaluation and development and product cost aggregation will be used in analyzing spend and improving the supply chain partnerships, transactional relationships and intermediary distributors, agents and brokers with the goal of risk mitigation, cost efficiency and value added.

Prerequisites: DSOM 326 or DSOM 340.

DSOM 442 Logistics, Transportation, Warehousing, and Distribution Credits: 3

Logistics, Transportation, Warehousing and Distribution teaches effective, efficient design and management of supply chain networks, including complexities and challenges of warehousing, channel distribution and transportation, global logistics, value chains and performance management. We focus on practical examples of integrated networks of activity and data-driven performance-based logistics decisions.

Prerequisites: DSOM 326 or DSOM 340.

DSOM 443 Project Management Credits: 3

Planning and control of projects, to include network models, risk analysis, time reduction, resource scheduling, leadership, and evaluation.

DSOM 444 Digital Transformations and Supply Chain Credits: 3

This course provides the foundation for understanding the key issues associated with the digital transformation in the supply chain landscape and its implications for security and business continuity. Students learn about emerging technologies such as artificial intelligence (AI), blockchain, cloud computing, and the Internet of things (IOT) as they relate to operations and supply chain management. They learn how these technologies can contribute to the flexibility, traceability, compliance, and accountability in production, transportation, warehousing, and distribution. They also learn about the security risks associated with the use of these technologies.

Prerequisites: DSOM 326 or DSOM 340.

DSOM 445 Strategic Sourcing and Supplier Relationship Management Credits: 3

This course explores the roles of procurement and strategic sourcing as components of an overall supply chain strategy, and the impact this strategy has on the competitive success and profitability of organizations. The course is structured into three segments: before you source, how to source, and after sourcing.

Prerequisites: DSOM 326 or DSOM 340.

DSOM 487 Special Topics Credits: 3

Special topics in decision science and operations management.

Dental Hygiene (DENT-HYG)

Courses

DENT-HYG 3000 Dental Morphology And Occlusion Credits: 2

Designed to provide the dental hygiene student with a sound knowledge base in dental morphology and occlusion through discussion and laboratory experiences. Students will learn to identify anatomical structures of each tooth and be able to communicate these findings effectively with colleagues and patients in both verbal and written forms. The clinical application and relevance of dental morphology in the practice of dental hygiene will be emphasized. Special consideration will be given to root morphology as it relates to periodontal instrumentation. Activities will include: identification of extracted teeth, terminology exercises, dental charting experiences and identifying classifications of occlusion.

DENT-HYG 3020 Dental Radiology Credits: 2

Lecture and clinical practice of dental radiographic procedures. Topics included are radiation hygiene, taking and developing radiographs, processing and mounting films, and radiographic interpretation. Clinical experience is required throughout the remaining semesters.

DENT-HYG 3030 Introduction to Histopathology of Oral Tissues Credits: 2

A comparison of the microscopic anatomy of healthy and diseased oral tissues. The major goal of this course is to integrate basic sciences (embryology, descriptive histology, and cell biology of oral tissues) with clinical sciences. The gap between the basic and clinical sciences is not always easy to bridge; this course is designed to bridge the "gap." This course provides students with an introduction to orofacial histology and embryology and pathology that may arise from the tissues of the head, neck, and oral cavity.

Prerequisites: Dental hygiene student.

DENT-HYG 3080 Introduction to the Preventive Practice of Dental Hygiene Credits: 4

This course will introduce theories and rationales for basic clinical dental hygiene care (infection control, oral examination and fundamentals of instrumentation) in diverse populations. Practical application of specific clinical skills will be introduced in the classroom and applied in the clinical setting.

DENT-HYG 3080L Preclinical Dental Hygiene Credits: 2

This course emphasizes the practical application of the fundamental concepts and principles of patient care in a diverse society discussed in DENT-HYG 3080. Emphasis is placed on patient assessment and techniques of instrumentation for examination and dental hygiene treatment. After the student has mastered basic skills, he/she will begin to provide direct dental hygiene services.

DENT-HYG 3200 General and Oral Pathology Credits: 2-3

An introduction to the principles of general pathology and organ system pathology including inflammation, immunity and diseases of immune origin, genetic diseases, neoplasia with emphasis on oral cancer, and diseases of selected organ systems including pulmonary, cardiovascular, hematopoietic, endocrine, skeletal, gastrointestinal, hepatic, pancreatic and other systems as time permits.

DENT-HYG 3210 Applied Nutrition and Biochemistry Credits: 2

This course introduces biochemistry and nutrition, encouraging identification of sources and application of specific nutrients for health. Contents familiarize students with roles of nutrition and places emphasis on the hygienist's role as nutritional educator- utilizing skills of recognition, prevention and treatment of related disease(s) and support of good oral health. Topics build on previous knowledge of chemistry, biology and physiology in application to health, coupled with deficient/optimal nutrition. Students will utilize motivational interviewing pertaining to counseling to help patients assign values, prioritize, and meet agreed upon goals. The format will include face-to-face lectures, online supplements, short labs, and group assignments/presentations.

Prerequisites: CHEM 211 and CHEM 211L; LS-PHYS 217.

DENT-HYG 3220 Dental Biomaterials Credits: 2

This course is designed to provide the dental hygiene student with a sound knowledge base in the science and manipulation of dental biomaterials. Through lectures and laboratory session, the student's ability to make clinical judgments regarding the application of dental biomaterials and the ways in which materials react to the oral environment will be enhanced.

DENT-HYG 3260 Principles Of Periodontics Credits: 2

This course in Periodontics will cover the biological and clinical aspects of periodontal health and pathology. An introduction to the supporting structures of the teeth will provide the foundation of understanding pathogenesis, histopathology and subsequent therapeutic treatment of periodontal diseases. The dental hygienist's role in recognition, prevention and treatment of periodontal diseases and maintenance of periodontal health is examined.

DENT-HYG 3280C Dental Hygiene Clinic I Credits: 3

Students will further develop clinical skills and techniques learned in DENT-HYG 3080L and previous courses by providing services to patients.

DENT-HYG 3285 Seminar In Dental Hygiene I Credits: 2-3

This course expands on theory and background presented in DENT-HYG 3080. Topics include expanding dental hygiene skills required for the care of patients and continued development of problem solving abilities and critical thinking skills as they relate to the provision of dental hygiene care. Provide students with a more insightful view of the role of the dental hygienist in the delivery of comprehensive patient care.

DENT-HYG 3300 Radiographic Interpretation Credits: 0.5

The purpose of the course is to introduce interpretation of radiographic anomalies and pathology just prior to the clinical experience. Since there was little time for an emphasis on radiographic interpretation during your second year radiology course, this lecture and participation course supplement clinic instruction in diagnosis of the patient's oral needs and formulation of a treatment plan. Upon completion of this course, the student should be able to recognize simple pathology and radiographic anomalies.

DENT-HYG 3320 Oral Health Behavior Change Credits: 3

The purpose of this hybrid course is to prepare the junior dental hygiene student to effectively assess and individualize preventive oral health care through the use of brief motivational interviewing. The course will include evidenced based information in dental caries and caries risk assessment, caries preventive measures, introduction to periodontal disease, dental stains, and management of xerostomia, halitosis, and dentinal sensitivity, oral healthcare products and how to care for an oral appliance. The student will subsequently apply course concepts to facilitate patient behavior change in the clinical setting. Recommended preparation: a course in General Psychology.

DENT-HYG 3340 Principles Of Public Health Credits: 2

This course introduces the student to principles of public health, the field of epidemiology, health care delivery systems, public health terminology and teaching methodologies to use in culturally diverse community settings. Students will have the opportunity to assess a target population, plan, implement and evaluate appropriate programs. Students will also apply theories and skills of communication and education while preparing and presenting oral health education programs for various population groups.

DENT-HYG 3620 Civic Engagement Credits: 0.25

Service learning experiences expose students with different opportunities to engage the community. Students can choose from approved experiences and participate based on their interest and skill level. Students will research, participate, and reflect on their experiences.

DENT-HYG 4001 Clinical Oral Radiology Credit: 1

Clinical application of radiology principles taught in preceding terms. To provide clinical skills to safely make and interpret radiographic images for the provision of oral health care.

DENT-HYG 4020 Local Anesthesia And Pain Control Credits: 3

This course is designed to prepare dental hygiene students for the safe, effective administration of local anesthesia and nitrous oxide sedation. Included are content areas in anatomy, physiology, pharmacology, and emergency management as they relate to the administration of local anesthetics, nitrous oxide, and pain control. Laboratory sessions are structured to develop actual experiences in administration of local anesthetics and nitrous oxide. Various mechanisms for pain control are also covered. Methods of presentation include lecture, large group discussion, laboratory and clinical participation.

DENT-HYG 4040 Foundations of Teaching Credits: 2

This course provides an introduction to the evidence-based best practices in course design for students who are preparing for a career in teaching and for those who simply wish to learn more about classroom instruction. Students will explore outcomes centered course design and practical and effective instructional strategies. Content application activities include syllabus development, writing objectives, constructing lesson plans, preparing presentations and developing course management sites.

DENT-HYG 4050 Periodontics II Credit: 1

This course in Periodontics will provide an introduction to Phase II and III therapy. Periodontal decision making will be emphasized. The dental hygienists' role in recognition, prevention and treatment of periodontal diseases and maintenance of periodontal health is further examined.

Prerequisites: DENT-HYG 3260.

DENT-HYG 4060C Dental Hygiene Clinic II Credits: 2

The student will continue to develop competency in basic dental hygiene skills. Principles of periodontal techniques, such as non-surgical periodontal therapy, supportive treatment procedures and comprehensive patient care in a diverse society will be emphasized. The student will be asked to demonstrate professional management skills and productivity.

DENT-HYG 4065 Seminar in Dental Hygiene II Credit: 1

This seminar course is offered in conjunction with DENT-HYG 4060C, and expands upon theory and background presented in other dental hygiene courses within the curriculum which will involve further development of their critical thinking/problem solving skills regarding patient care. Students will be provided with further instruction regarding advanced instrumentation, cultural diversity, motivational interviewing and other technological advancements utilized in dental hygiene care.

Co-requisites: DENT-HYG 4060C.

DENT-HYG 4080 Introduction to Research and Evidence Based Decision Making Credits: 2

This is a lecture/discussion course with assigned exercises in the research process and evaluating scientific studies. Students will apply basic principles of research design and methodology to the critical analysis of contemporary oral health related literature focusing on the review and evaluation of literature as it relates to the practice and profession of dentistry and dental hygiene with the intent of utilizing an evidence-based approach to care.

DENT-HYG 4100 Pharmacology Credits: 3

An overview and introduction to the major drug groups and common drugs taken by dental outpatients. Course includes the basic principles and general theories of drug action, basic pharmacokinetics, their mechanisms of action and therapeutic uses and the relative dental significance of each.

DENT-HYG 4110 Introduction to Research Methodologies Credits: 2

This is a lecture/discussion course with assigned exercises in the research process and evaluating scientific studies. Students will learn the basic principles involved in research design and methodology and will apply those principles to the critical analysis of contemporary health related literature. Focus on the review and evaluation of literature as it relates to the practice and profession of dentistry with the intent of utilizing an evidence-based approach to care will be stressed.

DENT-HYG 4115 Practicing in the Dental Hygiene Public Health Safety Net Credits: 3

The course is designed to increase the knowledge base of the practicing dental hygienist in the area of public health dentistry, including health promotion, disease prevention, current legislation, evidence based treatment, school based portable dentistry, coalitions, treating the geriatric and disabled populations, as well as how to write and secure.

DENT-HYG 4120C Dental Hygiene Clinic III Credits: 4

The student will continue to develop competency in intermediate dental hygiene skills. Principles of periodontal techniques, such as root planning, pain control and supportive techniques will be stressed. Comprehensive treatment planning and implementation of comprehensive care to a diverse patient population will be the focus of this course. Continued development of professionalism, management and critical thinking skills will be emphasized.

DENT-HYG 4125 ECP III Training Course Credits: 2

The ECP III Training Course is designed to prepare a registered dental hygienist to apply for the Kansas Extended Care Permit III. Hygienists with the ECP III certificate can practice under the sponsorship of a dentist in a variety of public health settings including schools and long term care facilities in Kansas.

DENT-HYG 4130 Introduction to Instructional Technologies and Online Learning Credit: 1

The web-based multimedia course will examine the mediated communication process using Internet tools and is designed to help the incoming student become prepared to succeed in their degree program using online technologies. Students will examine the changes and challenges associated with mediated synchronous and asynchronous technologies. The course will be delivered in four different modules.

DENT-HYG 4150 Portfolio Capstone Credit: 1

The capstone course serves as the culminating experience for students in the BSDH Degree Completion Program. During the Capstone course, students will create a coherent and cohesive body of work reflective of attainment of the competencies for the BSDHDC program—in the form of an e-Portfolio.

DENT-HYG 4210 Practice Management Credits: 3

Current relevant issues impacting dental hygiene practice are discussed. Dental practice economics, communicating and management in a diverse society are included. Also included in this course is the study of jurisprudence as it relates to the practice of dental hygiene.

DENT-HYG 4220 Interdisciplinary Community Oral Health Field Experiences Credits: 3

Students will practice skills/principles learned in Anchor I-II by participating in interdisciplinary community projects and clinical activities targeting Kansas City's urban and surrounding rural environments. Students will use strategies of assessment, program planning, implementation and evaluation to improve existing, develop new, and reflect on service projects' purposes, methods, and consequences. This course is taught with DENT-HYG 4120. Major emphases include team collaboration/leadership of civic action, community programming to enact measurable and meaningful change, respectful communication considering health literacy and associated disparities among patients and health care providers, to express ideas supporting wellness through improved oral health.

Co-requisites: DENT-HYG 4120.

DENT-HYG 4240 Ethics In Professional Practice Credit: 1

Study of ethics and ethical issue related to the practice of dental hygiene within a diverse society. Includes application of ethical principles to real-life situations.

DENT-HYG 4260 Senior Seminar Credits: 2

This course serves as a means of synthesizing information from all courses in the dental hygiene curriculum and applying content to patient cases and practice management issues. Case-based learning (CBL) will be utilized to review significant content areas as well as to introduce subjects not previously encountered during previous clinical experiences. Case based/problems based learning (PBL) with faculty facilitation will assist students in managing patient cases. This course is also designed to assist in preparing senior dental hygiene students for the written and clinical examinations required for licensure.

DENT-HYG 4260C Dental Hygiene Clinic IV Credits: 4

The student will have the opportunity to reach competency in all clinical skills. Emphasis will be placed on decision-making, problem-solving, critical thinking, appointment and time management. The course will focus on comprehensive dental hygiene care to a diverse population.

DENT-HYG 4320 Special Patient Care Practicum Credits: 2-4

Through outside agency affiliation, students will have the opportunity of applying the course content from Principles of Public Health, Dental Health Education and DHE-Practicum. Sites for participation include hospitals, nursing homes, and residential and day activity centers for developmentally disabled.

DENT-HYG 4340 Community Dentistry Practicum Credits: 2-4

The community dentistry practicum provides the student with an opportunity for personal exploration of the many settings of community dentistry. These experiences may lead the students into clinical activities or design and implementation of dental health educational programs. The student will have the opportunity to work with various community health professionals in the Kansas City area. The student will need reliable transportation and should expect some experiences to require travel.

DENT-HYG 4350 Periodontal Therapy Practicum Credits: 1-4

This course is designed for the dental hygiene student who desires increased experience with periodontal skills. The course involves practical experience in the graduate periodontics clinic working with a periodontology resident. Two clinic sessions per week; one seminar scheduled weekly.

DENT-HYG 4360 Practice Management Practicum Credits: 3

Current relevant issues impacting dental hygiene practice are discussed. Dental practices, economics, communication and management are included. Practical application of course would include the development of a dental office operating manual.

DENT-HYG 4380 Research Practicum Credits: 2-4

This course provides an opportunity to apply the content in the previous course Introduction to Research Design. The protocol identified may be a basic science, clinical or community dental hygiene problem. The field experience may deal with a basic or applied, descriptive or explanatory research question.

DENT-HYG 4500 Seminar on Issues in Higher Education for Health Professionals Credits: 2-4

This course is designed to introduce the student to matters encountered in higher education. specific to dental hygiene education. Weekly readings, assignments, and sessions will familiarize the student in topics such as: writing resumes and cvs, case-based learning, accreditation, promotion and tenure, and assessment.

DENT-HYG 4600 Evidence Based Decision Making in the Clinical Practice of Dental Hygiene Credits: 2-4

This course is designed for the graduate and degree completion dental hygiene student and expand on the student's basic knowledge of the dental hygiene process of care. Utilization of evidence based decision making skills will be explored in an effort to incorporate current scientific literature, personal clinical experience and patient preferences as it relates to the delivery of comprehensive patient care. Skills taught in this course will enhance background knowledge related to the dental hygiene process of care and help to foster an attitude of critical analysis and lifelong learning.

DENT-HYG 4620 Introduction to Educational Methodology Credits: 3

This course is designed to introduce the student to basic educational methodologies and to provide participants with a better understanding of the teaching/learning process. The course includes units on instructor/student relationships, educational approaches, educational ethics and professionalism, the scholarship of teaching and learning and curriculum theory.

DENT-HYG 4625 Dental Hygiene Administration Credits: 2

This course is designed for the post-certificate dental hygiene student. Major topic areas include accreditation of dental hygiene programs, the impact of National and State Board examinations on curriculum planning, selective admissions policies and procedures, faculty evaluation, promotion and tenure and students' rights.

DENT-HYG 4630 Practicum in Dental Hygiene Administration Credits: 2-4

Under the supervision of the Director of Dental Hygiene, the student will gain actual experiences in the daily administration of a dental hygiene program. The student may contract for responsibilities such as admissions, budget preparations, course scheduling, report writing and student academic counseling.

DENT-HYG 4635 Practicum In Clinical Supervision Credits: 2-4

Under the supervision and permission of the Dental Hygiene Clinical Supervisor, the student will gain actual experience in the duties involved in coordinating the clinical education of a dental hygiene student. The student may contract for responsibilities such as, coordinating mock board examinations, maintaining student clinical records, developing faculty and student clinic schedules and report writing.

DENT-HYG 4640 Student Teaching and Conference I Credits: 2-4

Under the direction of a supervising professor, the student may select teaching experience in the classroom areas of their choice. The student develops behavioral course objectives, comprehensive lesson plans, test and examination items, classroom presentations, and prepares student evaluations in the selected classroom teaching areas. The student may select teaching assignments in one of the developed externship student teaching programs. Conferences will be held in conjunction with the course.

Prerequisites: DENT-HYG 4040, DENT-HYG 4620.

DENT-HYG 4650 Student Teaching and Conference II Credits: 2-4

The student will continue to develop teaching skills in laboratory and/or classroom areas as selected by the student under the direction of a supervising professor.

Prerequisites: DENT-HYG 4640.

DENT-HYG 4660 Independent Study in Dental Hygiene Credits: 1-4

This course is designed for the dental hygiene student who desires independent study of a particular problem or area of interest in dental hygiene education.

DENT-HYG 4680 Dental Hygiene Clinical Instruction I Credits: 2-4

Continued development of competency as a clinical instructor under the supervision of the dental hygiene faculty. Requires a half-day in clinic student instructor.

Prerequisites: DENT-HYG 4640.

DENT-HYG 4685 Dental Hygiene Clinical Instruction II Credits: 1-4

A continuation of DENT-HYG 4680. Under the supervision of the dental hygiene faculty, students may continue to develop skills as a dental hygiene clinical instructor.

Prerequisites: DENT-HYG 4680.

Discourse (DISC)

Courses

DISC 100 Discourse I: Reasoning and Values (Speech and Writing) Credits: 3

"Discourse" refers to the language, images, styles, genres, behaviors and other forms of communication used by specific social and professional groups. The techniques of discourse analysis and language awareness taught in this course will enable you to position yourself socially and professionally, helping you understand the discourse conventions, reasoning, and "commonsense" assumptions that create and define academic, political, professional, and other discourse formations and communities. Students will produce, perform, and analyze college-level, oral and written texts; and they will learn how written and oral performances function together in specific discourse communities.

Co-requisites: Anchor I.

DISC 200 Discourse II: Culture and Diversity (Writing and Speech) Credits: 3

Students will produce, perform, and analyze college-level, oral and written texts that are based on sustained academic research. Students will continue to develop their understanding of discourse analysis and language awareness in the context of a range of discursive forms. Students will interpret and synthesize college-level scholarship that addresses how diverse discourse communities define, evaluate, and transform individual, institutional, and cultural identities.

Prerequisites: DISC 100.

Co-requisites: Anchor II.

DISC 300 Discourse III: Civic and Community Engagement (Speech and Writing) Credits: 3

Students will put the knowledge and skills learned in Discourse I and II into practical use by engaging in a service-learning project that is interdisciplinary and intercultural. Students will use strategies of critical discourse analysis and critical language awareness to target the appropriate audience/recipients for their research project, to develop innovative and rhetorically effective texts, and to reflect on their project's purpose, methods, and consequences.

Prerequisites: DISC 200.

Co-requisites: Anchor III.

DISC H100 Discourse I: Reasoning and Val Credits: 3

"Discourse" refers to the language, images, styles, genres, behaviors and other forms of communication used by specific social and professional groups. The techniques of discourse analysis and language awareness taught in this course will enable you to position yourself socially and professionally, helping you understand the discourse conventions, reasoning, and "commonsense" assumptions that create and define academic, political, professional, and other discourse formations and communities. Students will produce, perform, and analyze college-level, oral and written texts; and they will learn how written and oral performances function together in specific discourse communities.

Co-requisites: Anchor I.

DISC H200 Discourse II: Culture and Diversity (Writing and Speech) Credits: 3

Students will produce, perform, and analyze college-level, oral and written texts that are based on sustained academic research. Students will continue to develop their understanding of discourse analysis and language awareness in the context of a range of discursive forms. Students will interpret and synthesize college-level scholarship that addresses how diverse discourse communities define, evaluate, and transform individual, institutional, and cultural identities. This course is associated with the anchor course Culture and Diversity and prepares students for DISC 300.

Prerequisites: DISC 100.

Co-requisites: Anchor II.

DISC H300 Discourse III: Civic and Community Engagement (Speech and Writing) Credits: 3

Students will put the knowledge and skills learned in Discourse I and II into practical use by engaging in a service-learning project that is interdisciplinary and intercultural. Students will use strategies of critical discourse analysis and critical language awareness to target the appropriate audience/recipients for their service project, to develop innovative and rhetorically effective texts, and to reflect on their project's purpose, methods, and consequences. This course is taught in close connection with the anchor course Civic and Community Engagement.

Prerequisites: DISC 200.

Co-requisites: Anchor III.

Economics (ECON)

Courses

ECON 100 Economics Explained Credits: 3

Everything you need to know about how the economy works and where it's going. This course simplifies and clarifies the vocabularies and concepts used to describe all the important economic phenomenon in our society today: unemployment, trade deficits, government budget deficits or surpluses, inflation, investments, and customer debt. It describes where we've been (economically) and assess the future of the economic system we call capitalism.

ECON 100 - MOTR ECON 100: Introduction to Economics

**ECON 150 Introduction To Labor Studies Credits: 3**

This interdisciplinary course offered by The Institute for Labor Studies, covers the role of workers and the labor movement in society and the American political and economic system. Students will gain an overview, from a labor viewpoint, of the organization of work and workers, collective bargaining and representation, and labor's rights, roles, and strategies in a democracy and in the global economy. A particular focus will be the image of the working class and organized labor in the media and among public perception.

ECON 201 Introduction to Economics I Credits: 3

Economics I deals primarily with macroeconomic or national economic concepts, the economics of the determination of recession, inflation, maintenance of full employment and economic growth, with an emphasis upon the economics of modern Keynesian analyses. It further introduces the economics of Marx and Ayres and discusses relevant and current economic issues. ECON 201 and ECON 202 are prerequisites for most other economics courses.

ECON 201 - MOTR ECON 101: Introduction to Macroeconomics



ECON 202 Introduction To Economics II Credits: 3

Economics II deals primarily with microeconomics, firm analysis, the principles of demand, supply, elasticity, price determination, costs, income distribution, market structures, trade, and other related social, economic issues. ECON 201 and ECON 202 are prerequisites for most other economics courses.

ECON 202 - MOTR ECON 102: Introduction to Microeconomics**ECON 301 Macroeconomic Analysis Credits: 3**

This course provides more in-depth analysis of the macroeconomy. It examines the economic system as a whole and the ways in which its functioning is affected by the behavior of the interdependent sectors of which it is composed. It details the major factors affecting national income and the use of sectoral accounts in analyzing economic prospects and policies.

Prerequisites: ECON 201.

ECON 302 Microeconomic Analysis Credits: 3

This course provides in-depth analysis of the microeconomy. It examines the functioning of the individual enterprise and households. It specifically details problems confronting business enterprises operating under different types of market situations. It features analyses of the influence of the prices factors of production on methods of production and the effects that changes in income levels and in relative prices have on sales of different types of goods and services.

Prerequisites: ECON 202.

ECON 303H Special Issues In Economic Credits: 3

Readings and discussions of selected economic topics. Content varies over time as economic conditions change. Designed for outstanding students in Principles of Economics.

ECON 314 Political Economy of Race, Class And Gender: Theory, History, And Policy Credits: 3

Analyzes how the political economy of race, class and gender discrimination result in differences in opportunities and outcomes in society. Begins with an introduction to political economy. Then moves to an historical overview of the origins of oppression based on gender (patriarchy), class and race and their relation to the rise and development of capitalism. Discursive and non-discursive factors are investigated. Alternative theoretical approaches to understanding the intersections of race, class, and gender are evaluated. Policy debates on issues related to affirmative action, education, welfare, employment, and others are considered.

ECON 331 Money And Banking Credits: 3

A study of the structure, operations and problems of banks and other financial institutions with emphasis on their macroeconomic performance. The importance of banking in the financial system and the influence of Federal Reserve monetary policies are also studied.

Prerequisites: ECON 301.

ECON 336 The Kansas City Economy Credits: 3

This course explores the Kansas City economy in depth from both a micro and macro perspective. The macro approach details how important the Kansas City economy is to the state of Missouri, to the US economy, and in the international arena. The micro approach details the contribution of the many different sectors of the KC area to the overall local economy.

ECON 340 Collective Bargaining Credits: 3

This course involves a study of the economics and process of collective bargaining in the labor sphere, including contract negotiations, contract enforcement, and methods to resolve bargaining disputes. Both theoretical and applied issues in collective bargaining will be addressed. Students will participate in a contract bargaining simulation.

ECON 341 Union Leadership and Administration Credits: 3

This course focuses on the roles and challenges of union leadership in a changing environment. Topics include the union leaders' role as a representative, organizer and educator as well as administrative responsibilities within the union and the relationship with enterprise management in both adversarial and participatory situations. Options for leadership styles and organizational models will be discussed and explored in both theory and practice. Leaders will develop their skills of motivation, speaking, strategic planning and managing complex campaigns and diverse organizations.

ECON 353 Financial Analysis And The Economy Credits: 3

This course examines techniques of financial evaluation used by individuals, corporate managers, and portfolio analysts. Focus of the course will be on the interaction of the mechanics of analytical methods and economic activity. Topics covered will include individual portfolio building, asset evaluation, and financial market theory.

Prerequisites: ECON 301.

ECON 395A Economic Issues Credit: 1**ECON 395C The Economics Of Energy Credit: 1****ECON 402 Labor and the Global Political Economy Credits: 3**

This course will examine current issues, trends, and developments which are shaping labor in today's global economy. Students will analyze the shifting balance of power between labor and capital, the role of government, and evaluate the strategic options for workers and unions operating in a global environment.

ECON 404R American Economic History Since 1865 Credits: 3

The course deals with the emergence of Industrial American since 1865. It covers the rise to dominance of the large modern corporation, the problem of economic and social instability and stability, the rise of trade associations, cartels, and government regulation in an unstable economy, and the evolution of American economic policy and national economic planning.

ECON 404RR American Labor History Credits: 3

This course examines history of work and the working class in the U.S. from 1750 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.

ECON 406WI History Of Economic Thought Credits: 3

Analysis of basic concepts of economic thought, their historical sources and significance.

ECON 411 Geographic Information Systems (GIS) for Urban Economic Development Credits: 3

An advanced quantitative methods course featuring the application of Geographic Information Systems (GIS) to the problems of urban economic development. Surveys federal, state, and local geospatial and attribute data resources, including Census Bureau TIGER files, and provides training in geodatabase construction and management. Geospatial processing, editing, and address geocoding are also covered. Formal analytical methods (cartographic aesthetics and visualization, spatial analysis, exploratory data analysis, network analysis, crime analysis, etc.) are all applied in the context of the problematics of urban and regional economic development.

Prerequisites: GEOG 203 or UPD 203.

ECON 412 International Trade And Development Credits: 3

This course emphasizes the global allocation of resources and distribution of income in the analysis of economic development and international trade. Major topics include various theories of economic development, comparative advantage, terms of trade, tariffs, quotas, economic integration and the use of trade to foster economic development.

Prerequisites: ECON 301.

ECON 416 Law And Economics Credits: 3

This course will examine the use of economic principles in the analysis and application of public and private law. Emphasis will be given to the efficiencies of laws in meeting social objectives, how laws can be modified to become more economically efficient, and the uses of economics in the actual practice of the law. Issues covered will include proofs of liability in antitrust, contracts and employment law using statistical and economic analysis, and the calculation of economic damages in commercial, employment and personal injury/death litigation. Graduate students will be assigned a specific research paper.

ECON 420 Environment, Resources And Economic Growth Credits: 3

This course focuses on the theory and policy issues involved in resource recreation and depletion; environmental destruction, preservation and recreation; and the interrelation of these problems of and prospects for economic growth.

ECON 421 Mathematical Economics Credits: 3

An introduction to mathematical methods as applied to the questions addressed by economists. The principal methods to be applied are matrix algebra and differential calculus in the context of optimization. Other topics may include integral calculus, differential equations, difference equations, or linear and non-linear programming.

Prerequisites: ECON 301, ECON 302 and (MATH 206 or MATH 210).

ECON 425 Intermediate Economic Statistics Credits: 3

An introduction to the empirical side of economics. Estimation theory and the properties of commonly used estimators are covered. Some of the more important topics dealt with are: multiple regression, heteroscedasticity and autocorrelation in regression analysis, analysis of variance and the use of qualitative variables in regression analysis. Hands-on work with computer software designed for econometrics is stressed. No experience with computers necessary.

Prerequisites: ECON 301 and ECON 302.

ECON 429 Environment, Resources And Economic Growth Credits: 3

This course focuses on the theory and policy issues involved in resource creation and depletion; environmental destruction, preservation and recreation; and the interrelation of these problems of and prospects for economic growth.

Prerequisites: ECON 201, ECON 202.

ECON 431 Monetary Theory And Policy Credits: 3

A study of the nature and functions of money and the financial system, with emphasis on monetary theory and its application to current banking and financial problems. Recent contributions to monetary theory and current literature.

Prerequisites: ECON 201, ECON 202, ECON 301.

ECON 435 Public Finance Credits: 3

Problems of public and private sector decision making of revenue-expenditure policies and an examination of the actual legal, political and economic policies for revenues and expenditures of federal, state and local governments.

Prerequisites: ECON 201, ECON 202, ECON 302.

ECON 437 State And Local Government Finance Credits: 3

This course investigates the role, problems and relative importance of municipal governments in the United States. Such areas as the demand for public services, tax and expenditure policies, and intergovernmental fiscal relations will be explored in detail. Case studies of state and local governments will be introduced to emphasize the problems and proposed solutions arising in modern municipal governments.

Prerequisites: ECON 201, ECON 202, ECON 302.

ECON 438 Economic Policy Credits: 3

Analysis of the confluence of political and economic behavior, the economics of collective action.

Prerequisites: ECON 201, ECON 202, ECON 301 and ECON 302.

ECON 442 International Finance Credits: 3

This course emphasizes the global activity and balance of payments implications of government taxation, expenditure and monetary policies under various capital market conditions. Major topics include: exchange rates and the balance of payments; national income determination in an open economy; integrated and non-integrated capital markets; economic growth stabilization policies and the quest for global economic stability.

Prerequisites: ECON 201, ECON 202, ECON 301.

ECON 451 Institutional Economic Theory Credits: 3

Analysis of impact of modern philosophy and developments in social sciences on economic theory.

ECON 458 Urban Economics Credits: 3

An inquiry into the economics of location decisions and the influence of these on urban growth and on the real estate market; the evaluation of urban transportation and other public services; an examination of economic development of ghetto neighborhoods.

Prerequisites: ECON 302.

ECON 460 Industrial Organization Credits: 3

The structure, conduct, and performance of American industry. Historical evolution of American industry; alternative industrial systems. Antitrust policies and their alternatives. Technological change and industrial performance.

Prerequisites: ECON 302.

ECON 475 Economics Institutions and Policies Credits: 3

This course focuses on the economic system analysis of labor market phenomena in the context of historical-institutional development and labor market policies, this course is offered winter semester only.

Prerequisites: ECON 201 and ECON 202.

ECON 486 Labor Economics Credits: 3

An examination of the theories of wage determination, the economic effects of wage determination upon the wage structure, the distribution of national income, employment, and an introduction to collective bargaining.

Prerequisites: ECON 301 and ECON 302.

ECON 488 Radical Political Economy Credits: 3

This course will cover the ideas that constitute radical political economy. It will show how radical political economy can be used to examine current economics and social problems and will outline possible economic structures of utopian visions.

Prerequisites: ECON 201, ECON 202.

ECON 490 Readings In Economics Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the professor in any of the following fields: (a) economic theory, (b) history of economic thought, (c) labor economics, (d) urban economics, (e) monetary and fiscal policy and theory, (f) international economics, (g) economic development. (h) comparative economic systems, (i) public finance, (j) public policy toward business, (k) quantitative economics.

Prerequisites: ECON 201, ECON 202.

ECON 496 Practicum in Urban Economic Development Credits: 3

The Practicum in Urban Economic Development provides students with the opportunity to integrate and apply the knowledge and skills developed through previous coursework to real-world problems of urban economic development. Working on collaborative, service-learning projects in partnership with both community and metropolitan-level organizations, students will engage with the process of applied urban economic development in a team-structured context. Student teams will be each be responsible for one term project over the course of the semester. The course will culminate with the public presentation of project outcomes.

Prerequisites: ECON 336, ECON 458.

ECON 497 Internship Credits: 1-6

The course allows the student to participate in cognate, approved internships of a professional nature.

Prerequisites: ECON 201 and ECON 202; completion of 75 credit hours and undergraduate major or graduate student in Economics.

Education (EDUC)

Courses

EDUC 149 Economics In The K-8 Classroom Credits: 3

This course is designed to help students develop an understanding of economic concepts and principles and to raise their level of comfort for infusing these concepts throughout the K-8 curriculum. Special attention will be given to both national and state economic standards.

EDUC 160 Career And Life Planning Credits: 3

Skill development in career planning through processes of self-assessment and self-development and analyzing the structure of the world of work and occupational information, values, clarification and decision making, vocational exploration and preparation for employment.

EDUC 180 Introduction To Education Credits: 2

The course will present an overview of education today for those who have a general interest in education or are considering becoming educators. The curriculum provides students with an introduction to current issues in education while incorporating skills needed for academic success. Students will also have the opportunity to gain experience in a K-12 classroom setting (2 credit hours).

EDUC 189 Special Topics Credits: 1-6

An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

EDUC 289 Special Topics Credits: 1-6

An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

EDUC 389 Special Topics Credits: 1-6

An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

EDUC 402R Algebraic Thinking for Teachers Credits: 3

Designed for middle and secondary school mathematics teacher candidates to [re]evaluate conceptions of learning and teaching algebraic concepts across elementary, middle, and high school levels. Course topics include mathematical habits of mind, defining algebra, building number sense to develop algebraic thinking, generalizing functional relationships, and representing mathematical ideas.

EDUC 414 English Language Study In Elementary And Secondary Schools Credits: 3

Designed as a review of traditional as well as descriptive and historical approaches to grammar, usage and syntax - focusing upon teaching strategies for elementary, junior high, middle school, and senior high English/language arts classrooms.

EDUC 428 Cultural Diversity And American Education Credits: 3

An examination of educational needs and strategies in a culturally diverse society based on a study of several major ethnic and nationality groups in America from historical, anthropological and sociological perspectives. This course may be team-taught.

EDUC 434 Classroom Diagnosis And Correction Of Reading Problems Credits: 3

Procedures for the diagnosis and correction of reading problems which are appropriate for classroom teachers.

Prerequisites: TCH-ED 415.

EDUC 440 Literature For Adolescents Credits: 3

Focus upon literature for adolescents and ethnic literature, specifically, and upon the special reading interests of the adolescent in relation to the methods and materials of reading in grades 7-12, generally. Attention to literature selection standards, censorship, individualized instruction, and reader response.

EDUC 489 Special Topics Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in each semester's bulletin.

EDUC 497 Individual Study Credits: 1-6

Guided study of a selected topic in education.

Education Research and Psychology (EDUC-R&P)

Courses

EDUC-R&P 255 Understanding Data Through Sports: Sabermetrics Credits: 3

Non-theoretical approach to data analysis using applications and examples from the world of sports.

Electrical and Computer Engineering (E&C-ENGR)

Courses

E&C-ENGR 130 Engineering Graphics Credits: 3

Introduction to Engineering Graphics with the use of the Computer Aided Design tools AutoCAD and SolidWorks. Introduction to 2D design with AutoCAD and introduction to 3D design with SolidWorks. Also an introduction to electrical circuit diagrams. No previous 2D or 3D CAD experience is necessary to take this class.

E&C-ENGR 216 Engineering Computation Credits: 4

Development, analysis and synthesis of structured computer programs for solving engineering problems in the Python, MATLAB, and C languages. Introduction to algorithms and data structures.

Prerequisites: MATH 110 or MATH 120 (or higher) or ALEKS score of 51 (or higher); or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

E&C-ENGR 217 Engineering Computation Credits: 2

Students learn to develop, analyze and synthesize structured computer programs for solving engineering problems in the Python, MATLAB, and C languages. This course also provides an introduction to algorithms and data structures. This course is available by approval of the degree program committee if transfer credit has been approved for one of the listed programming languages.

Prerequisites: MATH 110 or MATH 120 (or higher) or ALEKS score of 51 (or higher); or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

E&C-ENGR 226 Logic Design Credits: 3

Design of combinational logic circuits, logic minimization techniques, design of sequential logic circuits, state machine design techniques, digital system design.

Co-requisites: E&C-ENGR 227.

E&C-ENGR 227 Logic Design Laboratory Credit: 1

Laboratory for E&C-ENGR 226. Experimental topics related to the design of combinational and sequential logic systems and small digital systems.

Co-requisites: E&C-ENGR 226.

E&C-ENGR 228 Introduction to Computer Design Credits: 3

This course covers computer organizations and fundamental computer design techniques. It also discusses design of computer data unit, control unit, input-output, microprogramming. Memory systems (RAM memory, Cache memory, interrupts, secondary memory) and direct memory access design is also discussed. Verilog HDL design is introduced and applied to small digital systems.

Prerequisites: E&C-ENGR 226 and E&C-ENGR 227.

Co-requisites: E&C-ENGR 229.

E&C-ENGR 229 Introduction to Computer Design Laboratory Credit: 1

This laboratory course covers experimental topics related to the design of digital computer systems and arithmetic circuits which students study in the E&C-ENGR 228.

Prerequisites: E&C-ENGR 226 and E&C-ENGR 227.

Co-requisites: E&C-ENGR 228.

E&C-ENGR 241 Applied Engineering Analysis I Credits: 3

Partial differentiation, multiple integrals, first and second order ordinary differential equations, partial fractions, and Laplace transform solution of Ordinary Differential Equations.

Prerequisites: MATH 220 or MATH 268 (with a grade of C or better).

E&C-ENGR 250 Engineering Mechanics and Thermodynamics Credits: 3

This course concentrates on practical concepts in mechanics and thermodynamics for EC-ENGR majors, such as the practical use of forces, moments, couples, centroids, and moment of inertia, friction, manipulating systems of rigid bodies in motion and applying conservation of energy to gases, liquids, and solids. Materials will also be addressed.

Prerequisites: MATH 220 or MATH 266; and PHYSICS 240 (both with a grade of C or better).

E&C-ENGR 276 Circuit Theory I Credits: 3

Kirchoff's circuit laws, Ohm's Law, nodal and mesh analyses, source transformations, superposition, Thevenin and Norton equivalents, transient analysis of 1st and 2nd order systems. AC circuit analysis, phasors, impedance, sinusoidal steady-state responses, operational amplifiers and PSpice.

Prerequisites: PHYSICS 250 and E&C-ENGR 241 (or MATH 345 as a pre or co-req) with a grade of C or better.

E&C-ENGR 277 Circuit Theory I Lab Credit: 1

Introduction to the use and limitations of basic instruments used in electrical testing and measurement. Experimental techniques and laboratory safety. Data gathering, interpretation and presentation. Preparation of laboratory reports. Experimental work supporting theoretical concepts developed in E&C-ENGR 276.

Co-requisites: E&C-ENGR 276.

E&C-ENGR 302 Electromagnetic Waves and Fields Credits: 3

Elements of vector calculus: curl, gradient and divergence differential operations; vector identities; integration of vectors Stokes and Gauss's theorems, laplacian; review of electrostatic and magnetostatic fields; boundary value problems; boundary conditions; time-harmonic fields and phasors; Maxwell's equations, Poynting vector; vector and scalar wave equations; electromagnetic wave propagation in free-space, lossy and lossless dielectrics and conductors; polarization; reflections at normal and oblique incidences; transmission line parameters; telegraphers equations; input impedance and VSWR; Smith Chart and impedance matching; transients on transmission lines.

Prerequisites: E&C-ENGR 341R, E&C-ENGR 376.

Co-requisites: E&C-ENGR 303.

E&C-ENGR 303 Electromagnetic Waves and Fields Lab Credit: 1

The goal of the lab is to complement and demonstrate the main concepts of transmission line and microwave theory using hands on experiments. The experiments will introduce students to microwave sources, components, and transmission lines. Moreover, the experiments will demonstrate the concepts of wave propagation, attenuation, power splitting, reflection, and standing waves. Moreover, students will design and conduct experiments to characterize unknown loads and antennas. Recommended preparation: MATLAB knowledge/proficiency.

Co-requisites: E&C-ENGR 302.

E&C-ENGR 330 Electronic Circuits Credits: 3

Application of operational amplifiers, semiconductor device physics, elementary analysis and design of analog electronic circuits that utilize diodes, BJT's, and MOSFET's in single and multistage amplifiers with passive loads and power amplifiers; DC biasing, small signal analysis and calculation of frequency responses. The use of CAD (Spice) in the analysis and design of electronic circuits.

Prerequisites: E&C-ENGR 276 and E&C-ENGR 334.

Co-requisites: E&C-ENGR 331.

E&C-ENGR 331 Electronic Circuits Laboratory Credit: 1

Laboratory experiments in the application of operational amplifiers, the analysis, design, and testing of single and multistage amplifiers with passive loads, and the measurement of frequency response. Recommended preparation: E&C-ENGR 276, E&C-ENGR 277.

Co-requisites: E&C-ENGR 330.

E&C-ENGR 334 Semiconductors and Devices Credits: 3

Junction theory, semiconductor diodes and models, bipolar transistors and models, field-effect transistors and models, selected electron devices and models.

Prerequisites: E&C-ENGR 341R, PHYSICS 250.

E&C-ENGR 341R Applied Engineering Analysis II Credits: 3

Complex numbers; Euler's formulas, analytic functions, Taylor and Laurent series; Cauchy residue theorem and application to evaluation of integrals; linear algebra, eigenvalue and eigenvectors; Fourier series and transforms.

Prerequisites: E&C-ENGR 241 (with a grade of C or better).

E&C-ENGR 358 Introduction to Control Systems Credits: 3

Study of feedback techniques, with applications to control systems. Includes modeling, applications of Bode plot, root locus, state-variable, and Nyquist methods.

Prerequisites: E&C-ENGR 376.

E&C-ENGR 376 Circuit Theory II Credits: 3

Power, transformers, three-phase circuits, two-port networks, the theory and application of Laplace Transforms.

Prerequisites: E&C-ENGR 276.

Co-requisites: E&C-ENGR 377.

E&C-ENGR 377 Circuit Theory II Lab Credit: 1

Continuation of E&C-ENGR 277 introducing the use of additional instruments used in electrical testing and measurements. Statistical data evaluation methods. Experimental work supporting concepts developed in E&C-ENGR 376.

Prerequisites: E&C-ENGR 277.

Co-requisites: E&C-ENGR 376.

E&C-ENGR 380 Signals and Systems Credits: 3

Continuous and discrete-time signals and systems, frequency response, Fourier analysis of discrete and continuous signals and systems and use of z, Fourier, Discrete Fourier, and Fast Fourier Transforms.

Prerequisites: E&C-ENGR 341R.

Co-requisites: E&C-ENGR 381.

E&C-ENGR 381 Signals and Systems Lab Credit: 1

Computer Laboratory for E&C-ENGR 380. Various signal processing software programs (MATLAB and DSP) are used to investigate properties and applications of continuous and discrete time signals and systems.

Co-requisites: E&C-ENGR 380.

E&C-ENGR 400 Problems in Electrical and Computer Engineering Credits: 1-4

Analytic or experimental problems pertaining to electrical or computer engineering.

Prerequisites: Departmental consent.

E&C-ENGR 401 Topics In Electrical And Computer Engineering Credits: 1-4

Topics covering current and new technical developments in electrical or computer engineering.

Prerequisites: Senior standing.

E&C-ENGR 401PQ Topics in Electrical Engineering Credits: 1-4

Topics covering current and new technical developments in electrical or computer engineering.

Prerequisites: Senior standing.

E&C-ENGR 402 Senior Design I Credits: 2

First capstone design course in electrical and computer engineering. Provides and accounts for laboratory, library, research and other work needed for the development of the project. Stresses oral presentations.

Prerequisites: E&C-ENGR 330 and E&C-ENGR 420 or E&C-ENGR 466.

E&C-ENGR 403 Senior Design II Credit: 1

Second capstone design course in electrical and computer engineering. Project management, professional practice, ethical and engineering economic considerations and development of written and oral presentation skills. Provides laboratory experience in prototyping, fabrication, and troubleshooting of the design project. Stresses written and oral presentation.

Prerequisites: E&C-ENGR 402.

E&C-ENGR 412 Principles of RF/Microwave Engineering Credits: 3

General aspects of TE, TM and TEM mode propagation in waveguides; circular waveguides; optical waveguides; wave propagation on dielectric backed conductors; wire antennas; equivalence principle and aperture antennas; antenna impedance and mutual coupling in arrays; array beamforming; scattering matrix representations; impedance matching; resonators; filters, couplers and power-dividers; microstriplines and striplines; r.f. propagation in wireless and radar systems; conformal mapping techniques and applications (optional). Recommended preparation: MATLAB proficiency.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380, E&C-ENGR 381.

E&C-ENGR 414 Microwave Engineering for Wireless Systems Credits: 3

Microwave networks; s-, z-, y- and abcd matrices; signal flow graphs; circular waveguides; stripline microstrip characteristics; impedance transformers; power dividers and directional couplers; microwave filters; microwave resonators; active microwave circuits.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380, MATLAB proficiency.

E&C-ENGR 415 Microwave Engineering for Wireless Systems Lab Credit: 1

Design performance simulation of microwave filters and active microwave circuits; comparative analysis of impedance transformers; use of CAD tools in microwave circuit design.

Prerequisites: E&C-ENGR 414.

E&C-ENGR 416 Neural and Adaptive Systems Credits: 3

A hands-on introduction to the theory and applications of neurocomputing. Includes classification, function approximation, supervised and unsupervised learning, time series analysis, and adaptive filtering using different feed-forward and recurrent artificial neural networks.

Prerequisites: COMP-SCI 394R, E&C-ENGR 341R.

E&C-ENGR 418 Introduction to Radar Systems Credits: 3

Radar equation; MT, Pulsed Doppler and Tracking Radars; detection of and information from radar signals; radar antennas; transmitters and receivers; radar propagation and clutter.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380, E&C-ENGR 381.

E&C-ENGR 420 Advanced Engineering Computation Credits: 2

Programming and computational analysis principles and techniques for various problems in embedded programming, applied computation, and signal processing.

Prerequisites: E&C-ENGR 216.

E&C-ENGR 426 Microcomputer Architecture and Interfacing Credits: 3

Advanced microprocessor architecture and programming; interfacing and programming of peripherals. Parallel and serial communication, interrupts, direct memory access, coprocessors.

Prerequisites: E&C-ENGR 226.

E&C-ENGR 427 Microcomputer Laboratory Credit: 1

Laboratory for E&C-ENGR 426. Microprocessor hardware and software involving interfacing of peripherals to 8-bit and 16-bit microprocessor. Simple D/A conversion, music composition, and various programmable controllers.

Prerequisites: E&C-ENGR 227.

Co-requisites: E&C-ENGR 426.

E&C-ENGR 428R Embedded Systems Credits: 3

This course examines the hardware/software aspects associated with developing microcontroller-based computer systems. The students learn about the architecture and assembly language for popular microcontrollers and how to take advantage of a variety of input/output options that include binary ports, A/D and D/A converters, communication ports, and interfacing techniques for various applications.

Prerequisites: E&C-ENGR 426, E&C-ENGR 427.

Co-requisites: E&C-ENGR 429.

E&C-ENGR 429 Embedded Systems Laboratory Credit: 1

The laboratory introduces the students to a variety of challenging design projects using microcontroller interfacing techniques to develop real world applications, such as digital thermometer and digital pressure monitoring systems. Students must produce an individual design project.

Prerequisites: E&C-ENGR 426, E&C-ENGR 427.

Co-requisites: E&C-ENGR 428R.

E&C-ENGR 436 Power Electronics I Credits: 3

Power electronic device characteristics, important circuit and component concepts, phase controlled rectifiers, line communicated inverters and AC phase control. Includes laboratory projects.

E&C-ENGR 442 Introduction to VLSI Design Credits: 3

The goal of this course is to familiarize students with the design fundamentals and layout of Very Large Scale Integrated (VLSI) Circuits. The primary focus of this course is complementary MOSFET (CMOS) based digital integrated circuits design and analysis. However, the topics regarding transistor, interconnect, and circuit implementation are relevant to digital, analog and mixed-signal integrated circuits. This course is designed to be a comprehensive foundation for advanced micro- and nano-electronics courses. To familiarize the students with the realities of design complexities they will get exposure to commercial CAD tools in a separate lab co-requisite class. Recommended preparation: Basic Electronics.

Prerequisites: E&C-ENGR 330.

E&C-ENGR 443 Introduction to VLSI Design Laboratory Credits: 3

The goal of this course is to teach basic design concepts and implementation issues of digital integrated circuits. Various methods of designing and optimizing very large scale integrated (VLSI) circuits will be introduced in the lab projects. To familiarize students with the realities of integrated circuit design and layout, they will get exposure to industry-standard computer aided design (CAD) and simulation tools for VLSI circuits and systems. The students will be using these CAD tools in the following levels – schematic, layout, parasitic extraction, and circuit simulation.

Co-requisites: E&C-ENGR 330.

E&C-ENGR 454 Robotic Control and Intelligence Credits: 3

Introduces robotics; robot system characteristics; robot motive power systems; geometric structure of robots; sensors and feedback; control applications and algorithms; data acquisition and output actuation functions; robots and Artificial Intelligence; microprocessor applications in robotics.

Prerequisites: E&C-ENGR 226 (or E&C-ENGR 426), E&C-ENGR 358.

E&C-ENGR 455 Instrumentation and Control Credits: 3

The instrumentation and control of industrial processes and systems, introduction to Programmable Logic Controllers, and simulation modeling of various systems.

Prerequisites: E&C-ENGR 358.

E&C-ENGR 457 Fundamentals of Solar Photovoltaic Cells Credits: 3

The science and engineering of solar cell/solar photovoltaic (PV) spans several disciplines namely physics, chemistry, electronic and electrical engineering. Even though solar cell related researches are carried out in those traditional disciplines but it is not widely taught as a comprehensive course. This course highlights the fundamental science and engineering of solar PV devices, solar energy conversion as well as solar cell manufacturing issues. It covers from basic to modern solar PV devices, including typical solar cell materials, basic device physics, ideal and non-ideal models, device parameters and design, and device fabrication.

Prerequisites: E&C-ENGR 330 or E&C-ENGR 334.

E&C-ENGR 458 Automatic Control System Design Credits: 3

Techniques for feedback system design analysis: compensator design examples, state variable methods, non-linear systems, and sampled-data control systems.

Prerequisites: E&C-ENGR 380, E&C-ENGR 358.

E&C-ENGR 459 Introduction to Photovoltaic Systems Credits: 3

The course presents an updated background of world energy production and consumption, a summary of the solar spectrum, how to locate the sun, and how to optimize the capture of its energy, as well as the various components that are used in PV systems. Also studied are why certain photovoltaic (PV) designs are used in certain ways, as well as how the design process is implemented. Economic and environmental issues involved in PV design criteria are discussed along with the most recently available technology, design, and installation practices.

E&C-ENGR 460 Introduction to Power Systems Credits: 3

Magnetic circuitry in general and in machinery; DC machine theory, operation, applications, transformer circuits, synchronous machine theory, operation applications, basic principles of energy conversion, introduction to power electronics, and basic principles of power transmission and control.

Prerequisites: E&C-ENGR 376.

E&C-ENGR 463 Advanced Sustainable Energy Systems Engineering Credits: 3

Sustainable Energy Systems Engineering focuses on understanding the theory and application of emerging energy technologies, including solar, wind, biomass, oceanic, geothermal, hydropower, fuel cell (hydrogen), nuclear, and other more exotic energy sources. A premise of the course is that a sustainable energy technology must both be technically feasible and economically viable. Renewable energy sources will be highlighted with a focus on projections for a sustainable energy future. Graduate students will be assigned an additional project to work.

Prerequisites: E&C-ENGR 466.

E&C-ENGR 466 Power Systems I Credits: 3

Electric power system fundamentals, rotating machines in general, synchronous, induction and DC machines, methods of power system analysis and design, modeling of power systems components such as transmission lines, transformers and generators, and analysis of steady state operation of power system under balanced conditions.

Prerequisites: E&C-ENGR 376.

E&C-ENGR 467 Power Systems II Credits: 3

Power system matrices. Power flow analysis. Gauss-Seidel and Newton-Raphson techniques. Fast-decoupled load flow. Economic dispatch. Voltage control system. Power system control.

Prerequisites: E&C-ENGR 358, E&C-ENGR 466.

E&C-ENGR 468 Electric Power Distribution Systems Credits: 3

Operation and design of utility and industrial distribution systems including distribution system planning; load characteristics; application of distribution transformers; design of subtransmission lines, distribution substations, primary systems, secondary systems; application of capacitors; voltage regulation and reliability.

Prerequisites: E&C-ENGR 466.

E&C-ENGR 474 Introduction to Communication Systems Credits: 3

Introduction to principles and fundamentals of communication systems. Signal representation and analysis, Fourier transform and applications, probability and random variables, analog and digital modulation techniques.

Prerequisites: COMP-SCI 394R, E&C-ENGR 380.

E&C-ENGR 477 Introduction to Wireless Networking Credits: 3

Principles of the design and analysis of wireless networks. Study of medium access control, administration routing and adaptation to the complexities of the wireless environment. Investigation of networking issues in the IEEE 802.11 family of standards, IEEE 802.15 (Bluetooth), Long Term Evolution, cellular, satellite, ad hoc, and sensor networks.

Prerequisites: COMP-SCI 394R.

E&C-ENGR 480 Digital Signal Processing Credits: 3

Concepts, analytic tools, design techniques used in computer processing of signals: signal representation, sampling, discrete-time system analysis, recursive/non-recursive filters, design/implementation of digital filters.

Prerequisites: E&C-ENGR 380.

E&C-ENGR 484 Digital Image Processing Credits: 3

Fundamentals of digital image processing hardware and software, including digital image acquisition, display, compression, transforms and segmentation. Recommended preparation: Experience in a high-level programming language.

Prerequisites: E&C-ENGR 380.

E&C-ENGR 486 Pattern Recognition Credits: 3

Pattern recognition techniques of applications such as automatic recognition for speech, visual inspection systems, clinical medicine, automatic photographic recognition systems and advanced automation systems.

Prerequisites: E&C-ENGR 380.

E&C-ENGR 491 Internship Credits: 6

Students may participate in structured internships under the joint supervision of an employer and a faculty member. The student must carry out significant professional responsibilities that also have academic merit. The number of credit hours is based on the quality of the academic experience. Available for credit/nocredit only and students must be in good standing with at least 18 credit hours of EC-ENGR courses counting towards the degree. Registration by consent number only; petition forms for E&C-ENGR 491 internships are available in the office of CSEE Division and on the web.

Prerequisites: At least 18 hours of EC-ENGR courses toward the degree.

E&C-ENGR 497 Directed Readings Credits: 1-4

Readings in an area selected by an undergraduate student in consultation with a faculty member. Arrangements must be made prior to registration.

Prerequisites: Departmental consent.

E&C-ENGR 499 Undergraduate Research Credits: 1-3

Completion of a project, including a final written report, under the direction of a faculty member. A prospectus must be accepted prior to registration.

Prerequisites: Departmental consent.

English Language & Literature (ENGLISH)

Courses

ENGLISH 100T TOEFL Preparation Credits: 1-3

This course will prepare students to take the TOEFL (Test of English as a Foreign Language), in either the paper-based (PBT) or internet-based (iBT) form, and/or to improve their scores from previous attempts. Exercises focus on developing the skills and strategies necessary for navigating TOEFL questions while continuing to develop the general English language skills that support success on the TOEFL. The course will provide students with a personal awareness of strengths and weaknesses so they may focus their test preparation work in and outside of class. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 110 English I: Introduction To Academic Prose Credits: 3

This course introduces students to college-level reading, writing, and discourse analysis: it engages students in the analysis and creation of texts that reveal multiple perspectives about specific rhetorical situations and cultural issues. In addition to learning how to revise by analyzing their own writing, students will learn to edit their own work and use proper academic documentation.

ENGLISH 110 - MOTR ENGL 100: Composition I

**ENGLISH 119 Myth and Literature Credits: 3**

A study of classical myth including readings from Homer to Ovid, analysis of selected myths in later literature, art, and music, and a study of contemporary definitions and approaches to myth.

ENGLISH 120 Literary Monstrosities Credits: 3

This course explores representations of monsters in literature. Students are introduced to different ways of thinking about monstrosities from a range of cultural and historical perspectives, as well as through a variety of materials in order to approach this question from an interdisciplinary perspective.

ENGLISH 123 True Lives: Autobiographical Arts and Acts Credits: 3

This course explores life writing and other autobiographical practices. Students will read and analyze a variety of life writing forms and think critically about life writing in various cultural, historical, and social contexts. They will also examine autobiography as a form of self-expression, as an articulation of personal and social values, as a public art, and as a way to study human experience in different contexts. Genres may include memoir, autobiography, diaries, etc., at the discretion of the instructor.

ENGLISH 124 Writing About Literature Credits: 3

This course is designed to be taken either prior to or concurrent with a student's first literature course. It introduces students to literary criticism in its broadest, most generic sense, as a stylized response to reading. Students in the course will be introduced to different approaches to writing about literature, to methods of generating ideas, and focusing and developing a topic.

ENGLISH 126 Popular Literature Credits: 3

This course is designed to help students develop a fuller understanding of the human condition by exploring a range of accessible, bestselling fiction and non-fiction from a variety of periods and places, historic and contemporary. The course may include popular stories, songs and ballads, the scripts of blockbuster plays and films, best-selling novels, and widely distributed nonfictional prose.

ENGLISH 126 - MOTR LITR 100: Introduction to Literature

**ENGLISH 141 Women and Literary Culture/The Heroine in Literature Credits: 3**

This course explores the role of the heroine in literature. Students will examine how the heroine is crafted by a variety of writers and think critically about the role of the heroine in various cultural, historical, and social contexts. Genres may include science fiction/fantasy, mystery, romance, etc. at the discretion of the instructor.

ENGLISH 200 Introduction To Undergraduate Study In English Credits: 3

An investigation of reading, writing, and research practices associated with studies in English. Students will learn about multiple forms, genres, and critical approaches, as well as encounter texts from various historical periods and places.

ENGLISH 200 - MOTR LITR 100: Introduction to Literature

**ENGLISH 203 Introduction to Journalism Credits: 3**

Introduction to the styles and techniques of reporting and writing basic news through assignments in straight news, features and in-depth stories. Exposure to the history and principles of American journalism. Practical application in writing news and news feature articles.

ENGLISH 207 World Literature in English Credits: 3

This course helps students develop a fuller understanding of the human condition by exploring accessible literary texts in English by non Euro-American writers. The course provides historical, economic and political contexts and is designed for students who enjoy learning about global cultures by reading and discussing a diverse range of bestselling literature.

ENGLISH 207 - MOTR LITR 200: World Literature

**ENGLISH 213 Introduction To Drama Credits: 2-3**

Beginning with an intensive study of a few plays analyzed to elicit general principles, the course moves on to consider several representative examples of each of the major periods and types of Western drama, from the Greeks to the present.

ENGLISH 213 - MOTR LITR 100D: Introduction to Literature-Drama

**ENGLISH 214 Introduction To Fiction Credits: 3**

Students will be introduced to the study of fiction as a literary art form. Students will continue to develop their understanding of fiction-writing in preparation for more advanced courses in literature and creative writing. Coursework will focus on close reading of short and long forms of fiction selected from a range of literary periods and world literature. Students are expected to interpret and analyze various forms of fiction and write critically about the role of fiction as a form of cultural discourse.

ENGLISH 214 - MOTR LITR 100F: Introduction to Literature-Fiction

**ENGLISH 215 Introduction To Poetry Credits: 3**

An introduction to the study of poetry for students desiring a basic course either to develop a greater appreciation of poetry or to prepare for more advanced courses in literature or creative writing. Class discussions will focus on close readings of poems and analysis of poetic techniques. Writing assignments will complement reading and class discussion and will enable students to develop their own critical and creative skills.

ENGLISH 215 - MOTR LITR 100P: Introduction to Literature-Poetry

**ENGLISH 216 The Craft of Creative Writing Credits: 3**

This course introduces students to the key techniques that writers of imaginative literature use. Students will develop skills at writing and reading in multiple genres.

ENGLISH 225 English II: Intermediate Academic Prose Credits: 3

This course extends the work of ENGLISH 110 with an additional emphasis on research. Each section of ENGLISH 225 uses a combination of book-length and shorter texts on focus on specific historical and/or cultural issues. As they learn to participate in scholarly conversations, students will find and evaluate library and internet sources. As with ENGLISH 110, this course emphasizes revision, editing, and proper academic documentation.

Prerequisites: ENGLISH 110 or DISC 100 or ACT sub-score of 30 or SAT writing sub-score of 690.

ENGLISH 225 - MOTR ENGL 200: Composition II**ENGLISH 242 Women Writing/Women Reading Credits: 3**

This course investigates women as producers and consumers of literature. Students will become acquainted with diverse women writers, explore women's reading practices, and interrogate the cultural, historical, and social contexts that influence women's writing and reading.

ENGLISH 242 - MOTR LITR 106: Women's Literature**ENGLISH 250 Introduction to Language Acquisition and Diversity Credits: 3**

Investigation of the basic principles of first and second language acquisition. Topics addressed include language competency, socio-cultural factors in language, dialects, acquisitional principles, and language diversity. Students will take part in monitored classroom observations in public schools, and will critically analyze how the topics addressed in class apply to real life and to teaching situations.

ENGLISH 270 Writing Tutor Training Seminar Credits: 3

This course covers the basics of serving as a tutor for writers. Students acquire hands-on experience in consulting with writers at all stages of the writing process, including invention work, drafting, revising, documenting, and editing. Students will also become conversant in theories of peer tutoring and research on Writing Centers.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 273 Science Fiction Credits: 3

This course focuses on a range of science fiction texts from a variety of periods and traditions. Students will examine the relationship between different types of science fiction from various periods and the related social, economic, and political contexts.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 278 Asian American Literature Credits: 3

This course examines literary and cultural texts produced by Asian Americans from the nineteenth century to the present. Texts will be drawn from a variety of genres and from several Asian American groups in order to examine how Asian American literature engages, challenges, revises, and reinvents American literary traditions. The course will identify and explore specific cultural and political issues that have shaped the writings, including trans-nationalism, immigration, racial identity, group identity, and community. Authors may include Carlos Bulosan, Maxine Hong Kingston, John Okada, Bienvenido Santos, and Hisaye Yamamoto.

ENGLISH 278 - MOTR LITR 105AS: Multiculture Literature**ENGLISH 300CB Women in the Ancient World Credits: 3**

This course focuses on the history, representation, literature, social lives, and political roles of women in ancient civilization including Egypt, Mesopotamia, the Biblical World, Greece, and Rome. It integrates methodologies from history, art history and archaeology, literary studies, and women's studies.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 300CD American Social Film: Silver Screen & American Dream Credits: 3

This course will combine American social history and film history in the sound era. Using Hollywood entertainment films, the course will look at Hollywood as an indicator of social, political and economic conditions in the United States since the 1930s. The main topics are representations of the American dream and nightmare, poverty and affluence, success and failure.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 300CE Radical Changes Since 1945 Credits: 3

This course will focus on modernism, post-modernism and expressionism in the visual arts and literature since World War II. Common lectures will address intellectual movements such as existentialism and formalism—and cultural development—such as the increased impact of technology and mass media—in contemporary society. By focusing on these movements, the cluster course hopes to provide an integrated view of the literature and visual arts of the period and to draw upon analogous developments in contemporary architecture, music, philosophy and film.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 300CW Critical Issues in Women's & Gender Studies Credits: 3

This class is an interdisciplinary upper-level course that will examine critical issues in women's and gender studies by focusing on the intersections of gender, race, class, sexuality, and social context. Through their study of these intersections, students will be more sensitive to the impact of social structures on gender and the experiences of women and men.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 300CX Empire Credits: 3

This is an interdisciplinary, team-taught course designed to teach students ways to think about the complexities of human cultures, past and present, helping them examine how imperialism continues to shape contemporary understandings of personal, institutional, and cultural identities (both of selves and others). The course engages students in the analysis of global cultures with a focus on the economic, environmental, political and social consequences of specific imperial regimes and the ongoing impact of these regimes on particular groups that continue to live with the legacies of empire.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 300CY Ancient World in Cinema Credits: 3

This course will explore the tradition of depicting the ancient Mediterranean world in film from the early silent era to the present. Topics to be covered include the ways that filmmakers respond to literary and historical sources from the ancient world, interact with the artistic tradition of films about the ancient world, the relation of these films to other works by the same creative personnel (directors, actors, writers, producers, etc.), and the political and cultural contexts in which the films were released.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 300F SS:Academic English/International Grad Teaching Assistants Credits: 3

The study and practice of standard spoken English combined with the study and practice of classroom teaching techniques. Exercises focusing on improvement of pronunciation, and formal (classroom presentation) and informal (conversation) English speaking are combined with techniques for lecture organization, strategies for clear content presentation, and with analysis of the American post-secondary educational culture. This course is designed for prospective International Graduate Teaching Assistants who need to improve their English communication skills and obtain an understanding of American educational culture.

ENGLISH 301WI Writing And The Academy Credits: 3

This course examines social and ethical issues raised by academic reading and writing. While some attention is paid to the formal aspects of academic prose within specific disciplines, the main emphasis of the course is on the cultural consequences of the different ways that academic knowledge is created and taught. In addition to studying the language and structure of academic reading and writing, the course explores the various rhetorics of the academy in terms of a broad range of subjects including economics, gender, education, history, and myth. This course satisfies the junior-level writing requirement and counts towards the writing minor.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 304WI Workplace Writing Credits: 3

This writing intensive course focuses on the rhetorical principles of workplace communication, providing students with opportunities to analyze complex rhetorical situations, to study various workplace genres, and to compose texts that meet the needs of diverse stakeholders.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 305WI Theory And Practice Of Composition Credits: 3

A course in expository writing that will include reading on composition theory and the nature of literacy. Frequent short essays and a long paper.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 306WI Advanced Composition Credits: 3

Further study of writing for those who wish to continue the study beyond the two semesters of composition. Emphasis will be placed on translating critical thinking into effective writing. Required of business and public administration majors.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 307WI Language, Literacy, Power Credits: 3

This course uses discourse analysis to investigate language and literacy. Students will explore how the discourses of institutional and cultural identities act as instruments of power and legitimacy.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 308 Rhetorics of New Media Credits: 3

This course will focus on the rhetorical study of new media texts (such as hypertext, networked multimedia, multimedia art and performance, virtual spaces, and so on) and theories of new media. The course will consider the rhetorical possibilities and constraints of new media and critically examine their impact on democratic discourse and literacy in the public sphere. Specialized knowledge of multimedia equipment and software is neither expected nor required.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 309WI Rhetorics of Public Memory Credits: 3

This course explores how museums and other cultural institutions function as rhetorical agents in creating and preserving public memory. Students will explore how processes of collection, arrangement, and visual display operate as modes of persuasion and make arguments about civic identities and community values.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 310 Introduction To Linguistics/Language Science Credits: 3

This course is a comprehensive introduction to the theory, methodology, and applications of the science of language. It examines properties of human language, covers all branches of language science, and provides a foundation for a critical understanding of language issues.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 311 American Literature I Credits: 3

A survey of American literature and culture from its beginnings to 1865. This course will cover a range of authors, several genres, and culture forms, which may include fiction, poetry, drama, autobiography, oral, contact and/or slave narratives, folklore, and songs.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 311 - MOTR LITR 101A: American Literature-Pre-Civil War**ENGLISH 312 Creative Writing I Fiction Credits: 3**

A course centered on the short story. Emphasis is placed on three areas: general principles governing the writing of fiction; practice in short fiction (primarily the short story, but including the novella); criticism; and technical skills (including editing and rewriting).

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 313WI Reporting Credits: 3

A seminar of practical application in advanced reporting. Assignments to cover news events and to pursue in-depth news reports on the campus and off.

Prerequisites: COMM-ST 203 or ENGLISH 203.

ENGLISH 315 Creative Writing Poetry Credits: 3

Writing and rewriting poems, with discussion of techniques needed to produce desired effects. Analysis and evaluation of student work. Examination of technical means utilized in selected poems by accomplished poets.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 316 Literary Nonfiction Credits: 3

Literary Nonfiction studies the reading and writing of nonfiction prose as a literary art. We'll survey the historical development of literary nonfiction (especially the essay), sample contemporary authors of the genre, write critical commentary on works we read, and compose personal essays of our own. The course is not exclusively a literary seminar nor a creative writing workshop, but seeks to mix and make connections between these modes, in the tradition of the essay itself.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 316WI Literary Nonfiction Credits: 3

Literary Nonfiction is a writing intensive course in the reading and writing of nonfiction prose as a literary art. We'll survey the historical development of literary nonfiction (especially the essay), sample contemporary authors of the genre, write critical commentary on works we read, and compose personal essays of our own. The course is not exclusively a literary seminar nor a creative writing workshop, but seeks to mix and make connections between these modes, in the tradition of the essay itself.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 317 British Literature I Credits: 3

A survey of British Literature and culture from its beginnings to the 18th century, including works by Chaucer and Milton.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 317 - MOTR LITR 102A: British Lit-Beg to 18th Cent.**ENGLISH 318 Bible As Literature Credits: 3**

A critical study of the major portions of the Old and New Testaments and the Apocrypha, with special attention to the development of literature from oral tradition, the literary genres, themes and archetypes represented in the collection, and the diction and style which have influenced later literature. Consideration also of the relation of Biblical literature to the historical, religious, and cultural milieu of the ancient Near East.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 320 Structure Of English Credits: 3

Not a remedial grammar course. Methods of linguistic inquiry and grammatical description. Study of traditional and modern schools of syntax, especially transformational grammar. Practice describing the structure of sentences. Application to the teaching of grammar in high schools.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 321 American Literature II Credits: 3

A survey of American literature and culture from 1865 to the present. This course will cover a range of authors, several genres, and culture forms, which may include fiction, poetry, drama, autobiography, essay, lyrics, and film.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 321 - MOTR LITR 101B: American Literature-Post-Civil War**ENGLISH 323 Shakespeare Credits: 3**

An intensive critical study of William Shakespeare's writings in various contexts (historical, social, political, literary, contemporary, for example). Readings will encompass at least eight plays and will include at least one comedy, history, tragedy, and romance. Required of all English majors.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 325 Arthurian Legends Credits: 3

Focusing on writers such as Marie de France, Chretien de Troyes, Sir Thomas Malory, Alfred, Lord Tennyson, Sara Teasdale, Bernard Malamud, and Marion Zimmer Bradley, this course examines the legend of King Arthur and his Round Table as a recurring myth, repeatedly manifested in time through literature, art, history, music, and film.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 326 Modern And Contemporary Irish Literature Credits: 3

This course examines a range of texts written by Irish-born writers from the end of the nineteenth century on. While it is likely the course will include texts by the most famous Irish writers, such as Yeats, Joyce, Beckett, O'Brien, Heaney, and Friel, course materials will vary from semester to semester and may focus on a specific genre, historical period, or area of interest.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 327 British Literature II Credits: 3

A survey of British Literature and culture from the late 18th century to the present. This course will cover a range of authors and genres, including at least one novel.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 327 - MOTR LITR 102B: British Lit-Late 18th Cent-Present**ENGLISH 330 History Of The English Language Credits: 3**

The study of English beginning with the Indo-European language family up to and including varieties of English spoken around the world today. Both outer history and the inner history of phonology, morphology, syntax, and lexicon will be addressed.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 331 African American Literature I Credits: 3

This course provides a survey of African American literature from its beginnings to the Harlem Renaissance of the 1920's and 1930's. Areas of interest will include abolitionist literature (especially Slave Narratives), turn-of-the-century literature and the Harlem Renaissance. This course will examine any or all of the following literary forms: fiction, poetry, drama, autobiography and essay. It will view African American literature in its historical and cultural contexts.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 331 - MOTR LITR 105AA: Multiculture Lit-African American**ENGLISH 332WI African American Novel Credits: 3**

This course will examine the African American Novel in the 19th and 20th centuries. The novels will be examined in their historical and cultural contexts.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 333 African American Literature II Credits: 3

A survey of African American literature from the end of the Harlem Renaissance to the present, covering a range of authors, texts, and contexts.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 336 Contemporary American Literature Credits: 3

This course focuses on contemporary American literature, concentrating on literary and cultural change. Topics, genres, and authors discussed will vary each semester.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 337 Introduction to American Literary and Cultural Studies Credits: 3

This course focuses on American literary and cultural production in an interdisciplinary manner. It explores how social, political, and economic conditions interact with the fields of art, film, history, and literature from colonial times to the present.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 339 Introduction to Screenwriting Credits: 3

An introduction to the form and language of the motion picture screenplays. Students create a blueprint for a movie and examine visual storytelling in-depth, including basic dramatic structure, scene and sequence construction and dialogue. Students will master the industry screenplay format, adapt a short story for the screen, and learn to receive feedback in small groups.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 342WI Women And Rhetoric Credits: 3

A study of the position of women within the traditions of western rhetoric. Students will examine the rhetorical practices of women as they pursue both public and private goals. Christine de Pizan, Sor Juana Ines de la Cruz, Hannah More, Maria Stewart, Frances Willard, Ida Wells-Barnett, Meridel Le Sueur, and Gloria Anzaldua are among the female rhetorians who may be studied in this course.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 344WI Women & Literary Culture: Genre Focus Credits: 3

A study of women writers that focuses on genre, i.e., texts that share a common set of conventions. The course will explore the conventions associated with a particular genre in various historical periods and consider the ways in which gender and genre intersect in shaping texts and their interpretation.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 345WI Women And Literary Culture: Historical Focus Credits: 3

A study of women's literary culture in a specific historical period either as broadly defined as Medieval or Renaissance or as narrowly defined as a decade or movement (e.g., 1960's, abolitionist movement). This course includes women writers across multiple boundaries (e.g., national, generic, racial, sexual, socio-economic). Content will change depending on the instructor.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 350 The 18th Century Novel Credits: 3

A detailed examination of the development of the novel in the 18th century. The course emphasizes the evolution of the novel from such predecessors as rogue literature, the picaresque story and the romance, due to changing social realities. The novelists studied may include Austen, Behn, Fielding, Godwin, Haywood, Richardson, Smollett, and Sterne.

Prerequisites: ENGLISH 110 or DISC

ENGLISH 351 Special Readings Credits: 1-3

Readings in a period, genre or theme to be selected by the instructor with attention to the needs of students who are interested in literary topics not covered in regular offerings. Proposals for a course in such readings require the approval of the department.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 351A Special Readings: Detective Fiction Credits: 3

This course will focus on a specific period, sub-genre, or theme related to Detective fiction.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 355 The Novel Before 1900 Credits: 3

Intensive attention to novels in English written before 1900, which may include comparative or analytical studies of genre; critical reception of novels; serialization, gender issues; authors and editors; and valuation.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 356 Studies in Poetry Credits: 3

An intensive study of poetry through the examination of a specific topic or the works of particular poets, for instance: Love, Seduction, and Betrayal; Form and Change; Death, Grief, and Consolation; Whitman, Dickinson, and the Soul; Sacred Poetry; Poetry and Metaphysics; The Long Poem; The Comic Poem; Sonnet, Sonnet Sequence and the Lyric; The Voyage; Nature, Self, and the Romantic Poet.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 360 The Modern Novel Credits: 3

This course focuses on selected novelists between 1900 and 1945 and is organized around particular literary themes, sub-genres, or contemporary issues.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 365WI Contemporary Novel Credits: 3

This course focuses on selected novelists since 1945 and is organized around particular literary themes, sub-genres, or contemporary issues.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 367 Introduction to Latinx Literature Credits: 3

An introduction to the literary production by US Latinx, the course introduces students to writings by authors from various Latinidades—such as Chicana/Chicano, Puerto Rican, Chilean American, Cuban American, Dominican American, and Mexican American—in multiple genres, including poetry, fiction, drama, personal essay, and film.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 380 Composing in the Digital Age Credits: 3

This course will focus on the study and creation of multimodal texts (such as webpages that include hypertext, video, and images). The course will consider the rhetorical possibilities and constraints of various modalities. Specialized knowledge of multimedia equipment and software is neither expected nor required.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 381 Writing for Social Media Credits: 3

This course will focus on the rhetorical study of social media and practical strategies for using social media effectively. The course will critically examine how the design and use of popular and emergent social media platforms affect democratic discourse and the public sphere. Specialized knowledge of social media platforms and software is neither expected nor required.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 400TC Advanced Studies in 20-21st Century Works Credits: 3

Advanced Studies in 20-21st Century Works. Approved topics include: Modern and Contemporary Irish Literature, Modern Poetry, Contemporary Poetry, Postcolonial Literature, and The Romantic Period.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 404 Old English Credits: 3

This course is a study of Old English, its grammar, its poetic style, and its literature, both poetry and prose.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 405 Magazine Editing Credits: 3

A course combining academic study of editorial management, publishing operations and language skills, with "hands on" experience in article evaluation, editing, magazine production, and legal matters such as copyright and libel. Class work concentrates on authentic and effective language use, with attention given to copy editing, grammar, typography, printing processes, financing and distribution for commercial and small-press publications.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 408 Harlem Renaissance Credits: 3

This course examines the period from 1920 to 1940, known as the Harlem Renaissance, a time of unprecedented literary and cultural creativity by Black artists. This course explores a variety of cultural productions, not only traditional forms of literature such as novels, short stories, plays and poetry, but also nonliterary objects of study such as painting, sculpture, and music.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 410 Black Women Writers Credits: 3

This course explores the writings of African American Women Writers. The course examines how these writers have interacted with and often revised stereotypical representations of African American womanhood typically found within canonical and African American male literatures. The course will examine literature (which might include fiction, poetry, autobiography, and drama) of the nineteenth and twentieth centuries; the majority of the works will be by modern and contemporary authors such as Nella Larsen, Zora Neale Hurston, Toni Morrison, and Terry McMillan. By placing the works in this sort of cultural and historical context, it will be possible to examine the unique tradition of African American women's writing as well as individual texts.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 412 Chaucer Credits: 3

Readings from Chaucer's most important works, especially "The Canterbury Tales" and "Troilus and Criseyde" with emphasis on them as types of medieval genres and on the Middle English language.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 413 Renaissance Literature I Credits: 3

English literature from the time of Wyatt and Surrey to the beginning of the 17th century, including the works of Spenser, Marlowe, Sidney, Shakespeare and others.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 414 Milton Credits: 3

A study of Milton's prose and poetry, with special attention to "Paradise Lost".

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 415 Restoration And Early 18th-Century British Literature Credits: 3

British literature from the late 17th century to the mid 18th century. Selected writers may include Addison and Steele, Behn, Congreve, Defoe, Dryden, Finch, Milton, Pope, Rochester, Swift, and Wortley Montagu.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 416 The Romantic Period Credits: 3

An extensive study of selected writers (such as Austen, Barbauld, Byron, Coleridge, Hazlitt, Hemans, Keats, Gilpin, the Shelleys, Wollstonecraft, and Wordsworth) organized around literary themes and/or cultural issues important to the Romantic period.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 417 Modern Poetry Credits: 3

Study of works by modernist poets such as Hopkins, Yeats, Frost, Stevens, Williams, Moore, Pound, H.D., Eliot, Millay, Hughes.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 418 19th-Century American Literature Credits: 3

An intensive study of either selected major American writers in the 19th century or of 19th -century literary movements.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 422 Medieval Literature Credits: 3

Western religious and secular verse and prose to the 15th century. Late Middle English works are read in the original; all other selections in translation.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 423 Renaissance Literature II Credits: 3

English literature from 1600 to the beginning of the Restoration, including the works of Donne, Jonson, Milton and other contemporaries.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 425 18th-Century British Literature II Credits: 3

British literature in its critical and historical context from 1750 to 1798. The writers studied may include Blake, Burney, Collins, Johnson, and Gray.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 426 The Victorian Period Credits: 3

An intensive study of selected writers (such as Arnold, Braddon, the Brontes, the Brownings, Dickens, Darwin, Eliot, Gaskell, Hardy, Ruskin, and the Rossetts) organized around literary themes and/or cultural issues important to the Victorian period.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 427 Contemporary Poetry Credits: 3

Study of works by contemporary poets (post World War II), such as Auden, Bishop, Hayden, Berryman, Rukeyser, Larkin, Rich, Plath, Heaney, Boland, Komunyakaa.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 428 20th-Century American Literature Credits: 3

An intensive study of either selected major American writers in the 20th century or of 20th-century literary movements.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 429B Advanced Screenwriting Credits: 3

This course provides students with advanced theory in narrative screenwriting, training in industry standard script analysis (called "coverage") and story editing. Students will be required to draft, revise and workshop a short film screenplay or will focus on a feature screenplay, delivering a draft and revision of the first act and a detailed outline for the rest of the script. Students will workshop feature screenplays in small groups, emphasizing the art of constructive story editing.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 339 or COMM-ST 354.

ENGLISH 430WI Advanced Technical Writing Credits: 3

This course is designed for those who plan to do or teach professional, business, or technical writing. Beginning with a brief background in the history of technical writing, the course will deal with current theories and methods of teaching technical and professional writing, and will cover such areas as business usage; technical linguistic problems and theories; the language of contracts, specifications, and other binding documents; and computer-oriented problems.

Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 431 18th-Century British Literature Credits: 3

British literature from the mid to late 18th century. Selected writers may include Blake, Burney, Collins, Equiano, Fielding, Gray, Johnson, Sheridan, and Wollstonecraft.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 432WI Advanced Creative Writing Prose Credits: 3

A course for advanced students of fiction writing. Open to students who have taken English 312 or its equivalent. The class will proceed through analysis of models, discussion of general principles, critique of student work. Students will simultaneously be encouraged to experiment and to refine the form and subjects best suited to their talents. Emphasis will remain on the short story, though there may be units in other forms--novella, film script, the non-fiction essay.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 312 or ENGLISH 315 or ENGLISH 316WI.

ENGLISH 433 Histories Of Writing, Reading, And Publishing Credits: 3

A study of selected topics concerning the material practices of writing, reading, and publishing within specific cultural and historical contexts. Issues examined may include authorship, education, information technologies, libraries, literacy, periodicals, popular literature, publishers, and communities of readers.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 434 Postcolonial Literature Credits: 3

An exploration of postcolonialism through the study of literary and theoretical texts created by or representing peoples whose historical experience has been decisively shaped by the experience or legacies of colonialism. Texts will be drawn from a variety of genres and from several countries. The course will consider several definitions of postcolonialism and related terms such as cosmopolitanism, hybridity, diaspora, and nationalism.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 435WI Advanced Creative Writing Poetry Credits: 3

An advanced poetry workshop that includes intensive reading of contemporary poetry and aims at each student creating a portfolio of publishable poems. The focus of the course will vary to address a variety of topics such as metaphor and closure; imitation and the line; form and voice. May be repeated once for credit.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 312 or ENGLISH 315 or ENGLISH 316WI.

ENGLISH 436WI Poetic Forms Credits: 3

An advanced creative writing course that focuses on intensive study of and practice in metrics and traditional and nonce forms. May be repeated once for credit.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 312 or ENGLISH 315 or ENGLISH 316WI.

ENGLISH 437WI Prose Forms Credits: 3

The making of a work of prose requires expertise with the structure of the chosen form, and an understanding of the relationship of form to content. This class teaches the techniques for planning and drafting major prose forms which could include the very-short story, the story, novella, novel, linked-story collection, episodic novel, essay novel, the play, the creative nonfiction book, and others. Students will learn how to create particular prose forms and how to use content as a guide to inventing new forms. We will examine some of the best examples of both traditional and newly invented forms by writers such as Anton Chekhov, Katherine Anne Porter, Tim O'Brien, and Sandra Cisneros.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 312 or ENGLISH 315 or ENGLISH 316WI.

ENGLISH 438 The "New Letters" Writing Conference Credits: 1-3

An intensive weekend conference for creative writers of varying genres and levels of experience, published and unpublished – fiction, poetry, nonfiction, stage and screen. The conference includes creative and interdisciplinary sessions on writing and publishing, genre-specific workshops, socializing and networking opportunities, and private manuscript consultations. The course of study for two- and three-credit students includes selected reading and post-weekend tutorial time conducted by accomplished, working writers. The conference may be repeated once for credit. Two- and three-credit students need the instructor's consent and must have taken a 300-level creative-writing course in the focus genre prior to enrolling.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 439 Shakespeare and Film Credits: 3

Grounded in the close analysis of texts, this course examines film adaptations of Shakespeare's plays across the range of dramatic genres (history plays, tragedy, comedy, and romance). This course is open to seniors and graduate students only. Graduate students will be responsible for supplemental critical readings.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 440 American Culture Credits: 3

Texts that offer perspectives on key historical themes of American culture. Texts may be grouped around any culturally significant principle (e.g. region, race, gender, class, ethnicity, religion) or theme (e.g. the mythology of the frontier, marriage and domesticity, the American Dream). The course may be taken twice for credit, provided substantive changes in topic.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 441 Girls And Print Culture Credits: 3

This course deals with girls' relationships to the continually evolving print culture. Students will examine various literary representations of girlhood by adult writers, explore texts directed at girls (e.g., conduct books, periodicals, textbooks), and study the writing and reading practices of girls themselves.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 442 Playwriting I Credits: 3

Theory and practice of writing for the theatre with emphasis on the basic techniques.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 443 Playwriting II Credits: 3

Theory and practice of writing for the theatre with emphasis on advanced techniques.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 445 History And Principles Of Rhetoric Credits: 3

A study of selected writings of ancient, and modern rhetoricians illustrating key issues in the development of Western discourse theory and practice. Issues examined include the relationships between rhetoric and knowledge, orality and literacy, and rhetoric and poetics. Attention will also be given to the implications of rhetorical theory for modern language instruction.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 447 Theory and Criticism in English Studies Credits: 3

A survey of major schools and methods of literary theory and criticism. Authors and texts to be determined by the instructor of the course.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 448 External Internship Credits: 1-3

Students may complete an external internship involving writing and editing with a publishing company, trade magazine, literary or academic journal, other print or electronic media organization, or with advertising, public relations, or non-profit firms. Internships are granted on a competitive basis. Students will compile a portfolio of their work under the direction of the internship supervisor to be submitted for evaluation to the department's internship coordinator.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 449A Publication Practicum Credits: 1-3

This course provides practical experience with New Letters magazine, New Letters on the Air, and BkMk Press in business analysis/reporting, copy-editing, manuscript evaluation, promotion/grant development, library research, market research, and other skills. The practicum is limited to three students per semester, to be chosen on the basis of demonstrated writing and organizational skills. References are required. May be taken for no more than three credit hours over a maximum of two semesters.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 449B Publication Practicum Credits: 3

This course covers the basics of producing an issue of an academic journal. Students acquire hands-on experience at all stages of production.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 449C Publication Practicum Credits: 1-3

This course allows students to work with a faculty member on an ad hoc project for publication such as a special journal issue or festschrift, book manuscript, a new scholarly edition of a primary text, or a digital edition. Course may be repeated once for continued work on the same project.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 450 Special Readings Credits: 1-3

Intensive individual readings in a field, genre, or individual figure to be selected by a student or a group of students in consultation with an instructor willing to direct the project. Generally limited to graduating seniors who have completed the majority of the work for their major. Not open to students in their first semester at UMKC. May be repeated for credit.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 451 Shakespeare Comedies And Histories Credits: 3

A study of Shakespeare's major comedies and history plays with special emphasis on his dramatic works before 1600.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 452 Early English Drama Credits: 3

English religious and secular drama prior to Shakespeare. Mystery and morality plays are studied, with emphasis on their literary and social backgrounds. Close reading of such works as "Everyman," "The Wakefield Second Shepherd's Play," and "The Spanish Tragedy."

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 453 Modern Drama, 1880-1945 Credits: 3

A study of modern drama: Continental, British, and American, including history and development, critical theory, and literary evaluation. This course will focus on the earlier modern playwrights from Ibsen and Shaw, with special attention to naturalism.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 454 The Civil Rights Movement in African American Literature Credits: 3

This course examines how African American literature shaped ideas about freedom, rights, citizenship and race in the civil rights movement. It draws on a variety of literary forms—speeches, essays, autobiographies, fiction, drama, poetry and film—to explore the movement's impact on communities and cultures as well as its various debates and competing visions.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 455 Studies In The Novel 1740-1900 Credits: 3

An intensive study of no more than three major novelists of the eighteenth or nineteenth century. The content of the course will change, depending on the instructor.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 456 From Field Shout to Hip Hop: African American Poetic Traditions Credits: 3

This course examines the development of African American poetry from its early forms as field shouts, ballads, and blues to present forms including spoken word and hip hop. Includes authors such as Phillis Wheatley, Paul Lawrence Dunbar, Langston Hughes, Gwendolyn Brooks, Tupac Shakur, and Jessica Care Moore.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 457 Stages Toward Freedom: African American Dramatic Traditions Credits: 3

This course explores the development of African American dramatic traditions from the eighteenth century through the Harlem Renaissance Black Arts Movement, to current postmodernism. Includes authors such as W.W. Brown, Zora N. Hurston, Amiri Baraka, Sonia Sanchez, August Wilson, Suzan-Lori Parks.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 458 Slave Narratives: Race, Gender, and Writing Freedom Credits: 3

A truly American, home grown genre and powerful force in the development of American political and social realities, the African American Slave Narrative is an established, recognized influence in the development of African American and American literary history. In this course you will have the opportunity to explore the historical trajectory of the Slave Narrative, looking at early formulations of its structure, purpose and conventions—especially in terms of gender and race, subsequent various permutations, and the eventual development of the Neo-slave Narrative as its resurrection, which adds to the complexity and theoretical impact of the literary autobiography from black perspectives.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 459 African American Migrations in Literature Credits: 3

The course examines representations of two different trajectories of migration in African American literature: African American journeys from the south to northern and mid-western regions of America, and concurrent migrations of Caribbean people to the US in the early twentieth century.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 460 Special Offerings Credits: 1-4

The instructor who gives this course determines what its content shall be. All aspects of literature and linguistics are within its possible range.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 461 Shakespeare Tragedies And Romances Credits: 3

A study of Shakespeare's major tragedies and late romances with special emphasis on his dramatic literature after 1600.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 462 Restoration And 18th-Century Drama Credits: 3

The drama after the restoration of the monarchy and the reopening of the theaters through the 18th century. Special emphasis is placed on the comedy of manners and the heroic drama in the Restoration and the sentimental comedy in the 18th century. Includes such playwrights as Dryden, Congreve, Etherege, Wycherley, Steele, Lillo, Cumberland, Sheridan, and Goldsmith.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 463 Contemporary Drama II Credits: 3

A study of contemporary drama: Continental, British, and American, including history and development, critical theory and literary evaluation. This course will focus on the more recent writers, including the absurdist, with special attention to experimental drama.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 464 Medieval Methods & Paleography Credits: 3

This course examines the methodology and historiography of Medieval Studies. Through an introduction to paleography, the study of medieval handwritings, it prepares students for advanced work in Medieval and Renaissance studies. Using an interdisciplinary approach, this course will examine the historical and cultural settings for medieval texts, their physical form and production, as well as the tradition of textual transmission in the medieval world. In addition to gaining familiarity with the many different types of primary sources, such as literary, artistic, legal and notarial sources, students will be exposed to methods for practical archival work in various European nations. Recommended preparation: First Year Latin.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 465 Studies In The Modern Novel Credits: 3

An intensive study of no more than three major 20th-century novelists. The content of the course will change, depending on the instructor.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 468 Women's Literature in Africa and the African Diaspora Credits: 3

This course is a comparative examination of the variety of literary works produced by women of African descent in the United States, the Caribbean and Africa. Students will explore the cross-cultural implications of texts in light of the intersections of gender, race and class.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 470 Introduction To Descriptive Linguistics Credits: 3

General introduction to linguistics science. Linguistic analysis, structures and change. Language families. Historical reconstruction. Generative grammar.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 310.

ENGLISH 475 Creative Nonfiction Credits: 3

This course emphasizes the study and crafting of creative nonfiction. special attention is given to developing the writing techniques required to shape publishable narratives out of experience.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 312 or ENGLISH 315 or ENGLISH 316WI.

ENGLISH 477CS Classical Studies Credits: 3

Advanced study in Classical literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 477DH Studies in Digital Humanities Credits: 3

Advanced study in in Digital Humanities. Subject varies and will be visible when students enroll.

ENGLISH 477EM Early Modern Studies Credits: 3

Advanced study in Early Modern literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 477ES 18th-Century Studies Credits: 3

Advanced study in eighteenth-century British or American literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 477MS Medieval Studies Credits: 3

Advanced study in Medieval literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 477NS 19th-Century Studies Credits: 3

Advanced study in nineteenth-century British or American literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 477RC Studies in Rhetoric and Composition Credits: 3

Advanced study in rhetoric and composition. Subject varies and will be visible when students enroll.

ENGLISH 477SA Studies in Authorship Credits: 3

Advanced study of individual authors or groups of authors in a variety of periods or literary and cultural movements. Subject varies and will be visible when students enroll.

ENGLISH 477SG Studies in Genre Credits: 3

Advanced study in a single genre such as the novel, the short story, poetry, drama, or non-fiction. Subject varies and will be visible when students enroll.

ENGLISH 477TS 20th- and 21st-Century Studies Credits: 3

Advanced study in twentieth- and twenty-first-century British or American literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 487FI Creative Writing Workshop Credits: 3

Advanced creative writing workshop. Subject varies and will be visible when students enroll.

ENGLISH 487MG Multigenre Workshop Credits: 3

Advanced creative writing workshop in multiple genres. Subject varies and will be visible when students enroll.

ENGLISH 487NF Nonfiction Workshop Credits: 3

Advanced creative writing workshop in nonfiction. Subject varies and will be visible when students enroll.

ENGLISH 487PO Creative Writing Workshop Credits: 3

Advanced creative writing workshop. Subject varies and will be visible when students enroll.

ENGLISH 499 Senior Tutorial Credits: 3

A comprehensive tutorial for students who have a faculty-approved research project. The project will culminate in a critical study of 20-25 pages or a creative writing portfolio of similar length. This course is appropriate for students who intend to continue their studies at the graduate level.

Prerequisites: ENGLISH 225 or DISC 200.

Entrepreneurship (ENT)

Courses

ENT 301 Entrepreneurship Toolkit Credits: 3

This course is for non-business majors (majors outside of the Bloch School) working towards an entrepreneurship minor. In this course students learn the basic elements of organizational functions including management, accounting, finance, and economics as foundational principles of entrepreneurship.

ENT 315 Entrepreneurial Mindset and Opportunity Recognition Credits: 3

This course teaches students how to develop an entrepreneurial mindset. Students will utilize play, creative problem solving, design thinking, and creativity tools while developing skills to mitigate risk and recognize opportunities.

ENT 321 Real Estate Principles Credits: 3

Starting with the basics of real estate terminology, students learn real estate's role in the economy, it's legal foundations, government controls, appraisal processes, valuation processes, brokering and closing transactions, time value of money, basic management issues and lease clauses, and basic standard form purchase contracts.

ENT 326 Creativity, Innovation, and Problem Solving Credits: 3

This course examines creativity and innovation, and their application to problem solving and developing new initiatives. Students will develop the ability to understand and solve problems and initiate opportunities by thinking new things. They will understand the concepts, skills, information, attitudes, and resources that leaders need to create valuable ideas, products, or initiatives.

ENT 327 Designing the Business Model Credits: 3

This course will teach students how to design a business model, refine that business model, and create a plan for a new venture. This course will take students through several different toolkits that can be used to create for-profit startups, social ventures, or create value within an existing organization.

Prerequisites: ENT 315.

ENT 329 Entrepreneurship Scholars Credits: 3

In this course, students will acquire the skills required to manage and grow a successful new venture through hands-on, real-world work on their own venture. Students will work with the instructor and at least one mentor to identify specific deliverables and a long term venture plan. Students will manage their enterprise, attend a series of workshops, and work with their peers, instructional coaches and mentors to further their venture. Special application and selection process.

Prerequisites: Departmental consent.

ENT 332 Managing the New Venture: Experiential Learning Credits: 3

In this course, students will acquire the skill sets needed to manage and grow a successful new venture, and will actually manage a new enterprise.

Prerequisites: ENT 327.

ENT 341 Technology Entrepreneurship Credits: 3

This course is designed to familiarize students with the creation of successful, high-value enterprises, with an emphasis on markets for technology and venture capital. Students identify a business opportunity, create a technology-based solution, and assess the commercial and technological viability of the business opportunity. Case studies will emphasize life sciences, engineering, and information technologies.

ENT 361 New Product Development Credits: 3

This course introduces students to a formal process used to develop new physical products. Throughout the process, students learn how an abstract idea can be transformed into concrete product concepts that will in turn be translated into tangible working prototypes.

ENT 364 Entrepreneurial Management and Innovation Credits: 3

Students are exposed to the unique entrepreneurial experience of conceiving, evaluating, creating, managing, and eventually selling a business. The goal is to provide a comprehensive background with practical application of important concepts applicable to an entrepreneurial environment. Key business areas of finance, accounting, marketing, and management will be addressed from an entrepreneurial perspective.

ENT 412 Entrepreneurial Finance Credits: 3

This course examines the financing and valuation of new ventures from the perspectives of entrepreneurs and venture capitalists. The focus is on financial thinking, tools, and techniques that are relevant for seeking new venture financing and making investment decisions. The course is suitable for anyone with an interest in startup companies, venture capital, or private equity firms.

Prerequisites: ACCTNG 210; or ENT 301 and ENT 327.

ENT 421 Real Estate Finance Fundamentals Credits: 3

This course will provide a fundamental understanding of basic financial concepts of real estate including compounding and discounting, construction of amortization tables and after-tax yield analysis for a simple real estate investment. It also touches on the basics of title insurance, ownership issues, fixed rate versus variable rate mortgages in residential real estate, understanding housing bubbles, and trends in valuation of residential real estate. In addition, the student will complete mathematical comparisons of leasing versus owning a home.

ENT 425 Corporate Entrepreneurship Credits: 3

This course seeks to equip students with the skills required to develop new ideas and create viable new businesses or processes within the context of an established organization. The course will address the development of an internal culture of innovation, processes for reviewing ideas and for developing business concepts, strategic analysis, and positioning for competitive advantage.

ENT 432 Entrepreneurial Marketing and Selling Credits: 3

This course exposes students to the objectives, challenges, and requirements for effective, results-oriented marketing activities and sales efforts for the entrepreneur/new venture. Key topics include the selection, design, and budgeting of entrepreneurial marketing and advertising programs, along with effective selling, customer acquisition, and service/retention efforts.

ENT 460 Creating the Enterprise Credits: 3

This course looks at the processes and skills individuals require in order to create their own enterprise, manage a new business, or work within an entrepreneurial organization. Students will learn how to take a good idea, assess that idea, and develop an appropriate business model, and will work in teams to develop a full-length business plan.

Prerequisites: (or concurrent) ACCTNG 211, FIN 325, MKT 324, MGT 330, DSOM 326.

ENT 461 Social Entrepreneurship Credits: 3

This course introduces students to social entrepreneurship through lectures and discussions, key readings, guest speakers such as social entrepreneurs, case studies, videos, service-learning activities, and group assignments. Students will develop an understanding of the social entrepreneurship process, the differences between social entrepreneurship and business entrepreneurship, social enterprise, and different revenue streams including the importance of sustainability. By the end of the course, students will be able to develop a social entrepreneurship project proposal on a social problem they are compassionate about and make a presentation to the class.

ENT 462 Entrepreneurial Experience Credits: 3

In this course students integrate skillsets and apply an entrepreneurial mindset to a practical experience. The process includes identifying an opportunity, taking action, and evaluating outcomes of actions taken. The experience will be through project based consulting for a startup or entrepreneurial organization or within the context of a student's own venture with prior approval.

Prerequisites: ENT 327, ENT 412.

ENT 487 Special Topics Credits: 3

Special topics in entrepreneurship.

ENT 496 Internship: Entrepreneurship Credits: 1-3

This course provides an opportunity for students to integrate their academic studies via employment with a business or organization in the community.

Prerequisites: Departmental consent.

ENT 497 Special Topics: Entrepreneurship Credits: 1-3

Study and research in areas of special interest under individually faculty direction.

Prerequisites: Departmental consent.

Environmental Sciences (ENV-SCI)

Courses

ENV-SCI 110L Understanding the Earth Laboratory Credits: 2

Laboratory and field demonstration and exercises in environmental science. Weekly exercises or field trips.

ENV-SCI 110L - MOTR PHYS 110LES: Essent. Physical Sciences w/Lab

**ENV-SCI 110R Understanding the Earth: Introduction to Environmental Science and Laboratory Credits: 3**

This introductory course surveys the processes that shape our planet. Topics include: plate tectonics and mountain-building, rivers and oceans, atmospheric circulation, weather and climate, and the amazingly complex relationships between life on Earth and the physical environment.

ENV-SCI 110R - MOTR PHYS 110ES: Essentials in Physical Sciences



ENV-SCI 210 Issues in Environmental Science Credits: 3

Explores important environmental issues such as air and water pollution, water supply, climate change, agriculture and food supply, environmental health, ecosystem disruption, environmental management, environmental ethics, and energy resources. Topics may vary depending on current events.

ENV-SCI 220 Ecosystem Science for Decision Makers Credits: 3

This course addresses the fundamentals of ecosystem science with an emphasis on human-induced change in natural systems. Course content characterizes the biological patterns found in nature emphasizing application of underlying principles. Scientific tools are provided to evaluate ecosystem concerns and make informed decisions.

ENV-SCI 303 Weather and Climate Credits: 4

Overview of weather processes and the main components of the climate system. Emphasis is on the physical basis of daily weather patterns, seasonal climate variability and longer-term climate change at local, regional, and global scales. The theme throughout the course will be the importance of weather and climate as major drivers of environmental change.

Prerequisites: ENV-SCI 110R or GEOLOGY 220.

ENV-SCI 321 Climate Change Impact Assessment and Policy Response Credits: 3

This course introduces how scientists assess observed climate change and predict future climate change. Lectures, discussions, problem sets, and term papers help students explore interactions among climate change, human activities and policy responses. It helps students achieve an appreciation for the role of accurate scientific information as foundation for shaping political agreements and policies on climate change.

Prerequisites: ENV-SCI 110R.

ENV-SCI 332CZ Environmental Sustainability Credits: 3

This course will introduce the concept of sustainability and review how sustainability might work at the individual, neighborhood, state, nation and global scales. Students will participate in some form of community engagement on sustainability as well as reflect upon how their own practices impact the environment.

ENV-SCI 416 Understanding and Living with Volcanoes Credits: 3

This course will examine the distribution, tectonic setting, and morphology of a range of volcano types on Earth and a few examples from other planets. Students will study volcanic processes including explosive and passive processes and how we investigate them. This will involve discussion of volcanic hazards and hazard assessment, risk communication, and the challenges of volcanic crises response. The course will also cover how volcanoes impact the local and global economy and Earth's climate. Recommended preparation: GEOG 314 / GEOLOGY 314 or GEOLOGY 325 or GEOLOGY 342.

Prerequisites: GEOLOGY 220 or ENV-SCI 110R/ENV-SCI 110L, and GEOG 203 or GEOG 402.

ENV-SCI 449 Global Water and Sustainability Credits: 3

This course examines the physical characteristics of water and its role in Earth systems. The challenges facing societies in an era of rapidly-changing climate are explored.

ENV-SCI 496 Environmental Internship Credits: 1-4

Students obtain practical experience working for local engineering and environmental firms, or governmental agencies. Specific duties and application requirements will vary depending on the funding organization's needs. Junior or senior standing required for undergraduates.

Environmental Studies (ENV-STDY)

Courses

ENV-STDY 325 Cultural Perspectives on the Environment Credits: 3

This course explores the history of conservation practices in American agriculture from the 1700s through the present. Additionally, the course examines the past and present legal implications of environmental statutes for minority farmers from a social and environmental justice perspective.

ENV-STDY 412 Global Tourism Credits: 3

This course is a regional survey of world tourism. Topics include the uniqueness of place, the marketing of tourist destinations, and the cultural, economic, and environmental impacts on host societies.

Prerequisites: GEOG 105 or GEOG 200 or GEOG 202.

ENV-STDY 450 Ecotoxicology Credits: 3

This course addresses the fundamentals of ecotoxicology, integrating the sciences of ecology and toxicology. Students will learn the biological basis for pollutant effects on individuals and populations of plants and animals, how pollutant intensity varies as a function of bioavailability, the basics of risk assessment, and how pollutant effects are modified by ecological interactions within communities and ecosystems. The ultimate goal of ecotoxicology is to predict the effects of pollution within an ecological context.

Prerequisites: BIOLOGY 108, CHEM 211, CHEM 212R.

ENV-STDY 499WI Environmental Studies Practicum Credits: 3

Students conduct research, participate in discussions, and prepare written reports on selected topics concerning the environment.

Prerequisites: Senior standing, RooWriter.

Euphonium (EUPHNM)

Courses

EUPHNM 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit towards the major.

EUPHNM 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

EUPHNM 100C Applied Study for the Non-Music Major. Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

EUPHNM 101 Freshman Euphonium I Credits: 2-4

EUPHNM 102 Freshman Euphonium II Credits: 2-4

EUPHNM 201 Sophomore Euphonium I Credits: 2-4

EUPHNM 202 Sophomore Euphonium II Credits: 2-4

EUPHNM 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

EUPHNM 301 Junior Euphonium I Credits: 2-4

EUPHNM 302 Junior Euphonium II Credits: 2-4

EUPHNM 401 Senior Euphonium I Credits: 2-4

EUPHNM 402 Senior Euphonium II Credits: 2-4

Finance (FIN)

Courses

FIN 325 Financial Management Credits: 3

This course provides an overview of the relationship between business decisions and the value of the firm, as determined by the marketplace. Students will study the composition of capital structure, capital budgeting, and cost of capital theory, including incremental analysis of investment situations.

Prerequisites: ACCTNG 210 and completion of 45 hours.

FIN 326 Financial Management 2 Credits: 3

Explores leverage and capital structure, dividend policy, raising capital, short-term financial planning, working capital management and international financial management. FIN 326 builds on the content of FIN 325. A cursory knowledge of accounting principles is assumed, as well as fluency with simple algebra and arithmetic skills.

Prerequisites: FIN 325.

FIN 340 Financial Markets and Institutions Credits: 3

This course introduces students to U.S. financial markets and institutions, explaining how they operate, how they promote economic growth and well-being, and how they malfunction in financial crises. Among the financial markets examined are those for short-term debt, mortgages, government and corporate bonds and equity. Financial institutions studied include investment banks, commercial banks and savings institutions, pension plans, mutual funds, hedge funds, and private equity funds. The course also examines the role of the Federal Reserve in the financial system and the nature and purpose of financial regulation.

Prerequisites: FIN 325.

FIN 345 Investments Credits: 3

The course develops the theoretical framework necessary for a systematic approach to portfolio management. Content includes consideration of investment objectives, measurement of risk and returns, alternative uses of invested funds, analysis of securities markets, and the techniques of security analysis. Students will have an opportunity for the creation and management of an investment portfolio.

Prerequisites: FIN 325.

FIN 350 Introduction to Risk Management and Insurance Credits: 3

This course introduces students to the principles of personal and corporate risk management. Personal risk management topics include: personal insurance planning, annuity investing and personal liability management. Corporate risk management topics include: managing corporate risk, reducing risk through hedging, and legal liability risk.

FIN 351 International Financial Management Credits: 3

The world's business activities and economics are becoming more integrated. This course provides an introduction, appreciation and understanding of how this process impacts financial decisions for global business. Students should expect to develop an integrated analytical and decision making perspective that will enable them to extend financial concepts such as capital budgeting and risk management, and instruments such as forwards, swaps, fixed income analysis, arbitrage, etc. to their international analogs.

Prerequisites: FIN 325.

FIN 369 Payment Systems Credits: 3

The payment system is central to virtually all economic transactions. The payment system also has been undergoing fundamental changes over the past two decades. Yet, the payment system is one of the least understood parts of the economic system. The purpose of this course is to examine the payment system from economic, business, and regulatory standpoints.

FIN 419 Financial Statement Analysis Credits: 3

Students will take an in-depth look at the external financial statements that are prepared by corporations, including the tools needed to organize, summarize, and understand corporate financial data for use in decision making. Ratio analysis, trend analysis, earnings forecasting, bankruptcy predictors, statistical methods important to finance, and financial data bases are among the topics that will be covered.

Prerequisites: FIN 325.

FIN 428 Commercial Bank Management Credits: 3

This course presents an overview of financial management of the interest spreads, credit risk, liquidity, and capital positions of commercial banks. Topics to be covered include analysis of bank profitability, lending functions and policy, securities investment strategies, fund attraction, regulatory examination, capital adequacy, and integrated asset/liability management. Instructional media includes cases and computerized bank management simulation.

Prerequisites: FIN 325.

FIN 435 Advanced Corporate Finance Credits: 3

The course focuses on the finance function of the firm from the managerial perspective. Topics include working capital management, capital budgeting, financial structure, merger and reorganization, capital rationing, and analysis of risk. Students will use cases and computer techniques.

Prerequisites: FIN 326.

FIN 445 Advanced Investments Credits: 3

Students take an in depth look at some of the advanced investment analysis tools used by practicing portfolio managers. This course covers the valuation of both derivative securities and fixed-income securities. There is also a strong focus on managing price risk, interest rate risk, and exchange rate risk. In addition there is an emphasis on bond portfolio management and derivative security applications.

Prerequisites: FIN 345.

FIN 451 Life & Health Insurance Credits: 3

This course focuses on insurance issues related to life and health insurance. Content includes consideration of life insurance needs, annuities, disability insurance, long-term care insurance, and personal and corporate health insurance issues.

Prerequisites: FIN 350.

FIN 452 Property and Casualty Insurance Credits: 3

This course focuses on insurance issues related to commercial property and liability insurance. Content includes consideration of issues related to managing risks such as loss of business income, employer liability, management liability, environmental liability and cyber-liability.

Prerequisites: FIN 350.

FIN 453 Risk Management Credits: 3

This course focuses on insurance issues related to managing corporate risk. Content includes consideration of issues related to managing risk such as enterprise risk management, reinsurance, corporate property and liability, and corporate uses for death and disability insurance for key employees.

Prerequisites: FIN 350.

FIN 454 Principles of Surety and Corporate Liability Credits: 3

This course focuses on insurance issues related to surety bonding and corporate liability. Content includes consideration of issues related to managing risk such as mitigating environmental liability, corporate safety programs, and surety bonding.

Prerequisites: FIN 350.

FIN 476 Introduction to Fintech Credits: 3

This course will introduce students to Fintech and provide an overview of the main areas in which it is disrupting finance. These areas include lending and equity investment (algorithmic lending, P2P lending and crowdfunding platforms); financial market infrastructure (cryptocurrencies, blockchain technology, smart contracts); portfolio management and financial advice (robo-investment); and financial trading (algorithmic trading, digital trading platforms). Students will learn how the new financial technologies work, how incumbents and new entrants might profit from the technologies, and how the technologies could affect the efficiency, accessibility, fairness, and security of the financial system.

FIN 487 Special Topics Credits: 3

Special topics in finance.

FIN 496 Internship: Finance Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

Prerequisites: Departmental consent.

FIN 497 Special Topics: Finance Credits: 1-3

Study and research in areas of special interest under individual faculty direction.

Prerequisites: Departmental consent.

Flute (FLUTE)

Courses

FLUTE 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit towards the major.

FLUTE 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

FLUTE 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

FLUTE 101 Freshman Flute I Credits: 2-4

FLUTE 102 Freshman Flute II Credits: 2-4

FLUTE 201 Sophomore Flute I Credits: 2-4

FLUTE 202 Sophomore Flute II Credits: 2-4

FLUTE 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

FLUTE 301 Junior Flute I Credits: 2-4

FLUTE 302 Junior Flute II Credits: 2-4

FLUTE 401 Senior Flute I Credits: 2-4

FLUTE 402 Senior Flute II Credits: 2-4

Foreign Language (FRN-LNG)

Courses

FRN-LNG 180 Special Elementary Foreign Languages Topics I Credits: 2-5

Instruction in foreign languages at the elementary level. Essentials of grammar, basic conversation and reading, practical vocabulary. May include introduction of new methods of foreign language teaching, special texts, and languages not offered through regular courses.

FRN-LNG 190 Special Elementary Foreign Languages Topics II Credits: 2-5

Special Elementary Foreign Languages Topics II.

FRN-LNG 230 Themes in World Cultures Credits: 3

Introduction to themes, topics, and traditions in world cultures with emphasis on historical or contemporary transnational and global issues.

FRN-LNG 231 Themes in World Languages Credits: 3

A survey of the world's human languages with a focus on typology, geography and sociolinguistics.

FRN-LNG 280 Special Intermediate Foreign Languages Topics I Credits: 1-4

Instruction in foreign languages at the second-year intermediate level. Further development of comprehension and communicative skills. Readings of moderate difficulty and grammar review. May include introduction of new methods of foreign language teaching, special texts and topics, and new languages not offered through regular courses.

FRN-LNG 290 Special Intermediate Foreign Languages Topics II Credits: 1-4

Continuation of FRN-LNG 280.

FRN-LNG 302 Love and Death in European Medieval Literature Credits: 3

This course explores the intertwined themes of love and death in medieval European literature. Students will read key works from the medieval European traditions in English and will also be introduced to key concepts in the comparative study of medieval culture.

FRN-LNG 380 Special Topics Credits: 1-3

Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

FRN-LNG 459 Foreign Languages Teacher Education Seminar Credits: 3

Supports the culminating Foreign Languages student teaching experiences, and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Peer and mentor collaboration in the analytical process are fundamental to the course objectives.

FRN-LNG 470A Internship in Foreign Languages Credits: 1-3

Intern experience under faculty supervision involving the use of the appropriate foreign language with a local firm, non-profit organization, etc. students will compile a portfolio of their work under the direction of the internship supervisor to be submitted for evaluation by their chosen faculty mentor.

Prerequisites: Junior standing.

FRN-LNG 470B School/Education Related Internship in Foreign Languages Credits: 1-3

Intern experience under faculty supervision involving the use of the appropriate foreign language at a local school. Students will keep a journal in the foreign language.

FRN-LNG 480 Special Topics Credits: 1-3

Each time this course is offered a particular genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

FRN-LNG 494 Methods of Teaching Foreign Languages Credits: 3

Teaching methods and materials for beginning and advanced classes in French, German, and Spanish. Modern language teaching methodology and material will be evaluated and demonstrated, together with effective use of the Language Resource Center, tapes, slides, film strips, and other audio-visual materials. Does not count toward a major in foreign language.

French (FRENCH)

Courses

FRENCH 110 Elementary French I Credits: 3

The goals of this course are an ability to speak and to understand simple (spoken) French as well as to read and write simple prose.

FRENCH 110 - MOTR LANG 101: French I

**FRENCH 120 Elementary French II Credits: 3**

Continuation of FRENCH 110.

FRENCH 120 - MOTR LANG 102: French II

**FRENCH 211 Second Year French I Credits: 3**

Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.

FRENCH 221 Second Year French II Credits: 3

Continuation of FRENCH 211.

Prerequisites: FRENCH 211.

FRENCH 280 Special Intermediate French Topics I Credits: 1-4

Instruction of French on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses.

FRENCH 290 Special Intermediate French Topics II Credits: 1-4

Continuation of FRENCH 280.

FRENCH 301 Introduction to French Literary Studies Credits: 3

An introduction to the study of French literature and techniques of textual criticism. Readings include representative works from various periods. Strongly recommended for all majors, to be taken before or concurrently with other upper-level courses. Taught in French.

Prerequisites: FRENCH 221.

FRENCH 304 French Literature and Culture II Credits: 3

An introduction to the history of French literature from 1800 to the present stressing historical and cultural context, the major literary movements and the developments of the various genres and historical periods. Selected readings of the works of major authors of the period. Taught in French.

Prerequisites: FRENCH 221.

FRENCH 315 Intermediate Composition and Conversation I Credits: 3

Grammar review, practice in speaking and writing French, emphasis on writing. Required for major.

Prerequisites: FRENCH 221.

FRENCH 325 Intermediate Conversation and Composition II Credits: 3

Grammar review, practice in speaking and writing French; emphasis on speaking. Required for major.

Prerequisites: FRENCH 221.

FRENCH 340WI French Texts in Translation Credits: 3

Seminar on French texts in translation. Class will be conducted in English and no knowledge of French is necessary. May be taken for major credit.

FRENCH 351 Introduction to French Phonetics Credits: 3

Introduction to the fundamentals of pronunciation and intonation patterns in modern French.

Prerequisite: FRENCH 221.

FRENCH 352 French Civilization II: Contemporary French Civilization Credits: 3

An in-depth survey of contemporary French culture, including major historical events and movements that have shaped modern France, as well as geography, the political system, family life and education, economics, etc.

Prerequisites: FRENCH 221.

FRENCH 354 French Civilization III: Lyon, Crossroads of France and Europe Credits: 3

An introduction to French culture and civilization through the history, geography, culture and arts of Lyon and its region. Offered during the Study Abroad Program in Lyon.

Prerequisites: FRENCH 221.

FRENCH 380 Special Topics Credits: 1-3

Treatment of a particular aspect of literature, language, or culture normally not offered through regular courses. May be repeated for credit when the topic changes.

Prerequisites: FRENCH 221.

FRENCH 414 Medieval Literature & Culture Credits: 3

Selected topics in medieval French literature and culture. Emphasis will be placed on the cultural and historical contexts surrounding text production in the Middle Ages. May be repeated for credit when the topic changes.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 415 Advanced Conversation and Composition I Credits: 3

Practice in speaking and writing French, with attention to advanced grammar topics and the elements of style.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 417 Renaissance French Literature and Culture Credits: 3

Selected topics in Renaissance (16th c.) French literature and culture. May be repeated for credit when the topic changes.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 424 19th-Century French Literature Credits: 3

Selected readings in various genres from Romanticism through Symbolism.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 426 20th- and 21st-Century French Literature and Culture Credits: 3

Selected readings from the Belle Epoque to the contemporary period. Special attention given to historical, cultural, and theoretical perspectives on the texts. May be repeated for credit when the topic changes.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 449 Survey of French Theater Credits: 3

A survey of the major French playwrights and their plays from the 17th through the 21st centuries. Historical and cultural influences will be covered as well as the specificities of the genre from the perspective of how the plays are performed and how we read them.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 472 Francophone Studies Credits: 3

Study of different national Francophone literatures. Reading may include writers from Quebec, Haiti, Africa, Louisiana, Vietnam, the French Indies, etc.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 473 The Francophone World Credits: 3

This course is an introduction to a large spectrum of Francophone literatures cultures around the world with a focus on North and West Africa, Belgium, Quebec, French Antilles and Haiti.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 480 Special Topics Credits: 1-3

Each time this course is offered a particular author, genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 490 Special Readings Credits: 1-3

Intensive readings in field or literary figure to be selected by the student in consultation with the instructor. Available to advanced students of French; available only when student cannot take regularly scheduled courses.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 499 Senior Seminar (Capstone) Credits: 3

Required for major. Covers seminal works of French literature in their historical and cultural context. Course content varies, but will include such elements as geography, politics, folklore, history of the language, architecture, art and music.

Prerequisites: FRENCH 315 or FRENCH 325.

General Education

Culture and Diversity Courses

GECDV 201 Culture and Diversity Credits: 3

Students engage in investigation and reflection of their own backgrounds and cultures, examining their own worldview and implicit bias. Through engagement with self and others, students begin recognizing the culture and worldview of those different from themselves. Students develop an awareness of self and how this self-knowledge manifests in interactions with others. Through dialogue and engagement with others in addition to reflection of self, students develop a critical consciousness of self and society.

Critical Thinking in the Arts and Humanities Courses

GECHT-AH 101 Making Meaning in A Changing World Credits: 3

Students appreciate the Arts and Humanities and the importance of the creative and human experience by learning how to analyze artifacts (e.g., texts) to make meaning out of their world.

GECHT-AH 102 Visual Art & Media Culture Credits: 3

An introduction to theory and practice in visual art and media culture, this course focuses on methods of understanding and creating images to reflect the cultural issues they represent, with focus put on how art represents the human condition.

GECHT-AH 103 Children's Literature and the Arts Credits: 3

This course introduces the critical analysis and evaluation of multicultural children's and young adult literature across a range of genres. Students will analyze the purposes and cultural meanings of print, digital, and online texts created specifically for children and adolescents and explore how readers meaningfully interact with this literature.

GECHT-AH 106 Kansas City as Text Credits: 3

Students appreciate the Arts and Humanities and the importance of the creative and human experience by learning how to analyze artifacts (e.g., texts) to make meaning out of their world. In this class, you will investigate important local topics, problems, or issues.

GECHT-AH 108 Making Meaning in A Changing World Credits: 3

Students appreciate the Arts and Humanities and the importance of the creative and human experience by learning how to analyze artifacts (e.g., texts) to make meaning out of their world.

Critical Thinking in the Natural and Physical Sciences Courses

GECHT-SC 101 How Do I Live in A Changing World Credits: 3

Students will investigate the natural and physical world through testable questions, models, hypotheses or discoveries and evaluate different lines of evidence including observations and measurements. Students will apply natural and physical science techniques and use results and conclusions to explain and appreciate the natural and physical phenomena that impact our lives, our community and the world in which we live.

Critical Thinking in the Behavioral and Social Science Courses

GECHT-SS 101 Why Though? Credits: 3

What is human behavior? How do humans influence and are influenced by the world around them? How can we study the "why" behind human behavior in a meaningful way given just how complex humans and societies are? In this course, students apply perspectives and critical thinking processes from the social sciences to identify and explore relevant questions. In particular, students collect and evaluate evidence and draw conclusions about the human experience in individual, social, and cultural contexts.

GEERT-SS 102 Culture through the Camera Lens Credits: 3

What is human behavior? How do humans influence and are influenced by the world around them? How can we study the "why" behind human behavior in a meaningful way given just how complex humans and societies are? In this course, students apply perspectives and critical thinking processes from the social sciences to identify and explore relevant questions. In particular, students collect and evaluate evidence and draw conclusions about the human experience in individual, social, and cultural contexts. This course provides an introductory survey of documentary film making.

Civic and Urban Engagement Courses

GECUE 201 Civic and Urban Engagement Credits: 3

Students participate in engagement with communities in which they investigate an issue of personal and public concern. Students analyze this community-defined issue or need by synthesizing knowledge from primary sources and/or secondary sources. Students discern and discuss the tension between individual and collective needs, and demonstrate ability and commitment to work actively within community contexts and structures to achieve a civic aim or remediate a problem or issue. In doing this, students develop decisions/ actions/ solutions that benefit the most people within a society while also not oppressing those in a minority. In short, students analyze issues and solutions that contribute to the greater good for the greatest number of diverse groups and people.

First Semester Experience Courses

GEFSE 101 First Semester Experience Credits: 3

The First Semester Experience will introduce students to the people, systems, and resources that foster success at UMKC. Students will participate in weekly Impact Seminars to learn about the research and teaching that takes place across campus and how to engage with faculty in your time at UMKC. They will also participate in small group sections for students pursuing related majors to explore big ideas, academic programs and career paths. The course also includes a range of co-curricular activities to connect students with a wide range of activities and events on campus and in the broader Kansas City community.

Geography (GEOG)

Courses

GEOG 105 Introduction to the Elements of Geography Credits: 3

A survey of major elements of physical and human geography, with a concise overview of the world's regions. Emphasis on global relationships and distributions, both environmental and cultural. Climates, natural vegetation, land forms, cultural origins and diffusions, economic patterns.

GEOG 105 - MOTR GEOG 101: World Regional Geography



GEOG 150 Introduction to Physical Geography Credits: 3

This course is an introduction to the study of the natural environmental systems of earth—the atmosphere, the hydrosphere, the biosphere, and the lithosphere. The primary objective of the course is to provide a broad overview of these systems at a global scale. This overview will entail descriptions of natural systems and the variations they exhibit both from place to place and through time. It will also entail explaining how natural systems operate and interact with each other, thereby providing a necessary foundation for understanding the tremendously diverse physical geography of earth.

Applies to natural science requirement.

GEOG 150 - MOTR GEOG 100: Physical Geography



GEOG 200 World Geography I Credits: 3

A survey of the physical and human geography of the regions and nations of Europe and the Americas, with Australia and New Zealand. The approach is strongly historical, emphasizing interconnections, shared colonial backgrounds and broader global contexts in the modern world. The course is aimed at non-specialists.

GEOG 202 World Geography II Credits: 3

A survey of the physical and human geography of the regions and nations of Russia and the other former Soviet republics, the Middle East, Africa, South Asia, East Asia Southeast Asia and the Pacific Realm. The approach is strongly historical emphasizing interconnections shared colonial backgrounds, and broader global contexts in the modern world. The course is aimed at non-specialists.

GEOG 203 Introduction to Geographic Information Systems Credits: 4

An introductory course covering the basic principles of geographic information systems focusing on such software programs as ARC-INFO and ARC-VIEW.

GEOG 210 Human Geography Credits: 3

A study of the geographical underpinnings and distribution of the main elements of culture, including population patterns, language, religion, political territorial organization, settlement, and economic livelihood. The environmental settings, geographic origins, diffusion, and geographic interrelationships of these culture traits are emphasized.

GEOG 215 Weather and Climate Credits: 4

Overview of weather processes and the main components of the climate system. Emphasis is on the physical basis of daily weather patterns, seasonal climate variability, and longer-term climate change at local, regional, and global scales. The theme throughout the course will be the importance of weather and climate as major drivers of environmental change.

GEOG 309 Urban Geography Credits: 3

Historical development, morphology and functions of urban places, including intercity relationships and the relationship between cities and their hinterlands; emphasis on American cities.

GEOG 311 Economic Geography Credits: 3

A systematic study of the modern world economy that includes discussion of the location of production and consumption, the nature and role of multinational enterprises in trade, resource limitations to growth, and cultural responses to globalization.

GEOG 314 Principles of Geomorphology Credits: 4

Explores the processes that shape the earth's surface. Focuses on the development and description of fluvial, glacial, eolian, and coastal landforms. Studies the influence of tectonic and climatic factors. Field trip.

Prerequisites: ENV-SCI 110R (or GEOLOGY 220).

GEOG 321 Climate Change Impact Assessment and Policy Response Credits: 3

This course introduces how scientists assess observed climate change and predict future climate change. Lectures, discussions, problem sets, and term papers help students explore interactions among climate change, human activities and policy responses. It helps students achieve an appreciation for the role of accurate scientific information as foundation for shaping political agreements and policies on climate change.

Prerequisites: ENV-SCI 110R.

GEOG 325 Cultural Perspectives on the Environment Credits: 3

This course explores the history of conservation practices in American agriculture from the 1700s through the present. Additionally, the course examines the past and present legal implications of environmental statutes for minority farmers from a social and environmental justice perspective.

GEOG 329 World Political Geography Credits: 3

An analysis of the influence of geographic factors (both physical and human) on the economic and political relationships of the nations of the world. Emphasis will be placed on population size and political viability of states, boundaries and frontiers as limits of national space, problems related to the spatial integration of states, and the independence and interdependence of states within the larger world political system.

GEOG 332 Cultural Geography Credits: 3

A study of the distribution and interpretation of cultural patterns throughout the world. Examined are material and non-material elements of culture such as settlement, land use, technology and belief systems. The geographic origins and diffusion of culture traits are emphasized.

GEOG 333 Geographic Elements of Urban Planning Credits: 3

Analysis of the changing form and structure of urban places from a planning viewpoint. The focus will be on land-use trends on both the intraurban and interurban levels. Covered will be such topics as planning for urban transportation, new towns, land-use planning, urban renewal, and environmental planning.

GEOG 340 Geography of the United States and Canada Credits: 3

A survey of the physical and human geography of the United States and Canada. The approach is strongly historical emphasizing interconnections, shared colonial backgrounds, and broader international contexts in the Americas and around the globe. This course is aimed at non-specialists.

GEOG 341 Geography of South America Credits: 3

A study of the physical and human geography of South America, with an emphasis on cultural processes and the historical record. Contemporary issues such as economic development, trade, urbanization, and geopolitical conflicts are discussed.

GEOG 342 Geography of Mexico, Central America and the Caribbean Credits: 3

A study of the physical and human geography of Middle America, with an emphasis on cultural processes and the historical record. Contemporary issues such as economic development, trade urbanization, and geopolitical conflicts are discussed.

GEOG 350 Geography of Europe Credits: 3

A survey of the physical and human geography of the regions and nations of Europe. The approach is strongly historical, emphasizing international interconnections and broad global contexts. The course is aimed at non-specialists.

GEOG 351 Regional Geography of the Middle East Credits: 3

A study of human imprint upon the land through settlement patterns, institutions of land organization, and types of economy. Strategies for the economic development of various regions in the Middle East are discussed.

GEOG 360 Principles of Biogeography Credits: 4

This course is an introduction to biogeography that explores the patterns of plant and animal distributions from both ecological and historical perspectives. We examine past geologic and climatic conditions, as well as interactions between organisms and their environment to explain modern distributions of flora and fauna. Human interactions with plants and animals have increasingly profound consequences on distributions of flora and fauna from destruction to management. We explore the increasing importance of issues and strategies in conservation. The laboratory portion of the course builds on core ecological concepts and provides experiences of field observation, data collecting and data analysis.

Prerequisites: ENV-SCI 110R.

GEOG 398 Field Trip Credit: 1

Three-day field trip in March or April (at student's expense) for department majors. An opportunity to observe and study physical and cultural features and collect materials. Brief descriptive report of trip required. Recommended preparation: 6-9 hours of upper-level geography.

GEOG 401 Advanced Geographic Information Science Credits: 4

This course is designed for the students knowledgeable in the fundamentals of geographic information systems, who wish to gain expertise in advanced topics and applications in geographic information systems, remote sensing, and related environmental informatics. Classes are organized to encourage active learning. Students are encouraged and guided to develop their research projects by integrating related techniques of geographic information science.

Prerequisites: GEOG 203 or GEOG 450.

GEOG 402 Environmental Remote Sensing and Digital Image Analysis Credits: 4

This course will provide students with innovative techniques for landscape-level environmental analysis, geographic and geological studies, earth science research, and environmental resources management using remotely sensed data including satellite images. Students will be taught basic remote sensing concepts and technical skills, including energy radiative transfer processes in remote sensing, sensors and resolutions, computer-based image processing and classification, and remote sensing/GIS integration.

Prerequisites: GEOG 203 or GEOG 450.

GEOG 403WI History and Philosophy of Geoscience Credits: 3

A survey of geoscientific thought since antiquity. The substance of geography, geology, and environmental studies will be sought primarily in scholarly treatise and formal analytical systems including cartography, but the course also addresses geoscientific principles emerging from the history of environment, government, law, economy, religion, literature, and material culture. Readings, lectures, discussions, research, writing.

GEOG 406 Global Environmental Change Credits: 3

This course will examine the current rates of global environmental change and potential causes in the context of Earth's natural climate variability. The course will follow a seminar format. Students will read and discuss published articles on current and emerging theories of forcing mechanisms in the Earth's systems.

GEOG 412 Global Tourism Credits: 3

This course is a regional survey of world tourism. Topics include the uniqueness of place, the marketing of tourist destinations, and the cultural, economic, and environmental impacts on host societies. Recommended preparation: GEOG 105 or GEOG 200 or GEOG 202.

GEOG 416 Understanding and Living with Volcanoes Credits: 3

This course will examine the distribution, tectonic setting, and morphology of a range of volcano types on Earth and a few examples from other planets. Students will study volcanic processes including explosive and passive processes and how we investigate them. This will involve discussion of volcanic hazards and hazard assessment, risk communication, and the challenges of volcanic crises response. The course will also cover how volcanoes impact the local and global economy and Earth's climate.

Prerequisites: GEOLOGY 220 or ENV-SCI 110R/110L, and GEOG 203 or GEOG 402.

GEOG 417 Special Topics Credits: 1-3

Individual research and study of a selected topic in geography, meteorology or earth science.

GEOG 426 Paleocology: Microfossils and Climate Change Credits: 3

Paleocology will focus on questions addressing past environments and past climates based on the ecology of microfossils. Micro-organisms are very sensitive to a wide variety of environmental conditions including temperature, precipitation, hydrology, water chemistry, salinity, habitat, and pollution. The fossil remains of these organisms are used as proxy indicators for reconstructing past environmental conditions, climate change, vegetation dynamics, and human impacts. Students will have the opportunity to process microfossils and make interpretations based on analysis data.

GEOG 437 Population Geography Credits: 3

This course analyzes human populations: how they grow, how their compositions change, and how and why people migrate from one place to another. Students will study basic demographic processes- mortality, fertility, and migration- and underline theory and techniques. Students will also examine relationships between population growth and population planning, immigration, urbanization and cities, and the environment.

GEOG 444 Spatial Data Analysis Credits: 4

Quantitative techniques and applications of spatial data analysis. The course will cover basic geospatial analysis techniques including hypothesis testing, kriging, variogram analysis, multivariate analysis and reliability analysis. Emphasis is on practical applications rather than theories. Intended for Geology, Geography, Environmental Studies, and relevant fields. Three hours lecture and one hour computer lab per week.

GEOG 448 Satellite Climatology Credits: 4

Use of satellite observations to study the climate system. Discussions consider the development of satellite climatology, sensors, platforms and methodologies used to estimate climate variables from radiance measurements. Aspects of climate that are emphasized include cloud climatologies, cloud systems, atmospheric moisture, radiation budget, and land-surface conditions. Three hours lecture and one hour lab per week.

Prerequisites: GEOG 303.

GEOG 449 Global Water and Sustainability Credits: 3

This course examines the physical characteristics of water and its role in Earth systems. The challenges facing societies in an era of rapidly changing climate are explored.

GEOG 450 Gis Fundamentals for Research Applications Credits: 4

This course will address the needs of upper level undergraduate and graduate students who desire to learn and apply fundamental Geographic Information Systems concepts and techniques for their research projects. This course will draw on the content of the Introductory GIS course offered by the department but will also be flexible such that the individual needs or interest of students can be met through guided reading and/or tailored laboratory sessions. The Department of Geosciences GIS computer laboratory, with a variety of GIS and Remote Sensing software, will be available for this course. Only for upper-level undergraduate and graduate students.

GEOG 460 Transportation Geography Credits: 3

Relation between transportation and spatial organization, selected analytical models dealing with traffic demand, network configuration, and allocation of transport facilities; application to specific problem areas including commuting. Seminar with discussions of briefs and term paper.

GEOG 496 Geography Internship Credits: 1-6

Students obtain directed practical experience working with non-profits, governments, or private enterprises. Duties will vary based on contractual agreement between the student, host organization, and the professor.

Prerequisites: Junior standing or higher.

GEOG 499WI Geography Seminar Credits: 3

Students critique geographic research and prepare a paper and an oral presentation on an approved topic.

Prerequisites: Senior standing.

Geology (GEOLOGY)

Courses

GEOLOGY 220 General Geology Credits: 3

Geology is the study of Earth, the materials that make up the Earth, and the forces and processes that build and shape the continents, oceans, and life on Earth. The goal of this course is for students to gain an understanding of the fundamental concepts and scientific principles that underlie the physical, chemical, and biological processes that shape our Earth and to learn to think critically about scientific information and how geologic processes affect us every day.

GEOLOGY 220 - MOTR GEOL 100: Geology

**GEOLOGY 220L General Geology Laboratory Credits: 2**

Laboratory and field investigations of principles of the geology designed to complement the topics covered in GEOLOGY 220 through the use of inquiry-based investigations in the laboratory and field.

GEOLOGY 220L - MOTR GEOL 100L: Geology with Lab

**GEOLOGY 250L Field Methods in Earth and Environmental Science Credits: 3**

A field-based course covering basic methods used by earth scientists for environmental, geographic, and geologic investigations. Students will collect field data at off-campus sites, conduct periodic monitoring, and analyze samples using departmental and personal instrumentation. Students will work on collaborative projects and will present their results. Class will meet weekly for four hours in the field.

GEOLOGY 250L - MOTR PHYS 110LES: Essent. Physical Sciences w/Lab

**GEOLOGY 251L Field Methods in Earth and Environmental Science: Off-Campus Credits: 3**

This course will provide students with an introductory, inquiry-based learning experience that focuses on the application of field methods for understanding surface and subsurface earth processes and environmental issues. Students will collect field data at off-campus sites, conduct periodic monitoring, and analyze samples using departmental Instrumentation. Students will work on collaborative projects and will present their results. Class will meet at an off campus location during break (added cost) plus have four on campus meetings.

GEOLOGY 313 Evolution and the Geologic Record Credits: 4

An introduction to the history of life by studying the geologic record. Students will examine major features of the fossil record including: invertebrates, vertebrates, and plants. Students explore what the fossil record tells us about geologic time, evolution, past environments and distributions of organisms. Three hours of lecture and two hours of laboratory a week. The course will include field trips to collect and interpret fossils and paleoenvironments.

GEOLOGY 314 Principles of Geomorphology Credits: 4

Explores the processes that shape the earth's surface. Focuses on the development and description of fluvial, glacial, eolian, and coastal landforms. Studies the influence of tectonic and climatic factors. Three hours lecture and two hours lab per week. Field trip.

Prerequisites: ENV-SCI 110R (or GEOLOGY 220).

GEOLOGY 321 Climate Change Impact Assessment and Policy Response Credits: 3

This course introduces how scientists assess observed climate change and predict future climate change. Lectures, discussions, problem sets, and term papers help students explore interactions among climate change, human activities and policy responses. It helps students achieve an appreciation for the role of accurate scientific information as foundation for shaping political agreements and policies on climate change.

Prerequisites: ENV-SCI 110R.

GEOLOGY 322 Earth Materials Credits: 4

Introduction to the formation, occurrence, and classification of minerals and igneous and metamorphic rocks. Three hours lecture and discussion with two hours laboratory a week.

Prerequisites: CHEM 212R, GEOLOGY 220 OR ENV-SCI 110.

GEOLOGY 325 Sedimentology/Stratigraphy Credits: 4

Study of sedimentary rocks with special emphasis given to hand specimen identification based on mineral composition and textural features. Characteristics of sediments, transportation and environment of sediment deposition. Principles of stratigraphy, facies analysis and interpretation. Measurement and description of stratified rocks. Three hours lecture and two hours lab per week. Field trips.

Prerequisites: GEOLOGY 220.

GEOLOGY 326CZ Archaeology of Ancient Disasters Credits: 3

Remarkable human achievements are revealed by archaeological research, but the human past was frequently shaped as well by disasters of natural and human origin. Drawing on case studies that include data from the geosciences, archaeological excavations, and historical sources, this class examines how earth processes, the biosphere, and human cultural behavior were all sources of catastrophe. The study of ancient disasters not only gives us a wider understanding of human history, it may offer lessons for coping with future catastrophes.

GEOLOGY 335 Introduction to Waste Management Credits: 3

Overview of issues in waste management. Nature and classification of waste. Municipal solid waste: disposal methods, design, construction and maintenance of sanitary landfills. Nature and sources of hazardous waste, storage, transportation, treatment and disposal of hazardous waste. Types and sources of nuclear waste; disposal of high level and low level nuclear wastes. Sources, nature, handling and disposal of biologic waste. Pollution prevention, recycling and resource conservation.

Prerequisites: ENV-SCI 110R, GEOG 150, GEOLOGY 220.

GEOLOGY 350 Earth Structures and Tectonics Credits: 4

This course is designed to teach students the basic techniques and approaches for problem solving in structural geology. The course will cover the fundamentals of crustal deformation and discuss joints, faulted and folded rocks in their plate tectonic context. Two hours of lectures and three hours of laboratory a week. Course will include local field trips and one weekend field trip.

Prerequisites: GEOLOGY 220, PHYSICS 210 (or PHYSICS 240).

GEOLOGY 370R Hydrogeology Credits: 3

Geology and hydrologic factors controlling the occurrence, movement, quality, recovery and development of water supply and distribution. Problems relating to urbanization of flood plains.

GEOLOGY 398 Geology Midcontinent Field Trip Credit: 1

A study of a selected area of the midcontinent U.S. with emphasis on locations to be visited during a three-day field trip (at the student's expense). An opportunity to observe and study physical features and collect materials. Several scheduled one-hour meetings in addition to field trip. Lectures, discussion and reading assignments provide a background to place the area covered by the field trip into the overall geologic framework of the Midcontinent U.S. Descriptive report or written examination. Limited enrollment.

Prerequisites: Junior or senior level.

GEOLOGY 411 Mineral Deposits Credits: 3

Distribution, origin and environmental implications of extractable resources including non-metallic deposits, ores, and selected energy resources.

GEOLOGY 416 Understanding and Living with Volcanoes Credits: 3

This course will examine the distribution, tectonic setting, and morphology of a range of volcano types on Earth and a few examples from other planets. Students will study volcanic processes including explosive and passive processes and how we investigate them. This will involve discussion of volcanic hazards and hazard assessment, risk communication, and the challenges of volcanic crises response. The course will also cover how volcanoes impact the local and global economy and Earth's climate. Recommended preparation: GEOG 314 / GEOLOGY 314 or GEOLOGY 325 or GEOLOGY 342.

Prerequisites: GEOLOGY 220 or ENV-SCI 110R/110L, and GEOG 203 or GEOG 402.

GEOLOGY 434 Hazardous Waste Operations Management Credits: 2

Overview of federal regulations dealing with hazardous waste management, toxicology, hazard communication, site management, air monitoring, operating procedures, and health and safety. The course includes hands-on training on spill control, equipment use and emergency response. Practical training involves physical stress and participants must be in good physical health. This course satisfies OSHA's 40 hour training requirement for hazardous waste personnel.

GEOLOGY 441 Environmental Geophysics Credits: 3

Fundamental theory and near-surface applications of the geophysical methods; (1) seismic refraction, (2) seismic reflection, (3) gravity, and (4) magnetics. Emphasis will be placed on the use of these methods in environmental and engineering investigations, addressing such issues as water resources, contaminant transport, geotechnical properties and archaeological protection. Course will include a field component illustrating application of selected techniques to local environmental problem.

GEOLOGY 446 Petroleum Geology Credits: 3

Study of the origin, concentration, exploration for and recovery of petroleum.

Prerequisites: GEOLOGY 220.

GEOLOGY 456 Field Methods in 3D Imaging of the Environment Credits: 3

This course is designed to teach students techniques to create high-resolution, 3D images of the environment and detailed topographic maps using digital technologies. The class will include instruction on various aerial systems and hand-held photography and the software required for data acquisition, processing, and interpretation.

GEOLOGY 460 Introduction to Geochemistry Credits: 3

Basic principles governing the origin, distribution and migration of the elements and the geochemical cycles operating in the earth's atmosphere, hydrosphere and lithosphere.

Prerequisites: CHEM 212R, GEOLOGY 312.

GEOLOGY 471 Tectonics Credits: 3

A detailed inquiry into plate tectonics and the geophysical and geological data that define the motion of lithospheric plates. Global examples of divergent, convergent, and transform plate boundaries will be studied through lectures, discussions, problem sets, and term papers.

Prerequisites: GEOLOGY 325, GEOLOGY 350.

GEOLOGY 472 Earthquake Geology Credits: 3

A detailed inquiry into the study of present and past earthquakes as they are preserved in the seismological, geophysical, and geologic record. Global examples of earthquakes will be studied through lectures, discussions, problem sets, term papers, field trips and field projects.

GEOLOGY 490 Geology Field Camp Credits: 6

Study and practical involvement in the methods of geological mapping. The six-week course is conducted during the summer, partially in a field camp away from the Kansas City area. Students pay their own travel expenses to and from the field. Participation in the course involves individual mapping in the field area and field reports.

GEOLOGY 498 Undergraduate Field Research Credits: 1-5

The student will collaborate with fellow students and instructors in collection of original field geologic data at a location remote from campus. Field research will be carried out during semester intersessions or summer semesters.

GEOLOGY 499WI Geology Seminar Credits: 3

Students participate in discussions; present formal talks; and prepare written papers on selected topics.

Prerequisites: Senior standing.

German (GERMAN)

Courses

GERMAN 110 Elementary German I Credits: 3

The goals of this course are an ability to speak and to understand simple (spoken) German as well as to read and write simple prose.

GERMAN 110 - MOTR LANG 105: Foreign Language I

**GERMAN 120 Elementary German II Credits: 3**

Continuation of GERMAN 110.

GERMAN 120 - MOTR LANG 106: Foreign Language II

**GERMAN 211 Second-Year German I Credits: 3**

Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.

GERMAN 221 Second-Year German II Credits: 3

Continuation of GERMAN 211.

Prerequisites: GERMAN 211.

GERMAN 280 Special Intermediate German Topics I Credits: 1-4

Instruction of German on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses.

GERMAN 290 Special Intermediate German Topics II Credits: 1-4

Continuation of GERMAN 280.

GERMAN 301 Introduction to Literary Studies Credits: 3

An introduction to the study of the different genres of German literature and techniques of criticism. Readings include representative works of major authors from various periods. Strongly recommended for all majors. To be taken before or concurrently with other literature courses. Taught in German.

Prerequisites: GERMAN 221.

GERMAN 315 Intermediate Conversation and Composition I Credits: 3

Practice in speaking and writing German; emphasis on idiomatic usage. Required for major.

Prerequisites: GERMAN 221.

GERMAN 325 Intermediate Conversation and Composition II Credits: 3

Continuation of GERMAN 315. Required for major.

Prerequisites: GERMAN 221.

GERMAN 330 Graphic Narratives Credits: 3

In this class, we will read graphic narratives with a dual focus: we will investigate the literary character of these narratives and explore the ways in which text and illustration help us learn German.

GERMAN 380 Special Topics Credits: 1-3

Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

Prerequisites: GERMAN 221.

GERMAN 415 Advanced Conversation and Composition I Credits: 3

Practice in speaking and writing German, with attention to the elements of style. First semester required of all majors and second semester recommended. Both semesters required of prospective high school teachers. Either or both semesters may be repeated. No more than six hours of credit may be applied toward a degree.

Prerequisites: GERMAN 221.

GERMAN 420 German Enlightenment Drama Credits: 3

This course covers plays, dramatic theories and theater history in the German-speaking countries 1730-1780. Emphasis will be placed on the theater as a bourgeois instrument of public discourse.

Prerequisites: GERMAN 221.

GERMAN 453 Women's Voices in Germany and Austria Credits: 3

The course focuses on the role of women in German and Austrian society from the Roman era to the present, primarily through the examination of literary texts by women.

Prerequisites: GERMAN 221.

GERMAN 480 Special Topics Credits: 1-3

Each time this course is offered a particular author, genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

Prerequisites: GERMAN 221.

GERMAN 490 Special Readings Credits: 1-3

Intensive readings in a field or literary figure to be selected by the student in consultation with the instructor. Available only to advanced students of German when students cannot take regularly scheduled courses.

Prerequisites: GERMAN 221.

GERMAN 499 Senior Seminar (Capstone) Credits: 3

Required for major. Covers seminal works of German literature in their historical and cultural context. Course content varies, but will include such elements as geography, politics, folklore, history of the language, architecture, art and music.

Prerequisites: GERMAN 221.

Greek (GREEK)

Courses

GREEK 110 Elementary Ancient Greek I Credits: 3

The goal of this course is an ability to read classical Greek. The student will be introduced to the fundamentals of grammar and the basic vocabulary of the language and will do exercises in the reading and writing of sentences. Continuous passages of Greek will be presented by the end of the semester.

GREEK 110 - MOTR LANG 105: Foreign Language I



GREEK 120 Elementary Ancient Greek II Credits: 3

A continuation of the study of the grammar and vocabulary of classical Greek, with an increasing emphasis on developing skills in translation. By the middle of the semester students will be introduced to selections from Plato, Herodotus or Homer.

Prerequisites: Greek 110 or MOTR Equivalent.

GREEK 120 - MOTR LANG 106: Foreign Language II



GREEK 211 Intermediate Ancient Greek I Credits: 3

Instruction of Greek on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.

Prerequisites: Greek 120 or MOTR Equivalent.

GREEK 221 Intermediate Ancient Greek II Credits: 3

Continuation of GREEK 211. May not be repeated for credit.

Prerequisites: Greek 211 or MOTR Equivalent.

GREEK 301 Herodotus Credits: 3

Selected readings in Ancient Greek from Herodotus' Histories.

Prerequisites: GREEK 211.

GREEK 302 Homer Credits: 3

Selected readings in Ancient Greek from Homer's Iliad or Odyssey.

Prerequisites: GREEK 211.

GREEK 310 Selected Readings in Ancient Greek and Rhetoric Credits: 3

Selected readings in Ancient Greek from works by Plato, Aristotle, or the Attic Orators.

Prerequisites: GREEK 211.

GREEK 311 Drama and Lyric Poetry Credits: 3

Selected readings in Ancient Greek from plays by Aeschylus, Sophocles, Euripides, or the Lyric Poets.

Prerequisites: GREEK 211.

GREEK 312 Greek Narrative Prose Credits: 3

Selected readings in Ancient Greek from Herodotus, Thucydides, Xenophon, Lucian, etc.

Prerequisites: GREEK 211.

GREEK 490 Special Readings in Greek Credits: 1-3

Intensive readings in period or genre or literary figure to be selected by the student in consultation with the instructor. Available only to advanced Greek students.

Guitar (GUITAR)

Courses

GUITAR 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

GUITAR 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

GUIITAR 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

GUIITAR 101 Freshman Guitar I Credits: 2-4

GUIITAR 101J Freshman Guitar I (Jazz) Credits: 2-4

GUIITAR 102 Freshman Guitar II Credits: 2-4

GUIITAR 102J Freshman Guitar II (Jazz) Credits: 2-4

GUIITAR 201 Sophomore Guitar I Credits: 2-4

GUIITAR 201J Sophomore Guitar I (Jazz) Credits: 2-4

GUIITAR 202 Sophomore Guitar II Credits: 2-4

GUIITAR 202J Sophomore Guitar II (Jazz) Credits: 2-4

GUIITAR 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

GUIITAR 301 Junior Guitar I Credits: 2-4

GUIITAR 301J Junior Guitar I (Jazz) Credits: 4

GUIITAR 302 Junior Guitar II Credits: 2-4

GUIITAR 302J Junior Guitar II (Jazz) Credits: 4

GUIITAR 401 Senior Guitar I Credits: 2-4

GUIITAR 401J Senior Guitar I (Jazz) Credits: 4

GUIITAR 402 Senior Guitar II Credits: 2-4

GUIITAR 402J Senior Guitar II (Jazz) Credits: 4

Harpsichord (HRPCHD)

Health Sciences (HLSC)

Courses

HLSC 100 Student Success Strategies Credit: 1

Topics will include setting goals for academic success, anticipating obstacles, problem solving solutions, and time management. Students will practice improving their listening, note-taking, and reading skills. They will practice communication, public speaking, and writing skills. Students will begin self-evaluation strategies to learn more about their motivation for successfully completing their academic program.

HLSC 101 Introduction to Health Sciences Credits: 2

This course introduces students to career options in health sciences. Students will explore basic concepts related to understanding one's role and scope of practice, professional responsibilities, and education and credentialing requirements for various careers in health. The course will explore basic concepts required by any health professional including history, safety, ethics, interpersonal skills, general well-being, as well as special skills and aptitudes required in various health career clusters. Students will explore health career paths in medical, government, business, non-profit, and many other sectors.

HLSC 110 Personal Wellness Credits: 3

This course presents an overview of health behaviors and actions needed to achieve a combination of physical, mental, and social well-being through intelligent lifestyle choices. Effective strategies for staying healthy and improving one's health will be explored. Elements of stress management, preservation of physical and mental well-being, personal hygiene and strong social relationships will be discussed.

HLSC 120 Anatomy & Physiology I Credits: 4

This course examines the structure and function of the human body from the molecular to the organism level as they interact among all body systems across the life span. Instructors also attempt to correlate course materials with the clinical aspects of the application of physiological knowledge.

Co-requisite laboratory exercises provide practical application of theoretical concepts. In this first term of two-term course, molecular biology, biochemistry, cellular biology, and histology are studied as well as the integumentary, musculoskeletal, and nervous systems.

HLSC 125 Medical Terminology Credit: 1

This course is designed to provide the student with a foundation in medical terminology and the components of health records. Course content will include how medical terms are formed; how medical terms are applied to organs, body systems and pathological conditions; how common medical abbreviations are used; and how health records are organized and compiled.

HLSC 160 Anatomy and Physiology II Credits: 4

This course is a continuation of HLSC 120. Co-requisite laboratory exercises provide practical application of theoretical concepts. Physiologic systems including endocrine, cardiovascular, immune, respiratory, digestive, renal, and reproductive are studied as well as embryology and genetics.

Prerequisites: HLSC 120 or NURSE 120.

HLSC 200 First Aid / CPR Credit: 1

This course is designed to certify students with the American Heart Association (AHA) in Basic Life Saving for Healthcare Providers and bloodborne pathogens. Students will be exposed to critical concepts of high quality Cardiopulmonary Resuscitation (CPR), the AHA's Chain of Survival, and 1 and 2 rescuer CPR and Automatic External Defibrillator (AED) for adult, child and infants. Bag-mask technique, rescue breathing, relief of choking will be covered. Adult and pediatric first aid basics, medical emergencies, injury emergencies, and environmental emergencies will be covered. The course will include information on bloodborne pathogens (protection, action, proper cleaning and reporting).

HLSC 230 Health Issues in Aging Credits: 3

This course focuses on promotion and maintenance of the health and well-being of the older adult population. Current trends and needs of the ever changing and diversifying older adult population are discussed. The physiological and psychological domains, socio-cultural influences, legal and ethical issues, and health care resources pertaining to older adults in relationship to their health and quality of life are explored. Assessments, problems and strengths, interventions, and outcomes specific to the older adult population are discussed. Opportunities are provided for interaction with the older adult population through service learning.

HLSC 252 Human Growth and Development Credits: 3

This course provides a basic introduction to the theory for human growth and development across the life span. Emphasis is placed upon the biological and the psychosocial aspects of growth and development. Content is organized in a modified chronological order dividing information into major stages of growth and development across the lifespan.

HLSC 252 - MOTR PSYC 200: Lifespan Human Development

**HLSC 255 Spanish for Health Care Pre-Professionals Credits: 3**

This course focuses on conversational Spanish, medical terminology in Spanish, and written/read Spanish. This course will provide the student with basic knowledge that will allow communication with clients who speak/read/write Spanish. This is a fast paced course and will require practice of the language outside of the classroom in order to master the material presented. Recommended preparation: SPANISH 110.

HLSC 300 Diversity in Health Credits: 3

This course will explore social determinants of health, i.e. how social, cultural, political, historical, and economic influences shape the individual's own values, beliefs, and behaviors. This course expands students' basic knowledge of cultural diversity to provide special focus on health disparities among marginalized populations. Students will examine diversity by exploring health inequities related to race and ethnicity, immigration status, disabilities, gender, access, poverty, sexual identity, and veteran status. The course includes experiential learning with organizations focused on reducing health disparities.

Prerequisites: HLSC 101 or PBHL 158.

HLSC 310 Healthcare Systems Credits: 3

The course is designed to provide a description and overview of the organization, financing, and delivery of healthcare in the United States. The historical background and the impact of socio-political, economic, and cultural influences will be explored. The purpose of the course is to provide a framework of understanding of the healthcare system through examination of public and private sectors, market competition, and government regulation. Major issues currently facing the healthcare system will be examined.

Prerequisites: HLSC 101 (or co-requisite) or PBHL 158 (or co-requisite).

HLSC 315 Health Literacy Credit: 1

In this course participants will explore the fundamentals of health literacy and demonstrate the impact on health outcomes. Students will be introduced to tools that health care professionals can use to assess the health literacy of their patients/clients. Tools and resources to provide health information at the correct health literacy level will be presented. Students will explore interventions that can increase an individual's health literacy.

HLSC 323 Bluford Healthcare Leadership Institute Phase I Credits: 3

This course is a leadership development program designed to expose students to dynamic leadership principles while analyzing challenging issues in today's healthcare landscape with leading national and local executives in the field. Topics covered include social determinants of health, delivery of healthcare in the U.S., for profit and not for profit healthcare systems, public health, public policy, and health law. The course includes site trips to an urban core safety net hospital and its behavioral health department, a community health center, and a healthcare informational technology corporation among others. Students will need to be accepted into the Bluford program to take this course.

HLSC 325 Human Sexuality Credits: 3

This course is designed to introduce students to the field of human sexuality. Course content will include sexual anatomy and physiology, sexuality across a life-span, sexually transmitted infections, contraception, pregnancy and childbirth, sexual orientation, love and relationships, sexual therapy, sex education, gender identity and gender roles and social and legal issues related to sex. Recommended preparation: HLSC 110.

HLSC 345 Quantitative Analysis in the Health Sciences Credits: 3

This course focuses upon the skills required for the utilization of scientific findings in evidence-based care. The conceptual basis of descriptive and inferential statistics found in the properties of the normal distribution, comprise the core of these skills. Using the normal distribution as a structure for understanding descriptive and inferential procedures, the course presents information necessary to the selection, computation and interpretation of basic statistics relevant to evidence based-care in the health sciences. Discussions of variables, measurement and tabular and graphic presentation of data precede the development of computation skills.

Prerequisites: MATH 110 or MATH 116 or STAT 115 or MOTRMATH 110 or higher level math course; or ALEKS score of 61 or higher; or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

HLSC 403A Comparative Weight Loss I Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Specific topics that will be addressed include risks of overweight/obesity; common psychological issues for the overweight/obese; societal perceptions and barriers for overweight/obese individuals. This course consists of one hour of didactic work with one module per week for four weeks.

HLSC 403B Comparative Weight Loss II Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Comparison of common medically recommended diets and diet programs and their efficacy/risks; exercise requirements for weight loss and weight maintenance. This course consists of one hour of didactic education with one module per week for four weeks.

Co-requisites: HLSC 403A.

HLSC 403C Comparative Weight Loss 3 Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Comparison of pharmacologic weight loss options and their efficacy/risks; non-prescription medications/nutraceuticals for weight loss and their efficacy/risks; and bariatric surgeries and efficacy/risks. This course consists of one hour of didactic work with one module per week for four weeks.

Co-requisites: HLSC 403A.

HLSC 404 Introduction to Social Justice Credit: 1

This course is designed to increase a student's knowledge regarding personal and social biases based on race, ethnicity, culture, religion, age, sex, sexual orientation, social and economic status, political ideology, disability and how these entities contribute to social injustice. The focus of the course will center on issues involving diversity, prejudice and oppression that impacts social justice. During the course, students will be introduced to tools for developing social justice literacy in order to take action towards establishing a more just society.

HLSC 408 Gender, Health and Development in Senegal Credits: 3

This course examines women's economic empowerment, health education initiatives, philanthropy, and social entrepreneurship in West Africa and Senegal in particular. In the main city of Dakar we will visit indigenous and global nonprofits to study their policies and processes. The culture, both urban and rural, will be experienced in order to provide a unique perspective on the Senegalese and their culture.

Prerequisite: Departmental consent.

HLSC 410 Epidemiology Credits: 3

This course is an introduction to epidemiology with an emphasis on applications in public health. Students will learn basic principles of epidemiology, including the relationship of simple statistics to epidemiology and public health, methods of disease investigation, epidemiological study designs and their uses and measures of effects. Through the course, students will be able to apply measures of disease incidence and prevalence, and explain the uses of screening tests and criteria for their evaluation, including measures of validity. The class will explore epidemiology in environmental health and social sciences.

Prerequisites: HLSC 101 or PBHL 158; HLSC 345, NURSE 345, or STAT 235.

HLSC 417 Information Systems and Technology for Improved Health Care Credits: 3

This course provides a basic introduction to health information technology across health care settings. Students will acquire an understanding of key concepts associated with health informatics and network models, systems and management strategies, health information strategic planning, clinical and public health application, data retrieval and analytics, public policy, research, and one's professional responsibility to protect electronic health care records.

HLSC 419 Introduction to Social Epidemiology Credit: 1

This course is designed to increase a student's knowledge of Social Epidemiology, which is the branch of epidemiology that studies the social determinants of health. Social processes will be explored that center on social networks, social support, social capital, social cohesion, and contributing ecological factors that influence health and wellness. Students will discover how social relationships and institutions, such as familial relationships, group culture, policies, and global economic forces, promote or undermine the health of populations. Students will also explore how social inequity indicators involving income, health insurance, and access to care inter-relate and often lead to negative health outcomes.

HLSC 423 Bluford Healthcare Leadership Institute Phase II Credits: 3

This course provides students opportunities to build upon and apply the healthcare knowledge learned during the first phase of the Bluford Healthcare Leadership Institute in an internship in a notable healthcare organization. Throughout the internship, students will be mentored by members of the organization's leadership team and be afforded unique opportunities to learn effective leadership practices, skills, and characteristics. Students will complete an internship project and at the conclusion of the internship will deliver their findings to the organization's leadership.

HLSC 430 Health Program Management Credits: 3

This course is designed to acquaint students with assessment, planning, implementation, and evaluation of health programs. Issues of health financing, health policy, health delivery, and population health will be explored. The course provides a broad introduction to key concepts in health program management, common issues, evidence-based tools, and usable strategies, regardless of the health settings. Vocabulary relevant to policy makers, managers, administrators, and consumers will be studied. Students will develop mock health programs using provided outlines and budgetary restrictions, while considering human resource restraints, climate, relevance of health issue, and readiness for change.

Prerequisites: HLSC 310.

HLSC 440 Ethics and Policy of Public Health Promotion Credits: 3

This course distinguishes biomedical ethics from public health ethics, highlighting the driving principle of justice in public health policy. Historical and present ethical issues will be explored within a variety of health based organizations and settings. The relationship of how ethics drives policy decisions and improves health outcomes will be discussed. The course will also examine how health policy is created in relationship to core ethical theories and public health justifications.

Prerequisites: HLSC 300.

HLSC 450 Urban Health Credits: 3

This course focuses on the unique health needs and outcomes of individuals and communities located within an urban core. Included in the course, are the specific ways in which health interventions can be delivered to urban populations to promote better health outcomes and quality of life. The course provides information on urban characteristics including crowding, poverty and crime in exacerbating the health and wellness needs of this historically underserved community.

Prerequisites: HLSC 300.

HLSC 460 Global Health Credits: 3

This course discusses the complexity of health in a global context. It is designed as an overview of the biological, social and environmental contributors to health and diseases in populations around the world. Course content will include case studies of various global organizational structures and systems relative to population health, selected infectious diseases, nutritional deficiencies and health effects of environmental change.

Prerequisites: HLSC 300.

HLSC 470 Technology, Marketing and Media in Health Credits: 3

This course will focus on past, present, and future trends in health marketing and messaging. Technology's role in marketing health will be explored. Marketing principles will be used to evaluate strategies to promote health behavior change and social policy. Course content will link current trends in consumer health and how these trends are marketed to the public. Examples include mobile apps and devices, personal health data collection, health data storage, and health risk assessment tools. Students will discuss the philosophical, social and legal issues in the use and abuse of health technology, health marketing, and health in the media.

Prerequisites: HLSC 440 (or co-requisite).

HLSC 476 Research Methods in Health Sciences Credits: 3

This course focuses upon the development of inquiry skills necessary to identify relevant research-based literature and apply findings from research to practice. Students will develop an understanding of basic research concepts and evidence based practice in addition to skills in finding, appraising, and using health related literature.

Prerequisites: HLSC 345, NURSE 345, or STAT 235.

HLSC 480 Leadership and Management in Health Professions Credits: 3

This course will provide the student with a theoretical foundation of leadership and management in health professions. The principles of authority, power, politics, decision making, and influence will be explored. Organizational philosophies will be examined within the context of current health issues. The leadership skills of negotiation, delegation, conflict resolution, coaching and mentoring will be discussed, as related to health professions. The role of communication will be examined across organization systems. The effect on gender and cultural diversity on communication will be discussed.

Prerequisites: HLSC 300.

HLSC 490 Special Topics Credits: 1-9

A course of study in a special area of interest in health sciences under individual faculty direction.

Prerequisites: Departmental consent.

HLSC 492 Health Sciences Specialty Course Credits: 3

This course provides students an opportunity to develop advanced knowledge and skills in health sciences. Concepts and topics covered throughout the course of the Bachelor of Health Sciences program will be revisited and practiced through a variety of applied assignments and experiences. Students will integrate examples and case studies from their Health Sciences Internship settings into the course.

Prerequisites: Departmental consent.

Co-requisites: HLSC 494.

HLSC 494 Health Science Internship Credits: 6

An experience-based internship for the senior student. Depending upon the health professions career selected, the student will complete a service learning, research, or problem-based experience under the guidance of a site supervisor within the agency or organization that is mutually agreed upon.

Prerequisites: Departmental consent.

Co-requisites: HLSC 492.

History (HISTORY)

Courses

HISTORY 101 U.S. History to 1877 Credits: 3

This course offers a broad survey of American history up to 1877.

HISTORY 101 - MOTR HIST 101: American History I

**HISTORY 102 U.S. History Since 1877 Credits: 3**

This course covers American history from the end of Reconstruction to the present.

HISTORY 102 - MOTR HIST 102: American History II

**HISTORY 201 European History to 1600 Credits: 3**

This course surveys the political, social and cultural history of Europe from ancient times to 1600. Beginning with a brief description of the riverine civilizations of the ancient Near East, the course then examines the political and cultural evolution of classical Greco-Roman civilization, the medieval world, the rise of the national state, and the essential characteristics of the eras of the Renaissance and Reformation.

HISTORY 201 - MOTR WCIV 101: Western Civilization I

**HISTORY 202 European History since 1600 Credits: 3**

This course surveys the political, economic, social, intellectual, and cultural history of Europe from about 1600 to the present. Emphasis is given to themes of continuity and change in European culture through the experience of political, scientific and industrial revolutions, conservative reactions, liberal reforms, nation building, imperialism, two world wars, fascism, communism and the Cold War.

HISTORY 202 - MOTR WCIV 102: Western Civilization II

**HISTORY 206 World History To 1450 Credits: 3**

This course surveys the cultural, social, economic, and political history of the world to 1450. It studies the development of civilizations in isolation as well as the origins, nature, and consequences of global forms of interaction and exchange.

HISTORY 206 - MOTR HIST 201: World History I

**HISTORY 208 World History since 1450 Credits: 3**

This course surveys the social, economic, political history of the world from 1450 to the present. It studies the development of civilizations in isolation as well as the origins, nature, and consequences of global forms of interaction and exchange.

HISTORY 208 - MOTR HIST 202: World History II



HISTORY 215 Getting High: Alcohol & Drugs in American History Credits: 3

This class will investigate historical transformations in how American society has defined and responded to problematic drinking and drug use. The class will analyze what controversies surrounding various forms of intoxication indicate about the nature of American society and culture.

HISTORY 300AM Special Topics in Antiquity and Medieval History Credits: 3

This course addresses special topics in Antiquity and Medieval History. Topics are focused and specialized based on faculty interests and change from semester to semester. Special topics courses are repeatable for credit when the topic changes. See notes in Pathway each semester for the specific topic.

HISTORY 300EM Special Topics in Early and Modern European History Credits: 3

This course addresses special topics in Early and Modern European History. Topics are focused and specialized based on faculty interests and change from semester to semester. Special topics courses are repeatable for credit when the topic changes. See notes in Pathway each semester for the specific topic.

HISTORY 300HW Special Topics in World History Credits: 3

This course addresses special topics in World History. Topics are focused and specialized based on faculty interests and change from semester to semester. Special topics courses are repeatable for credit when the topic changes. See notes in Pathway each semester for the specific topic.

HISTORY 300P Special Studies Credits: 1-3**HISTORY 300PH Special Topics in Public History Credits: 3**

This course addresses special topics in Public History. Topics are focused and specialized based on faculty interests and change from semester to semester. Special topics courses are repeatable for credit when the topic changes. See notes in Pathway each semester for the specific topic.

HISTORY 300US Special Topics in United States History Credits: 3

This course addresses special topics in United States History. Topics are focused and specialized based on faculty interests and change from semester to semester. Special topics courses are repeatable for credit when the topic changes. See notes in Pathway each semester for the specific topic.

HISTORY 300WY Decade of Dissent: The 1960s Credits: 3

The social movements and conflicts that developed during the 1960s continue to define American culture. Questions of racial and gender equity, a greater willingness to challenge authority, concerns about the environment, and a new openness about issues of sexuality all developed during the sixties and remain as arenas of debate today. This course will examine the origins, contexts, and major themes of these social and cultural movements.

HISTORY 301WI Historiography and Method Credits: 3

This basic course is required of all history majors at the beginning of the junior year. Content includes: 1) what history is; 2) its value and usefulness; 3) the diversity of our fields, approaches, and methods; and 4) the techniques of preparing and writing history papers. Texts and reading are approved by the Department (i.e.: Turabian for style). Although the emphasis is general instead of particular, the instructor will be assisted by other historians representing their main special interest areas.

HISTORY 302 Colonial North America, 1492–1763 Credits: 3

This course examines European colonization in North America, from the voyage of Christopher Columbus to the eve of the American Revolution. Students will consider the Atlantic-world context of colonization, the environmental factors that shaped colonial development, and the complex interactions of European, African, and Indian peoples.

HISTORY 303 The American Revolution, 1763-1789 Credits: 3

This course examines the history of the American Revolution, from the explosive political crisis of the 1760s to the struggle over ratification of the Constitution. Students will consider the origins and conduct of the war, as well as the Revolution's far-reaching political, social, and economic consequences.

HISTORY 304 The Early American Republic, 1789–1850 Credits: 3

This class will survey major themes in the history of the early American republic, from the passage of the Constitution in 1789 to the California Gold Rush of 1849.

HISTORY 305 America, 1828-1852: The Jacksonian Period Credits: 3

An analysis of the political, social, economic, and intellectual factors in American society, 1828-1852. The period featured the presidency of Andrew Jackson, the shaping of a new democratic ideology, the culmination of manifest destiny, the quickening of the antislavery impulse, the Mexican War, the growing sectional split, and the Compromise of 1850.

HISTORY 306 America, 1850-1877: Civil War and Reconstruction Credits: 3

A survey of the political, social and economic factors leading to the dissolution of the federal union is followed by a consideration of the major features and developments of the war period. This, in turn, leads to an analysis of the major factors and relationships involved in the "reconstruction" of the federal union. The course covers the years 1850 to 1877.

HISTORY 306A History of Christianity to the Middle Ages Credits: 3

This course examines the cultural, historical and theological development of Christianity from its origins to the High Middle Ages. The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major cultural, social, institutional, and intellectual force in Western Europe with a focus on patterns of crisis and reform.

HISTORY 307A History of Christianity from the Middle Ages to Present Credits: 3

This course examines the cultural, historical and theological development of Christianity from the High Middle Ages to the present. The main themes follow the development of foundational Christian theological thought and practice into what are now mainstream Western Christian theologies, the institutional histories of Western Christianity, and the cultures of Western civilization.

HISTORY 309 World War II Film and Propaganda Credits: 3

This course examines film and propaganda, including posters, political cartoons, speeches, and other media, created in prewar or wartime conditions by both the Allies and Axis powers from 1933 to 1945 as it affected World War II.

HISTORY 334 History of Technology Credits: 3

The course examines technology as it shapes and is shaped by human society. Students will consider technology as a product of historically-specific and sometimes overlapping contexts shaped by culture, economics, natural environments, and social processes.

HISTORY 343 Oral History Credits: 3

This course focuses on the methods, theories, ethics, practices, and applications of tools in documenting and recovering the experiences of people hidden from the "traditional records." Through lectures, readings, discussions, and fieldwork, students will learn the various steps in developing a robust oral history project. Students will go out into the community to capture the histories of communities in Kansas City.

HISTORY 348 Missouri/Kansas Border Wars Credits: 3

This course explores the history of the Civil War on the Missouri/Kansas border, where residents first shed blood over the issue slavery. An exploration of this most uncivil of wars provides insight into the ways in which societies can be fragmented by ideology and ultimately rebuilt upon different lines.

HISTORY 349 Civil War in Memory and Film Credits: 3

This course explores how the era of the Civil War and Reconstruction has been portrayed in film, literature, and art, and if the popular memory of the war accurately reflects the history. We also will discuss how the understanding of this pivotal event in American History has changed over time and how cultural artifacts often say more about the time in which they were produced than the actual history of the Civil War.

HISTORY 356 Rise of the City in the U.S. Credits: 3

This course treats the background and major developments of the urbanization of the United States. Includes the American urban tradition, the scope of urbanization, colonial beginnings, urban rivalries, promotion, case studies of cities, the growth of urban services, the slum, problems of government, population trends, urban planning, and suburban growth. Consideration is also given to the methods and techniques of urban research and history of the development of this field.

HISTORY 357 The American West Credits: 3

This course deals with the relationship of the American West to the social and economic development of the United States. Major emphasis is placed on the role of the trans-Mississippi West in the economic growth of the national economy. Related cultural and political events are evaluated in the terms of the many Western frontiers. Emphasis will be placed on the Turner thesis, the Indian heritage, frontier violence, and the cow town experience.

HISTORY 358 History of the American South I Credits: 3

A study of the political, intellectual, cultural, economic, and social development of the American South up to and including the Civil War. Special topics discussed will be the plantation system, slavery, abolition, secession, the Confederacy, and the interaction of the region with the nation.

HISTORY 360R Constitutional History of the United States Credits: 3

The general question covered is: how does American society govern itself? Topics include the fusion of Anglo traditions and American environment, creation of the American republic under the Constitution of 1787, the struggle for sovereignty during the Marshall-Taney era, and the Supreme Court's utilization of the 14th Amendment to adapt the Constitution to modernity.

HISTORY 364R Nature, Culture And The Human Experience Credits: 3

This course is an introduction to various interpretations of nature with a focus on American culture and society. We will consider ideas about nature from diverse perspectives including history, literature, philosophy and religion in order to understand how human perceptions and uses shape relations with the natural world. Specific themes include such diverse topics as the aesthetic tradition, environmental thought, and environmental justice.

HISTORY 365A American Environmental History Credits: 3

This course examines the changing relationships between human beings and the natural world through time. The main argument of this course will be that American History looks very different through an environmental lens. Nature is an important category of historical analysis as well as a topic worthy of historical study itself and this course will examine themes as diverse as Native American ecology to the modern environment crusade.

HISTORY 366RR American Labor History Credits: 3

This course examines the history of work and the working class in the U.S. from 1750 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.

HISTORY 369 Women and Work in Early America Credits: 3

This course examines the ways in which gender, race, region, and class have shaped the historical experiences of American women. Students will trace women's lives from pre-European contact to 1877 through an examination of a wide variety of social, cultural, economic, and political forces and factors.

HISTORY 370 Introduction to Material Culture Credits: 3

This course will consider the ways in which material culture contributes to our understanding of history. Scholars have increasingly recognized the significance of "the things they left behind," particularly as they provide insights to the lives of those who did not leave extensive written records. Students will consider all aspects of material culture, drawing largely on examples from American history: architecture, domestic utensils and furnishings, clothing, tools, and good agricultural practices. The courses will emphasize the process of handicraft technology as well as the product, and will consider the impact of modernization upon both process and product.

HISTORY 371 American History Through Film Credits: 3

This course will move through the twentieth century and highlight major themes and developments that reveal the contours of American history as depicted in film. Students will examine the ways in which filmmakers have presented history, paying particular attention to the presentation of political, cultural, and social conflicts.

HISTORY 375 Success and Failure in Nineteenth Century America Credits: 3

This course traces the social history and cultural significance of success, failure, and poverty in nineteenth-century America. The class will investigate how diverse Americans made sense of the rapidly growing disparities of wealth that accompanied the rise of industrial capitalism.

HISTORY 379 Museums, Monuments, and American Life: An Introduction to Public History Credits: 3

This course will investigate the ways America commemorates, invokes, and misremembers its history—what scholars call public history. Students will learn the skills professionals use to communicate historical scholarship to wider audiences, and will grapple with the political and ethical issues that arise when we expand the discipline's stakeholders.

HISTORY 392A Archival Internship Credits: 1-3

Students work directly with professional archivists and other personnel at the Kansas City Federal Records Center, the Truman Library, Jackson County Historical Society, and similar facilities in the area. Emphasis will be given to areas of arrangement, description and preservation of archival materials. Each student must make individual arrangements through the department.

Prerequisites: Departmental consent.

HISTORY 392B Public History Internship Credits: 1-3

Students work directly with public history and editorial personnel at the Kansas City Museum, the Kansas City Pitch Weekly, the Truman Library, and similar facilities in the area. Depending on the institutional affiliation, emphasis will be given to museum operations and displays, editing, fund-raising, historical research and writing. Each student must make individual arrangements through the department.

Prerequisites: Departmental consent.

HISTORY 398 Black Civil Rights in the 20th and 21st Centuries Credits: 3

This course examines the fight for black civil rights in the United States in the 20th and 21st centuries, focusing on the Jim Crow period, the fight to end segregation, and the enduring problem of race in the United States.

HISTORY 400 Special Studies Credits: 1-3

Courses on subjects which are not a part of the regular department offering. The courses result from one or more of the following: (1) The expressed desire of students; (2) the broadened or refocused scholarship of a member of the history faculty; (3) the temporary presence of a scholar whose specialization is not reflected in the department's regular offerings; (4) the conclusion by the department that the course meets a community need; (5) the effort of the history faculty to provide an interdisciplinary approach to an era or topic. The course is experimental in the sense that it is a one-time offering with the potential of repetition or modification—depending upon student, faculty and community response.

HISTORY 400CW Cluster Course: Critical Issues in Women's & Gender Studies Credits: 3

What does it mean to grow up female in America? How does being female influence the body, the mind, identity? This course is an interdisciplinary exploration of the issues that have shaped the lives of American women throughout the life cycle and across the timeline. This course examines the role that culture and society have played in shaping and defining what it means to be an American girl and woman.

HISTORY 400WI Special Studies Credits: 1-3

Special studies in History. Writing Intensive.

HISTORY 404 Women and Gender in Latin America Credits: 3

This course studies gender in Latin America from the eve of conquest by the Portuguese and Spanish in the fifteenth century to the present. It examines how ideas about gender affected the lives of Latin American men and women. This course additionally analyzes how gender and race contributed to the creation of a hierarchical social order. Finally, it discusses the exercise of authority within and outside households and its impact on private and public spaces.

HISTORY 405 Colonial Latin America (From the Encounter to the Early 19th Century) Credits: 3

This course discusses the conquest and colonization of Latin American by the Spanish and the Portuguese imperial powers from the time of the encounter to the early nineteenth century. It studies the Iberian, Indigenous and African cultures and their influence in the creation of a hierarchical imperial order. Emphasis is given to the impact of the conquest, the economics of exploitation, race, sexual and gender identities and, religious and legal domination.

HISTORY 406 Modern Latin America Credits: 3

This course studies social, political, economic and cultural trends in Latin America in the nineteenth and twentieth centuries. Discussion topics include nation building after independence with an emphasis on gender and race in the creation of national identities and new forms of social stratification; integration of national economies into the world economic system; the expansion of political participation and citizenship; immigration and the tensions caused by the forces of modernization and tradition.

HISTORY 407 Latin American Crises and Opportunities Credits: 3

This course studies why Latin America has experienced in the 20th and 21st centuries recurrent economic and political crises – and why it is still a land of enormous opportunity. While this is primarily a history course, it undertakes a multidisciplinary examination of the region's strengths and weaknesses by discussing theories of economic development, political and sociological models as well as the influence of crime and violence. Case studies anchored in representative countries will be used to illustrate historical trends and theories.

HISTORY 411A Medieval Civilization I Credits: 3

This course covers the period between the decline of the Roman Empire in the West and the Investiture Controversy. Topics include the rise of Christianity and early church-state relationships; the barbarian invasions and the various Germanic kingdoms; the age of Charlemagne; monasticism and feudalism. There will also be special sessions on the civilizations of Islam and Byzantium.

HISTORY 411B Medieval Civilization II Credits: 3

Medieval Civilization II.

HISTORY 412A Medieval Women & Children Credits: 3

This course explores the roles of women in the social, economic, political and cultural environments of medieval and early modern Europe. We examine the lives of women in all areas of life, from the ordinary to the extraordinary, in urban and rural environments, from the centers of religious and political power to the margins of society. Focus will be on the world of work for urban and peasant women and on the social and legal institutions of marriage, kinship and the family. The course makes extensive use of primary sources by and about women during this period.

HISTORY 414 Reformation Credits: 3

Beginning with a description and analysis of the social, intellectual and political aspects of the later Middle Ages, the course continues with an examination of those profound religious, social and political changes which mark the 16th century as the end of the Middle Ages and the beginning of the modern secular era.

HISTORY 416R The French Revolution and Napoleon Credits: 3

Narrative history concentrating on the explosive and colorful events and personalities in France, but also showing the European and Western context and impact of the revolution and Napoleon. Illustrated accounts cover such "great days" as the storming of the Bastille, the fall of Robespierre, and Napoleon's Coup of 18 Brumaire, and great battles. Main periods are: the origins of the revolution (economic, social, political, intellectual); revolution and reconstruction (1789-92); through terror to Thermidor (Jacobins and sans-culottes); Napoleon's wars and reconstruction (France and Europe). Cinema, slides and martial music periodically. Discussion of major authors and interpretations.

HISTORY 420CC World War I in Film: The World made Modern Credits: 3

This cluster course examines World War I and its legacy through the lenses of international history and film studies. It explores the origins and conduct of the "Great War," as it was called at the time, as well as its transforming effects on the modern international relations and the ongoing process of globalization. It also examines how the war spurred the growth of an infant motion picture industry, and how movies produced during the decades that followed helped shaping popular memories of the conflict-reflecting and shaping cultural discourses regarding the myth or reality of modern civilizational progress; the ethics of modern weaponry; the individual's placed in mass society; constructions of class, race, and gender; and the meaning of national identity in a globalizing world. The class will draw on selected history texts and an array of films and film clips.

HISTORY 425R European Criminal Justice History, 500-1900 Credits: 3

This course will survey European crime, criminal procedure, policing and punishment between 500 and 1900. Particular attention will be given to changing methods of proof (oaths, ordeals, juries); changing type of criminal activity (banditry, vagrancy, witchcraft, professional theft) and changing penal strategies (the stocks, breaking on the wheel, the workhouse, the prison, the penitentiary). English experiences are emphasized.

HISTORY 428B Gender & Medicine: Patients & Practitioners From Antiquity to Present Credits: 3

This course explores, in a selective fashion, the role of women in Western medicine both as health care providers and patients. The subject of the history of medicine is too broad to be covered comprehensively in a semester, and so we will focus on diseases or physical conditions which were believed to be limited to women—childbirth, certain mental health conditions, reproductive health, breast cancer— as well as the increasing marginalization of women within the profession of health care providers to those branches concerned primarily with "women's problems."

HISTORY 430RA 'We Are The Dead': The Great War Experience Through its Artifacts Credits: 3

World War One was the "war to end all wars"; all previous wars were indeed eclipsed by its scale of destruction. And yet, it was a war that initiated a century of continual bloodshed and crimes against humanity. This course will explore the causes, nature and consequences of the Great War of 1914-18. It will be taught on different themes each Winter semester at the National World War One Memorial Museum at Liberty Memorial.

HISTORY 431R Medieval England, 1066 To 1485 Credits: 3

Beginning with the Norman conquest of England in 1066, this course traces the history of Medieval England through the establishment of the Tudor dynasty. Covered will be such items as the rise of the Angevin Empire, the conflict between monarch nobility, the evolution of Parliament, as well as the Anglo-French rivalry which culminated in the Hundred Years' War.

HISTORY 432R Tudor England, 1485-1603 Credits: 3

This course covers England from the accession of Henry VII, the first Tudor, to the death of Elizabeth I in 1603. Topics to be covered are: transformation of England into a modern state, the Reformation, the role of Parliament, conflicts with European powers, especially Spain, etc.

HISTORY 433R History of Britain 1603-1832 Credits: 3

This course surveys the history of Britain from the rise of the Stuart dynasty through the Industrial Revolution, with particular emphasis on the cultural aspects of political, social, economic, and military changes. Topics include: the domination of the aristocracy; the rise of the Navy; the exploration of the Pacific; the monarchy of George III; the loss of the American colonies; the wars with Napoleon; the Agricultural and early Industrial Revolutions; and the social changes they brought in both Britain and the Empire.

HISTORY 436R Modern German History Credits: 3

This course traces the history of Central Europe from the fall of Bismarck to the reunification of Germany one century later. It will ask students to think critically about the relationship between state and society, elites and 'ordinary' Germans, in the various German-speaking regimes that existed over the course of this era: two empires, two interwar republics, two fascist dictatorships, and three post-fascist republics. All assigned readings will be in English; a background knowledge of European history is recommended.

HISTORY 437AWI Imperial Germanies, 1848-1918 Credits: 3

This course traces the history of German-speaking Central Europe from the Revolutions of 1848 to the collapse of the Hohenzollern and Habsburg empires at the end of World War One. It will ask students to think critically about the relationship between state and society and the role played by 'elite' and 'ordinary' people in shaping German history. This reading and writing intensive course will be run as a seminar. Final grades will be based on a portfolio of assignments of which students will select what they consider to be the best examples of their work.

Prerequisites: HISTORY 202, HISTORY 208.

HISTORY 437BWI First German Republics, 1917-1935 Credits: 3

This course traces the history of the two German Republics during the inter-war years—the First Austrian Republic and the so-called Weimar Republic—from the peace movements of the First World War to the solidification of fascist dictatorships. It will ask students to think critically about the relationship between state and society and the role played by "elite" and "ordinary" people in shaping German history. This reading-and writing-intensive course will be run as a seminar. Final grades will be based on a portfolio of assignment of which students will select what they consider to be the best portfolio of assignments of which students will select what they consider to be the best examples of their work.

Prerequisites: HISTORY 202, HISTORY 208, RooWriter.

HISTORY 437DWI Cold War Germanies, 1941-1991 Credits: 3

This course traces the history of the three postwar German Republics—the Second Austrian Republic, the German Democratic Republic, and the Federal Republic of Germany—from the initial plans of the Allies for postwar reconstruction to the Reunification of Germany in 1991. It will ask students to think critically about relationship between state and society and the role played by 'elite' and 'ordinary' people in shaping, and in the remembering, of German history. This reading-and writing-intensive course will be run as a seminar. Final grades will be based on a portfolio of assignments of which students will select what they consider to be the best examples of their work.

Prerequisites: HISTORY 202, HISTORY 208, RooWriter.

HISTORY 444R Islam and the Arabs: The Formative Period Credits: 3

The first semester of a three-semester sequence begins with a brief overview of the geography and topography of the Middle East. The course proceeds with a discussion of the conditions of pre-Islamic Arabia; the appearance of Muhammad and his mission; the rise and spread of Islam; the establishment and consolidation of the Arab dynasties in the Middle East, North Africa and Spain; Islamic institutions; and Islamic society and culture. The time span will be approximately 500 A.D. to the Mongol conquest of Baghdad in 1258.

HISTORY 445 The Ottoman Empire in the Middle East to World War I Credits: 3

The second semester of a three-semester sequence covers the transition from Arab to Turkish hegemony in most of the Middle East as well as the restoration of native Persian dynasties in Iran and their subsequent development. The emphasis is on the rise and decline of the Ottoman Turkish Empire. Attention is given to the Ottoman provinces and to the national movements of subject peoples. The course ends with an overview of World War I and the peace treaties which marked the dissolution of the Ottoman Empire.

HISTORY 446R The Middle East from World War I to the Present Credits: 3

The third semester of a three-semester sequence deals with the emergence of the modern countries of the Middle East after World War I and their history and course of development to the present day. There will be a general survey of the government and politics, economic situation, and social and cultural characteristics of each important country in the area. In addition, special topics will be discussed such as the modernization process, ideological alternatives, relations with the great powers, the economics and politics of oil, and the Arab-Israeli conflict.

HISTORY 464 Medieval Methods and Paleography Credits: 3

This course examines the methodology and historiography of Medieval Studies. Through an introduction to paleography, the study of medieval handwritings, it prepares students for advanced work in Medieval and Renaissance studies. Using an interdisciplinary approach, this course will examine the historical and cultural settings for medieval texts, their physical form and production, as well as the tradition of textual transmission in the medieval world. In addition to gaining familiarity with the many different types of primary sources, such as literary, artistic, legal, and notarial sources, students will be exposed to methods for practical archival work in various European nations.

HISTORY 468R Archaeology and the History of Antiquity Credits: 3

This course will analyze the contributions of archaeology to the understanding of ancient history. It will cover archaeological excavations and their pertinence to classical civilization in the Near East and Greece. The techniques and methodology of field archaeologists will be discussed and demonstrated. Archaeological excavations relating to the Hittite capital, to the Ugaritic tablets, to the Minoan-Mycenaean civilization and its link to the Near East will be treated.

HISTORY 469 Archeology and Biblical History Credits: 3

An examination of ancient Israel as she emerges from the ruins of the past, both lapidary and literary. Through a study of the "mute documents," artifacts man-made (storied cities, household utensils, inscribed shards from Jericho to Jerusalem) we gain an insight indispensable for Biblical studies, for ancient Near Eastern history.

HISTORY 470 Ancient Egypt Credits: 3

This course describes the political, social and cultural evolution of ancient Egypt from pre-dynastic times, with major emphasis upon the Old, Middle, and New Kingdoms (especially the 18th dynasty and the reign of Akhenaton).

HISTORY 471 Ancient Greece Credits: 3

This course begins with a survey of the pre-classical Minoan and Mycenaean civilizations and then describes the rise of prominent Greek city-states (with particular emphasis upon the evolution of Sparta and the political, social and cultural contributions of Athens). The course concludes with the rise of Macedon and Alexander's conquests and significance.

HISTORY 471P Ancient World: The Political Structure Of The Ancient World Credits: 4

The four-hour lecture period on weeknights will emphasize the historical aspects of the ancient civilizations. The lectures will be chronologically organized to focus upon their evolution from their rise to their collapse.

HISTORY 472 Ancient Rome Credits: 3

This course covers Roman history from its origins (including the Etruscans) to the decline of the imperial system. Particular emphasis is placed upon the political, social and economic developments in the Republic, the death of the Republic, the early Principate, and the factors that led to Rome's decline in the ancient world.

HISTORY 472P Ancient World: The Cul/Intellectual Dimension Of Ancient Civi Credits: 4

The four weekend periods will provide the students with a general picture of these civilizations: society, religion, economics, and culture (w.f., arts, literature, philosophy, science, etc.). Guest lecturers, slides, films and video cassettes will be used to introduce the varied aspects of these ancient peoples.

HISTORY 474 Late Antiquity: The Transformation of the Mediterranean World (200–600 AD) Credits: 3

The decline of the Roman Empire and the barbarian invasions transformed the Mediterranean and European worlds, forming the foundation of Europe and the Islamic world. Students will investigate the multicultural society of Late Antiquity and become familiar with the primary sources for the period.

HISTORY 475WI The History of Ancient Israel Credits: 3

Judaism has had a tremendous impact on our civilization and yet most Americans are only dimly aware of its origins and development. This course will trace the roots of the Jewish religion in its historical context from its beginnings through the formation of rabbinic culture. The rise of Christianity will be examined in its original Judaic context, and recent discoveries, particularly those pertaining to the Dead Sea Scrolls, will be interpreted.

Prerequisites: RooWriter.

HISTORY 476 Medieval Jewish History Credits: 3

This course covers the general period from the decline of the Roman Empire to the dawn of early modern times. It is concerned with Jewish centers of life and learning in the Diaspora, both East and West. The course considers the Jews under Islamic rule from the time of Mohammed through the Golden Age of Moorish Spain. The focus then shifts to the situation of the Jews in Christian Europe, from the period of Constantine to the expulsions from England, France and Christian Spain. The Jews in the Ottoman Empire are mentioned and the course ends with the episode of Sabbatai Zevi, the false Messiah.

HISTORY 477 Modern Jewish History Credits: 3

This course surveys modern Jewish history from the Napoleonic period to World War II. Analyzing the social status of the Jews in Medieval Europe, it proceeds towards a discussion of the growth of the national state and the breakup of the Holy Roman Empire and analyzes the growth of socialism, integral nationalism, and liberalism as they affected the Jewish communities in Europe and America. The course serves as a survey of modern political and economic trends as they affect a distinct group.

HISTORY 496 Historical Research Project Credits: 1-3

Working extensively with an individual faculty member actively engaged in his/her research, students practice the multiple facets of investigating the sources of history, developing a comprehensive analysis from such sources, and composing a persuasive interpretation.

Prerequisites: Departmental consent.

HISTORY 497 Special Topics and Readings Credits: 1-6

Intensive reading and/or research in an area selected by the student in consultation with the instructor. May be repeated for credit when the topic varies.

HISTORY 498WI Senior Capstone Credits: 3

This is the capstone course in the department and is required for majors in the senior year. It consists of tutorial sessions with a regular faculty member and independent research leading to a major paper using original source materials. Performance in this course will weigh heavily in the award of departmental honors.

Prerequisites: HISTORY 301WI.

HISTORY H497 Special Topics and Readings Credits: 1-6

Intensive reading and/or research in an area selected by the student in consultation with the instructor. May be repeated for credit when the topic varies.

Honors (HONORS)

Courses

HONORS 215 Researching Kansas City Credits: 3

Researching Kansas City is an interdisciplinary undergraduate research course open to honors and other high-achieving students. It will introduce students to scholarly research and analysis through the exploration of important issues of the past and present in Kansas City.

Prerequisites: Honors College Student, or a 3.5 GPA or higher, or a 28 ACT score or higher.

HONORS 230 Honors American Government Credits: 3

This course will analyze the structure and operation of American government. Major topic areas include the historical development of American democracy, mass political behavior, political institutions, public policy, and their connections. The US and Missouri Constitutions provide a framework for the class and are examined in-depth throughout the class.

Prerequisites: Honors student, or a 3.5 GPA or higher, or a 28 ACT score or higher.

HONORS 330 Senior Honors Thesis/Project Practicum Credit: 1

The Senior Honors Practicum is a graded one-credit-hour course that will prepare honors students to undertake a Senior Honors Thesis or Project. In this class, students will explore different options for theses or projects; identify a topic and faculty advisor; plan the production of the thesis or project; produce a component of the thesis or project; and collaborate effectively with other honors students to develop their plans.

Prerequisites: Admission to the Honors College.

HONORS 350 Honors Tutorial Credits: 1-3

Independent Study.

Prerequisites: Admission to the Honors College.

HONORS 490 Special Topics Credits: 3

An advanced undergraduate course designed to deal with a topic that is not available in the regular course offerings. May be repeated for credit when the subject changes.

Prerequisites: Admission into Honors College.

HONORS 495A Senior Thesis-Criminal Justice and Criminology Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495AA Senior Thesis Anthropology Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495B Senior Thesis-Art History Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495C Senior Thesis Biology Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495D Senior Thesis-Chemistry Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495E Senior Thesis-Communication Studies Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisite: Departmental consent.

HONORS 495EE Senior Thesis-Electrical and Computer Engineering Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495F Senior Thesis-Economics Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495G Senior Thesis-English Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495H Senior Thesis-Foreign Languages Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495I Senior Thesis-Geosciences Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495J Senior Thesis-History Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495L Senior Thesis-Mathematics Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495M Senior Thesis - Business Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495ME Senior Thesis-Medicine Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495N Senior Thesis-Philosophy Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495NH Senior Thesis-Health Sciences Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495NN Senior Thesis-Nursing Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495O Senior Thesis-Political Science Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495P Senior Thesis-Psychology Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495PA Senior Thesis-Public Administration Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar. Pre-requisites: Departmental consent.

HONORS 495Q Senior Thesis-Sociology Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495R Senior Thesis-Theatre Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495S Senior Thesis-Education Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495U Senior Thesis-Classics/Ancient Studies Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495V Senior Thesis-Physics Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495X Senior Thesis-Music Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 496 Honors Internship Credits: 1-6

This course is an academic internship that requires written assignments in addition to the work performed in a professional workplace. Internships are individually arranged with the sponsoring organization, which may be a business, school, nonprofit agency or government office. Academic credit may range from 1 to 6 credit hours (for 0 credit hours see HONORS 496A). There will be a Learning Agreement established in the first week of the semester that states the contractual responsibilities of the student, the workplace supervisor and the internship coordinator.

HONORS 496A Honors Internship Credits: 0

This course is an academic internship that requires written assignments in addition to the work performed in a professional workplace. Internships are individually arranged with the sponsoring organization, which may be a business, school, nonprofit agency or government office. Academic credit for this course is 0 credit hours (for variable 1-6 credit hours see Honors 496). There will be a Learning Agreement established in the first week of the semester that states the contractual responsibilities of the student, the workplace supervisor and the internship coordinator. This Learning Agreement will outline the job responsibilities, workload expectations, assignments and anticipated learning outcomes of the internship experience.

HONORS 499 Senior Thesis/Project Writing Group Credit: 1

This course is open to honors students and high-achieving students who are working on senior theses, projects, or capstone papers. The group meets twice a month to offer peer response to the work of members, who set goals and deadlines for producing their theses or projects. A faculty member of the Honors College advises the group. Non-honors students who meet the Honors College admission criteria may receive permission to enroll.

Horn (HORN)

Courses

HORN 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

HORN 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

HORN 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

HORN 101 Freshman Horn I Credits: 2-4

HORN 102 Freshman Horn II Credits: 2-4

HORN 201 Sophomore Horn I Credits: 2-4

HORN 202 Sophomore Horn II Credits: 2-4

HORN 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

HORN 301 Junior Horn I Credits: 2-4

HORN 302 Junior Horn II Credits: 2-4

HORN 401 Senior Horn I Credits: 2-4

HORN 402 Senior Horn II Credits: 2-4

Information Technology (INFO-TEC)

Courses

INFO-TEC 222 Multimedia Production and Concepts Credits: 3

Multimedia production and concepts will give an overview of multimedia technology and communication theory needed to deliver information and to produce interactive presentations for the web, portable media, and for in-person presentations and demos. The course offers exposure to software, hardware, other multimedia technologies, authoring and copyright matters.

Prerequisites: COMP-SCI 101.

INFO-TEC 321 Introduction to Computing Resources Administration Credits: 3

This introductory course is designed to give an overview of a wide variety of technical, interpersonal, documentation, and managerial skills needed to become an effective systems administrator.

Prerequisites: COMP-SCI 201R.

INFO-TEC 426 Practical Network Security Credits: 3

This course examines common threats to computer network security and discusses various techniques to mitigate those threats. The course material is supplemented with lab assignments that implement network security tools and use them to build a small secure network. It discusses information hiding, traffic monitoring and control, intrusion detection, and security policy. Note: NOT FOR GRADUATE CREDIT.

Prerequisites: COMP-SCI 420.

INFO-TEC 429 Introduction to Cybersecurity Credits: 3

This course introduces students to cybersecurity and its domains. The course will cover topics such as cryptography, software development security, access control, security architecture, security operations, disaster recovery, and physical and environmental security.

Prerequisites: INFO-TEC 321.

INFO-TEC 490 Special Topics Credits: 1-3

Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

Prerequisites: Departmental consent.

INFO-TEC 490DC Introduction to Data Compression Credits: 3

This course provides an introduction to information theory, first-order entropy; lossless methods such as Huffman coding, arithmetic coding, and dictionary methods; and lossy and transform coding including image, audio, and video formats. The emphasis in this course is on algorithmic understanding and applications rather than derivation from first principles. Not for graduate credit.

Prerequisites: MATH 210, COMP-SCI 303, or equivalent.

INFO-TEC 491 Internship Credits: 1-6

Students may participate in structured internships under the joint supervision of an employer and a faculty member. The student must carry out significant professional responsibilities that also have academic merit. The number of credit hours is based on the quality of the academic experience. Available for credit/no credit only, and students must be in good standing with a least 18 credit hours of CS/IT counting towards the degree.

Prerequisites: Departmental consent.

Integrated Studies (INTGR)

Courses

INTGR 200 Intermediate Pre-Hospital Life Support Credits: 4

This course is designed to increase the scope of practice for the Emergency Medical Technician who is considering becoming a paramedic. It encompasses EMS operations, and the management of various medical and trauma emergencies at the Intermediate level.

Prerequisites: School of Medicine, Paramedic Program Student.

INTGR 200L Intermediate Pre-Hospital Life Support Laboratory Credits: 2

Laboratory applications for emergency medical science.

Prerequisites: School of Medicine, Paramedic Program Student.

INTGR 201 Advanced Pre-Hospital Life Support I Credits: 4

This course encompasses EMS operations, as well as roles and responsibilities. Airway management, IV therapy, and management of various medical emergencies will be addressed. Students acquire the skills necessary to perform paramedic-level skills. These skills are practiced in the laboratory and clinical setting under close supervision.

Prerequisites: INTGR 200.

INTGR 202 Advanced Pre-Hospital Life Support II Credits: 4

This course encompasses the management of patients in the prehospital setting. Students acquire skills to perform interventions in the paramedic scope of practice. Skills are practiced in the laboratory and clinical settings under supervision, and during field internship with an ambulance provider.

Note: Admitted students in the UMKC Paramedic Program.

Prerequisites: INTGR 201.

Italian (ITALIAN)

Courses

ITALIAN 110 Elementary Italian I Credits: 3

Intended to give the student the ability to read prose of ordinary difficulty and to understand and speak simple Italian.

ITALIAN 110 - MOTR LANG 105: Foreign Language I



ITALIAN 120 Elementary Italian II Credits: 3

Continuation of ITALIAN 110.

Prerequisites: ITALIAN 110.

ITALIAN 120 - MOTR LANG 106: Foreign Language II



ITALIAN 211 Second Year Italian I Credits: 3

Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.

Prerequisites: ITALIAN 120.

ITALIAN 221 Second Year Italian II Credits: 3

Prerequisites: ITALIAN 211.

ITALIAN 280 Special Intermediate Italian Topics I Credits: 1-3

Instruction of Italian on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.

Prerequisites: ITALIAN 110, ITALIAN 120.

ITALIAN 290 Special Intermediate Italian Topics II Credits: 1-3

May not be repeated for credit.

Prerequisites: ITALIAN 280.

Latin (LATIN)

Courses

LATIN 110 Elementary Latin I Credits: 3

Elementary Latin I introduces students with no previous Latin experience to the fundamentals of Latin grammar. The course is continued with LATIN 120.

LATIN 110 - MOTR LANG 105: Foreign Language I



LATIN 120 Elementary Latin II Credits: 3

Elementary Latin II is a continuation of LATIN 110. This course focuses on the fundamentals of Latin grammar and morphology, and students will read longer Latin passages.

Prerequisites: LATIN 110 or MOTR Equivalent.

LATIN 120 - MOTR LANG 106: Foreign Language II



LATIN 211 Second Year Latin Readings I Credits: 3

This course introduces students to extended readings from Roman authors in Latin. Students' knowledge of basic Latin grammar, vocabulary, and morphology will be reviewed and reinforced.

Prerequisites: LATIN 120 or MOTR Equivalent.

LATIN 221 Second Year Latin Readings II Credits: 3

Prerequisites: LATIN 211 or MOTR Equivalent.

LATIN 280 Special Intermediate Latin Topics I Credits: 2-4

Instruction of Latin on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.

Prerequisites: LATIN 120.

LATIN 290 Special Intermediate Latin Topics II Credits: 2-4

Continuation of LATIN 280. May not be repeated for credit.

LATIN 301 Virgil Credits: 3

Selected readings in Classical Latin from the works of Virgil.

Prerequisites: LATIN 211.

LATIN 302 Ovid Credits: 3

Selected readings in Classical Latin from Ovid's Metamorphoses.

Prerequisites: LATIN 211.

LATIN 314 Lyric and Elegiac Poetry Credits: 3

Selected readings in Classical Latin from Catullus, Horace, Martial, Ovid, etc.

Prerequisites: LATIN 211.

LATIN 490 Special Readings In Latin Credits: 1-3

Intensive readings in period or genre or literary figure to be selected by the student in consultation with the instructor. Available only to advanced Latin students.

Latina / Latino Studies (LLS)

Courses

LLS 201 Introduction to Latinx and Latin American Studies Credits: 3

This course addresses and examines the social, economic, and political factors that have influenced the historical experiences of Latinx in the U.S. and Latin Americans. Attention will focus on the major concepts, issues and debates in the field of Latinx and Latin American Studies. Particular consideration will be given to an analysis of and understanding as to how these factors have influenced the past and present status of Latinxs in U.S. society. Given the diversity existing within the Latinx population, the course will be comparative, cross-cultural, and interdisciplinary in nature.

LLS 300 Special Topics in Latinx and Latin American Studies Credits: 3

A variable content course offered in the area of Latinx and Latin American studies.

LLS 310 The World of Latinx Youth and Adolescents in the U.S. Credits: 3

This course will provide a general introduction and in-depth understanding to the largest group of racial/ethnic adolescents in the United States: Latinx youth. An historical examination of Latinx youth will provide a better understanding of their present status, with emphasis on their contact and interactions within social institutions. Additionally, students will analyze the experiences Latinx youth have within and among other groups in the broader social context based on past, present, and possible future interactions.

LLS 315 Arts Of African and New World Cultures Credits: 3

This historical survey of ethnographic arts examines the diasporas of African art and the influences of Africans on the arts of new world cultures (in Brazil, Surinam, Cuba, Haiti, and the United States) and Meso-American art and the influence of Meso-Americans on the arts of the Native North American cultures.

LLS 320 Ethnic and Minority Perspectives in Psychology Credits: 3

The theory, methods and content of psychology relevant to the interests and needs of ethnic minorities, and the contributions of ethnic groups and other minorities to psychology.

Prerequisites: PSYCH 210 with a C- or better.

LLS 322 Race and Ethnic Relations Credits: 3

The nature, origin and dynamics of ethnic and race relations in the U. S. and other societies. Specific attention will be given to the historical and contemporary contexts of prejudice discrimination and confrontation.

LLS 346 Urban Latin America Credits: 3

Introduction, overview, and analysis of major contemporary urban issues in Latin America.

LLS 348 Latinx Immigrants, Migrants, and Refugees in the U.S. Credits: 3

This course addresses the culture of societies of U.S. citizens, immigrants, and refugees of Latin American heritage living in the U.S. The course emphasizes recent anthropological, historical, cultural, and sociological studies.

LLS 353 Covering Urban Latinx Communities Credits: 3

This course focuses on journalistic methods of reporting Latinx communities, which are part of major urban areas. It covers topics on immigration, health care, policy, cultural diversity, race, legal issues, and education. It brings the voice of the Latinx communities into news stories. Various story-telling skills and ideas taught in this course will prepare students to cover the Latinx communities in urban areas and beyond.

LLS 397 Independent Readings in Latinx and Latin American Studies Credits: 1-3

Students will complete extensive readings in an area selected by the student with prior consultation with instructor.

LLS 400 Advanced Special Topics in Latinx and Latin American Studies Credits: 3

This course is a variable content course and offered as a result of specialized faculty interest, student demand, or the availability of a visiting expert in a field closely related to Latinx and Latin American Studies.

LLS 404 Women and Gender in Latin America Credits: 3

This course studies gender in Latin America from the eve of conquest by the Portuguese and Spanish in the fifteenth century to the present. It examines how ideas about gender affected the lives of Latin American men and women. This course additionally analyzes how gender and race contributed to the creation of a hierarchical social order. Finally, it discusses the exercise of authority within and outside households and its impact on private and public spaces.

LLS 405 Colonial Latin America (From the Encounter to the Early 19th Century) Credits: 3

This course discusses the conquest and colonization of Latin American by the Spanish and the Portuguese imperial powers from the time of the encounter to the early nineteenth century. It studies the Iberian, Indigenous and African cultures and their influence in the creation of a hierarchical imperial order. Emphasis is given to the impact of the conquest, the economics of exploitation, race, sexual and gender identities and, religious and legal domination.

LLS 406 Modern Latin America Credits: 3

This course studies social, political, economic and cultural trends in Latin America in the nineteenth and twentieth centuries. Discussion topics include nation building after independence with an emphasis on gender and race in the creation of national identities and new forms of social stratification; integration of national economies into the world economic system; the expansion of political participation and citizenship; immigration and the tensions caused by the forces of modernization and tradition.

LLS 407 Latin American Crises and Opportunities Credits: 3

This course studies why Latin America has experienced in the 20th and 21st centuries recurrent economic and political crises – and why it is still a land of enormous opportunity. While this is primarily a history course, it undertakes a multidisciplinary examination of the region's strengths and weaknesses by discussing theories of economic development, political and sociological models as well as the influence of crime and violence. Case studies anchored in representative countries will be used to illustrate historical trends and theories.

LLS 421 Made in the USA: Latinx Art and Experience Credits: 3

This course focuses on art of and by members of the U.S. Latinx community. Students in this course will engage with the politics of representation, gender, sexuality, race, class, and ethnicity in Latinx art, as well as visual and popular culture.

LLS 431 Hate & Bias Crimes Credits: 3

The purpose of this course is to examine the development and enforcement of hate crime law within our legal system. Discussion focuses on the causes and consequences of hate crimes, the constitutional issues associated with bias crime statutes, and the effectiveness of formal and informal social controls for eliminating hate and bias crimes.

LLS 497 Directed Research Credits: 1-3

Students will develop and conduct a research project in an area selected by the student under the supervision of a faculty member. Students may only enroll in 6 total credits of LLS 497 during their time at UMKC.

Prerequisites: Junior or Senior Level Standing.

Life Sciences (LIFE-SCI)

Courses

LIFE-SCI 201 Careers in Health I Credit: 1

This course will introduce students to various healthcare professions. Guest speakers will cover topics including day-to-day activities on the job, educational requirements, career advancement, and necessary interests and abilities.

LIFE-SCI 202 Careers in Health II Credit: 1

Students will gain an understanding of the role and scope of practice of health professionals, patient privacy, professionalism, professional school applications and a deeper appreciation of what it means to be a patient through facilitated shadowing experiences.

LIFE-SCI 310 Fundamentals of Medicine I Credits: 2

This course introduces students to various aspects of women's health care. In addition, students will consider the cultural diversity of caring for patients with various medical conditions, and will integrate information from the basic sciences, the, and the social sciences as they learn about health care. Recommended preparation: BIOLOGY 202 and BIOLOGY 206.

Prerequisites: Bachelor of Science, Biomedical Sciences Emphasis Student.

LIFE-SCI 320 Fundamentals of Medicine II Credits: 2

This course introduces students to the aging process and various medical conditions in the elderly. Cultural diversity within aging patient populations will be discussed. Students will experience personal growth and reflection. Recommended preparation: LIFE-SCI 310.

Prerequisites: Bachelor of Science, Biomedical Sciences Emphasis Student.

LIFE-SCI 330 Fundamentals of Medicine III Credits: 2

This course introduces students to various aspects of pediatric health care. Students will become familiar with medical symptoms and clinical findings while integrating knowledge in anatomy, physiology, and pathophysiology of infants, children, and adolescents. Recommended preparation: LIFE-SCI 320.

Prerequisites: Bachelor of Science, Biomedical Sciences Emphasis Student.

LIFE-SCI 340 Fundamentals of Medicine IV Credits: 2

This course introduces students to aspects of adult health care, including bioethics, conflict resolution, informed consent, and human subject research. Presentations on various medical symptoms and clinical findings will be provided to integrate anatomy, physiology, and pathophysiology for learning about acute and chronic medical conditions. Recommended preparation: LIFE-SCI 330.

Prerequisites: Bachelor of Science, Biomedical Sciences Emphasis Student.

LIFE-SCI 399 Introduction to Research Credits: 1-3

Introduction to the theory and practice of research in modern biological sciences. Requires minimum of 3-4 hours per week in the laboratory for each credit hour.

Prerequisites: Departmental consent.

LIFE-SCI 497 Directed Studies—Biological Sciences Credits: 3

Individual or small group study of topics in an area of the biological sciences including class room work, presentation, library work, and writing of term papers or other reports.

Prerequisites: CHEM 320 (or CHEM 322R).

LIFE-SCI 497A Directed Studies-Bioinformatics Credits: 1-3

Individual or small group study of topics in the area of bioinformatics including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497B Directed Studies-Genetics Credits: 1-3

Individual or small group study of topics in the area of genetics including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497BB Directed Studies: Behavioral Biology Credits: 1-3

Individual or small group study of topics in the area of behavioral biology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: BIOLOGY 206 and LS-BIOC 441.

LIFE-SCI 497C Directed Studies-Microbiology Credits: 1-3

Individual or small group study of topics in the area of microbiology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497D Directed Studies-Physiology Credits: 1-3

Individual or small group study of topics in the area of physiology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497E Directed Studies - Biochemistry Credits: 1-3

Individual or small group study of topics in the area of biochemistry including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497F Directed Studies - Biophysics Credits: 1-3

Individual or small group study of topics in the area of biophysics including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497G Directed Studies-Cell Biology Credits: 1-3

Individual or small group study of topics in the area of cell biology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497H Directed Studies - Neuroscience Credits: 1-3

Individual or small group study of topics in the area of neuroscience including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497I Directed Studies-Botany Credits: 1-3

Individual or small group study of topics in the area of botany including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497J Directed Studies-Zoology Credits: 1-3

Individual or small group study of topics in the area of zoology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497K Directed Studies - Ecology Credits: 1-3

Individual or small group study of topics in the area of ecology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497L Directed Studies - Biological Sciences Credits: 1-3

Individual or small group study of topics in the area of biological sciences including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497P Directed Studies - Biotechnology Credits: 1-3

Individual or small group study of topics in the area of biotechnology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497WI Directed Studies—Biological Sciences Credits: 3

Individual or small group study of topics in an area of the biological sciences including class room work, presentation, library work, and writing of term papers or other reports.

Prerequisites: CHEM 320 (or CHEM 322R).

LIFE-SCI 499 Undergraduate Research-Biological Sciences Credits: 3

Independent research, including the writing of research reports in the area of biological sciences.

Prerequisites: CHEM 320 (or CHEM 322R).

LIFE-SCI 499A Undergraduate Research-Bioinformatics Credits: 1-3

Independent research, including the writing of research reports in the area of bioinformatics. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499B Undergraduate Research-Genetics Credits: 1-3

Independent research, including the writing of research reports in the area of genetics. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499C Undergraduate Research-Microbiology Credits: 1-3

Independent research, including the writing of research reports in the area of microbiology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499D Undergraduate Research-Physiology Credits: 1-3

Independent research, including the writing of research reports in the area of physiology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499E Undergraduate Research-Biochemistry Credits: 1-3

Independent research, including the writing of research reports in the area of biochemistry. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499F Undergraduate Research- Biophysics Credits: 1-3

Independent research, including the writing of research reports in the area of biophysics. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499G Undergraduate Research-Cell Biology Credits: 1-3

Independent research, including the writing of research reports in the area of cell biology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements. Recommended preparation: BIOLOGY 206 and LS-BIOC 441.

Prerequisites: Departmental consent.

LIFE-SCI 499H Undergraduate Research-Neuroscience Credits: 1-3

Independent research, including writing of research reports in the area of neuroscience. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499I Undergraduate Research-Botany Credits: 1-3

Independent research, including the writing of research reports in the area of botany. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499J Undergraduate Research-Zoology Credits: 1-3

Independent research, including the writing of research reports in the area of zoology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499K Undergraduate Research-Ecology Credits: 1-3

Independent research, including the writing of research reports in the area of ecology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499L Undergraduate Research-Biological Sciences Credits: 1-3

Independent research, including the writing of research reports in the area of biological sciences. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499M Undergraduate Research-Biological Sciences Honors Credits: 1-3

Independent research, including the writing of research reports in the area of biological sciences.

Prerequisites: Departmental consent.

LIFE-SCI 499P Undergraduate Research-Biotechnology Credits: 1-3

Independent research, including the writing of research reports in the area of biotechnology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499WI Undergraduate Research-Biological Sciences Credits: 3

Independent research, including the writing of research reports in the area of biological sciences.

Prerequisites: CHEM 320 (or CHEM 322R).

LIFE-SCI H490WI Honors Senior Seminar Credits: 3

Discussion, writing and specific readings to coordinate with and amplify topics covered in School of Biological Sciences seminars; must include a term paper on a specific topic. Writing Intensive.

Life Sciences - Anatomy (LS-ANATO)

Courses

LS-ANATO 219 Functional Anatomy I Credits: 3

An introduction to the functional anatomy of vertebrates with emphasis on organs, organ systems and tissues.

Prerequisites: Pharmacy or Medicine Student.

LS-ANATO 219L Functional Anatomy I Laboratory Credit: 1

An introduction to the functional anatomy of vertebrates with emphasis on organs, organ systems and tissues.

Prerequisites: Pharmacy or Medicine Student.

Life Sciences - Biochemistry (LS-BIOC)

Courses

LS-BIOC 341 Basic Biochemistry Credits: 3

One semester course covering the properties of organic compounds important to biological systems. Structures, characterization and reactions of common compounds and their relationship to the building blocks of biological systems will be discussed. Recommended preparation: BIOLOGY 202, CHEM 320 (or CHEM 322R).

LS-BIOC 360 Biochemistry Credits: 3

Introduction to modern biochemistry. Structure and function of biologically important compounds, major biochemical pathways and their regulation in animals, plants and microorganisms, and the molecular and biochemical basis of gene function will be studied. Recommended preparation: BIOLOGY 202, BIOLOGY 206, BIOLOGY 441, CHEM 320 (or CHEM 322R).

LS-BIOC 370 Pharmacy Biochemistry Credits: 4

The chemistry and mechanisms involved in biosynthesis, degradation and utilization of the major constituents of living systems, and the biochemistry of specialized tissues, hormones, nutrition and regulation with a focus on application to clinical pharmacy practice.

Life Sciences - Microbiology (LS-MCRB)

Courses

LS-MCRB 114L Introductory Microbiology Laboratory Credits: 2

Introductory laboratory studies in microbiology and infection to correlate with LS-MCRB 113. For non-majors only; does not count toward biology degree requirements. Recommended preparation: BIOLOGY 112 or LS-MCRB 113.

LS-MCRB 121 Human Biology III (Microbiology) Credits: 3

Basic concepts of microbiology with emphasis on infectious diseases and host defenses. Recommended preparation: CHEM 211.

Prerequisites: LS-ANATO 219 or BIOLOGY 108.

LS-MCRB 121L Human Biology III (Microbiology) Lab Credit: 1

Laboratory exercises demonstrating basic concepts of microbiology with emphasis on infectious diseases and host defenses.

Co-requisites: LS-MCRB 121.

LS-MCRB 4180 Microbiology Credits: 4

Study of infectious diseases, their etiology, symptoms, prevention and treatment. Special emphasis is placed on plaque formation, caries development, periodontal and other oral diseases that relate to dentistry.

Prerequisites: School of Dentistry Student.

LS-MCRB 431 Virology Credits: 3

Survey of the molecular biology of animal, plant, and bacterial viruses. The course will emphasize the molecular mechanisms of virus replication, viral pathogenesis, and the use of virus as model systems to study mammalian cells.

Prerequisites: BIOLOGY 202, BIOLOGY 206.

Co-requisites: BIOLOGY 441.

Life Sciences - Physiology (LS-PHYS)

Courses

LS-PHYS 217 Human Physiology Credits: 3

Introduction to body functions presented from an organ systems approach. For non-majors only.

Prerequisites: BIOLOGY 102 (or BIOLOGY 108 or BIOLOGY 109).

LS-PHYS 217 - MOTR LIFS 100P. Essentials in Human Biology - Phys**LS-PHYS 3070 Oral Physiology Credits: 3**

Concepts of general physiology will be discussed as they relate to the clinical practice of dental hygiene. Emphasis will be placed on the normal and abnormal physiology of oral structures, including such topics as neurophysiology, muscle function, salivation, and endocrinology.

Prerequisites: Dental Hygiene Student.

LS-PHYS 399 Pharmacy Physiology I Credits: 3

LSPHYS 399 is an introduction to integrated physiology of the human body, beginning with an emphasis on understanding the foundations of physiologic principles followed by an in depth study of the physiology of the nervous, endocrine, and muscle systems. Recommended preparation: BIOLOGY 202 and CHEM 320.

Prerequisites: School of Pharmacy Student.

LS-PHYS 400 Pharmacy Physiology II Credits: 3

LS-PHYS 400 is a continuation into the study of integrated human physiology. Topics covered include the cardiovascular, respiratory, renal, digestive and reproductive systems. Recommended preparation: LS-PHYS 399.

Prerequisites: School of Pharmacy Student.

LS-PHYS 401 Physiology Lecture Credits: 5

An integrated study of normal functions of various organ systems of the human body with special consideration of the physiology of the oral cavity and its related structures.

Prerequisites: School of Dentistry Student.

Management (MGT)

Courses

MGT 100 Foundations of Business Credits: 3

Provides an introduction to the functional areas of business (e.g., accounting, systems, finance, marketing, human resources, and entrepreneurship) as well as a number of contemporary business topics, including social responsibility, diversity, ethics, and globalization. Additionally, students will be exposed to various topics that facilitate a successful transition from high school to college. Examples include an overview of University and Bloch School resources, development of effective study habits, time and stress management, selection of a major and career options.

MGT 256 Legal and Regulatory Contexts of Organizations Credits: 3

An examination of the legal, regulatory, and ethical environment in which businesses operate. Students are introduced to our legal system, focusing on selected areas of business law. Not available for credit for students who have completed MGT 306.

MGT 301 Effective Business Communication Credits: 3

The instructor introduces students to the strategic nature of business communication. By the end of the course, students should be able to analyze business situations, prepare messages that fulfill the intended purpose of their communication, and meet the needs and expectations of business audiences. Students will develop the tools to deliver effective, professional written and oral communications, and will learn how to use library and electronic business research tools.

Prerequisites: DISC 200 or ENGLISH 225 or equivalent and Bloch School student with 45 hours earned.

MGT 301A Effective Business Communication for Non-Native Speakers Credits: 3

Students will learn the strategic nature of business communication with a focus on building business English language skills and understanding U.S. business terminology and culture. By the end of the course, students should be able to analyze business situations, prepare messages that fulfill the intended purpose of their communication, and meet the needs and expectations of business audiences. Students will develop the tools to deliver effective, professional written and oral communications, in addition to cultivating their English language abilities in the business environment.

Prerequisites: DISC 200 or ENGLISH 225 or equivalent and Bloch School student with 45 hours earned.

MGT 306 Legal, Ethical And Regulatory Environment Of Business Credits: 3

The course looks at legal and moral thought, with attention to ethical issues in business. Students are introduced to our common law system; selected areas of law, with attention to the inclusion of cultural and moral values; and an introduction to government regulation of business.

Prerequisites: Bloch or BIT student with sophomore standing.

MGT 320 Law Of Commercial Transactions Credits: 3

Study of major areas of law included in the Uniform Commercial Code. Topics may include sales, commercial paper, bank deposits and collections, aspects of property law, documents of title, investment securities, and secured transactions.

Prerequisites: MGT 306.

MGT 330 Understanding the Individual in the Organization Credits: 3

This course explores the micro dynamics of organizations: the individual and his/her relationship to other people, teams, and work groups. Topics will include: individual traits, behaviors, and skills for effective performance; self-assessment and professional development; staffing; motivation; individual and group dynamics; multicultural understanding and diversity; and ethical decision making.

Prerequisites: MGT 301 or MGT 301A or concurrent enrollment (for BBA and BSA students); Bloch business minor or BIT student with sophomore standing.

MGT 332 Principles of Organizational Behavior Credits: 3

A study of the principles and foundations of managing individuals, groups, and organizations. This course seeks to develop students' understanding of the concepts and approaches that constitute the fields of organizational behavior and management and how these concepts and approaches may be applied effectively in the workplace. Not available for credit for students who have completed MGT 330.

Prerequisites: MGT 301 or MGT 301A or ACCTNG 360 or concurrent enrollment (for BBA and BSA students); Bloch minor or BIT student with sophomore standing.

MGT 337 Managing Human Capital Credits: 3

Building on prior coursework, this course will provide students with advanced human resource concepts and practices as well as practical experience in how human resources should be managed in successful businesses. Student groups will work with a local organization to diagnose, analyze, and make recommendations regarding effective programs in staffing, developing, rewarding, motivating, and managing its personnel.

Prerequisites: MGT 330 or MGT 332.

MGT 355 Organizational Effectiveness and Leadership Credits: 3

Students will study the macro dynamics of organizations: broad knowledge of how organizations work and the various ethical means of impacting outcomes. Topics will include: structure, culture, and politics of organizations; human resources and linkages to organizational culture and success; organization influence and political savvy; managing change and learning in a global context; organizational governance, codes of conduct, and internal controls; the role of business in society; and various professional development issues.

Prerequisites: MGT 330 or MGT 332.

MGT 360 Groups and Teams Credits: 3

Teamwork has become increasingly popular in many organizations. Whether formally integrated into the organizational structure, or temporarily created around specific projects, teams can be an important competency of organizations. They are considered an effective performance unit, and expected to efficiently cope with the fast changes and demands of today's business environment. Attaining the full advantages from teamwork requires effective management of team processes and dynamics. This course focuses on issues in team development, internal processes, and members' behavior, as well as management skills needed to effectively lead teams in organizations.

Prerequisites: Bloch student and completion of 45 hours.

MGT 365 Managing in a Virtual Environment Credits: 3

This course builds on the fundamentals of individual and group behavior to emphasize how organizational design and management practices have been dramatically affected by the proliferation of social media and other internet technologies. Students examine cases and engage in virtual exercises to experience ethical and mindful ways to engage in the virtual environment. Virtual-appropriate variations of interaction, collaboration, conflict management, decision-making, problem-solving, and leadership are introduced. Students also examine geographic and cultural issues potentially encountered in a global virtual organization.

Prerequisites: MGT 330 or MGT 332.

MGT 367 Human Resource Analytics Credits: 3

A survey of analytical methods necessary to understand critical HR topics and make effective human capital decisions. Analytical methods in staffing, rewards, benefits, performance management, diversity, legal issues, safety, and current HR topics will be explored.

Prerequisites: MGT 337 and DSOM 211 (or STAT 235 or STAT 115 or MOTRMATH 110).

MGT 370 International Management Credits: 3

Students receive an introduction to management in an international environment, addressing the management functions and behaviors necessary to develop global vision and management skills at a strategic (macro) and interpersonal (micro) level. Cross-cultural management and competitive strategy are evaluated in the context of global changes.

Prerequisites: Bloch student and completion of 45 hours.

MGT 372 Ethics and Leadership Credits: 3

Students use a variety of frameworks and approaches to address ethics both abstractly (via case studies) and as a practical matter, as it will affect them and how they approach life in the workplace and other organizations. Students analyze (1) the role of values and ethics in decisions that individuals, managers, and organizations make on a daily basis, as well as the responsibility of each party in these decisions, as well as (2) the impact of individual, relational, and cultural differences on how individuals, managers, and organizations recognize, understand, make, and sometimes revisit ethical choices.

Prerequisites: MGT 332 or MGT 330 or concurrent enrollment.

MGT 374 Leading a Positive Workplace Credits: 3

Students will build their understanding of the dynamics of relationships, organizations, and organizational life in building and maintaining a positive workplace. Students will incorporate individual, interpersonal, organizational, and societal foci for managing at an individual and organizational level. Strengths-based leadership, values, ethics, diversity, managing within and across levels, negotiation, conflict management, and other broad areas of leading a positive workplace will be covered. Not available for credit for students who have completed MGT 355.

Prerequisites: MGT 332 or MGT 330.

MGT 375 Global Mindset for Managers Credits: 3

Students receive an in-depth look at the major geopolitical and cultural factors that have forged the international conflicts, relations, and identities that international business managers should thoroughly comprehend to effectively navigate cross-border ventures. In-depth regional and country business and cultural profiles will be investigated to provide students with multiple contrasting perspectives to their own upbringing or sense of identity (a global mindset), allowing them to better sympathize, communicate, and collaborate when working in cross-cultural business environments.

Prerequisites: MGT 370.

MGT 410 Corporate Social Responsibility Credits: 3

Students will examine the role of corporate social responsibility (CSR) in modern society. Students will learn that being able to respond to needs and values of stakeholders is a key to success in the globalized business environment. This course also offers opportunities for students to apply knowledge to practical decision-making using case studies, research projects, or other course activities.

Prerequisites: MGT 332 or MGT 330 or concurrent enrollment; MGT 301 or MGT 301A or ACCTNG 360 or concurrent enrollment.

MGT 470 International Study in Business Credits: 3

This course is designed to provide a study-abroad experience for the student. The course involves three components: study of international business through on-campus lectures and discussions; travel to a foreign country for visitations to business firms, government organizations, and cultural sites; and critique sessions of the international learning experience after travel completion.

Prerequisites: Departmental consent with special application and selection process.

MGT 471 Strategic Management Credits: 3

The study of business strategy concepts and application using case studies representing "real world" situations. The course stresses the formulation of business strategies to achieve organizational objectives using strategic analysis and models based upon external and internal assessments of the organization's environment.

Prerequisites: Junior standing and completion of ACCTNG 211; FIN 325; MGT 330 or MGT 332; MKT 324; and completion of or concurrent enrollment in DSOM 326 or DSOM 340.

MGT 487 Special Topics Credits: 3

Special topics in management.

Prerequisites: Departmental consent.

MGT 496 Internship: Management Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

Prerequisites: Departmental consent.

MGT 497 Special Topics: Management Credits: 1-3

Study and research in areas of special interest under individual faculty direction.

Prerequisites: Departmental consent.

Management Information Systems (MIS)

Courses

MIS 202 Computer Applications In Management Credits: 3

A comprehensive coverage of computer tools for personal productivity in a management context, including spreadsheets and databases.

Prerequisites: MATH 110 or MATH 120 or higher; or ALEKS score of 61 or higher; or ACT MATH sub-score of 28 or higher; or SAT MATH sub-score of 660 or higher.

MIS 402 Information Management Credits: 3

This course introduces students to the impact of information technologies and systems on the enterprise. Business Intelligence and decision support capabilities are explored as well.

Prerequisites: MIS 202 and junior standing Bloch student.

MIS 415 Managing the Information Systems Resource Credits: 3

All organizations today have information systems, and managing the related resources (systems personnel, software applications, databases, networks, computing hardware) is a necessary skill for many employees. This course is aimed at developing the non-technical skills that business-school graduates need to make appropriate decisions about the deployment of information systems throughout the firm.

Prerequisites: MIS 202 and junior standing Bloch student.

MIS 487 Special Topics Credits: 3

Special topics in management information systems.

Prerequisites: Departmental consent.

MIS 496 Internship: Management Information Systems Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

Prerequisites: Departmental consent.

MIS 497 Special Topics: Management Information Systems Credits: 1-3

Study and research in areas of special interest under individual faculty direction.

Prerequisites: Departmental consent.

Marketing (MKT)

Courses

MKT 324 Principles of Marketing Credits: 3

The course focuses on the processes involved in the marketing of goods and services, including the meaning and importance of marketing terminology, the marketing mix, the marketing concept, consumerism, market segmentation, market and marketing research, and the impacts of different competitive structures on marketing decision making.

Prerequisites: Completion of 45 hours.

MKT 335 Customer Insights Credits: 3

This course draws upon findings from various disciplines including cognitive psychology, social psychology, sociology, economics, and anthropology to understand and predict buying behavior. Structured around applications in marketing strategy, topical coverage includes motivation, perception, attitude change, choice decisions and the consumption process, as well as post-purchase satisfaction.

Prerequisites: MKT 324.

MKT 348 Marketing Research Credits: 3

Marketing Research is designed to systematically introduce students to the most commonly used tools/techniques used to arrive at major business decisions from a consumer/customer perspective. The course emphasizes analysis of data using statistical models. Students will use designated software to analyze data to address real-world marketing problems pertaining to market entry decisions, new product development, product positioning, and pricing.

Prerequisites: MKT 324; and DSOM 211 (or STAT 235 or STAT 115 or MOTRMATH 110) or DSOM 309.

MKT 390 Customer Data Analytics Credits: 3

Customer Data Analytics is designed to systematically introduce students to contemporary tools/techniques pertaining to the analysis of customer data to assist with business decision-making. The course emphasizes analysis of data using statistical models. Students will use designated software to analyze a wide variety of customer data for business purposes such as assessing customer response to marketing intervention, classification, clustering (for market segmentation), etc.

Prerequisites: MKT 324 and DSOM 211 or DSOM 309.

MKT 418 Advertising and Branding Credits: 3

Students receive exposure to the planning, implementation, and evaluation of various advertising and promotion strategies. Topics covered will include communication process, brand positioning, branding strategies, creative strategies; media planning, and promotional effectiveness.

Prerequisites: MKT 324.

MKT 420 Sales Management Credits: 3

This course examines the strategic management of the boundary-spanning function of the organization, the sales force. Topics include the selling process, customer relationship management, organizing the sales effort, utilizing sales force automation technology, understanding the salesperson's role, selecting appropriate salespeople, motivating the sales force, conducting training programs, and evaluating the efficacy of individual salespeople and the overall sales function.

MKT 430 Personal Selling Credits: 3

Regardless of what career you choose, sales will be a part of your life. Sales is an extremely common first job for graduating students and more than half of business graduates hold their first job in sales. The skills you will learn in this course are especially applicable to the professional selling context, however, they are also very relevant in non-sales applications. For example, this class will provide guidance in how to effectively conduct a job interview, make a sales proposal, deal with objections, manage your managers, and much more. These skills are valuable in any job regardless of major.

MKT 442 Social Media and Mobile Marketing Credits: 3

The course builds around Database Marketing principles, whether supporting marketing at a distance without requiring a physical wholesale or retail intermediary; or supporting physical retail. Social and Mobile media principles, on-line measurement, digital marketing strategy, and tactics by on-line platform are discussed across a variety of media and devices. Students must demonstrate competence in SEO (Search Engine Optimization) and on-line analytics.

Prerequisites: MKT 324.

MKT 465 Introduction to Retailing and Pricing Credits: 3

This course presents an approach to retail and pricing management. Topics covered in the course include: retail strategy development, understanding the customer, retail information systems, market location selection, merchandise buying and handling, financial operations management, human resource management, operations management, store layout and design, laws ethics, and retail tactics.

Prerequisites: MKT 324

MKT 480 Strategic Marketing Credits: 3

Marketing 480 is the capstone course in the marketing curriculum. The intent of this course is to review and integrate the important concepts you have learned in your other marketing and general business classes into a unified whole. This class is very intensive as well as interactive.

Prerequisites: MKT 324.

MKT 487 Special Topics Credits: 3

Special topics in marketing.

MKT 496 Internship: Marketing Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

Prerequisites: Departmental consent.

MKT 497 Special Topics: Marketing Credits: 1-3

Study and research in areas of special interest under individual faculty direction.

Prerequisite: Departmental consent.

Mathematics (MATH)

Courses

MATH 109 Precalculus Algebra Fundamentals Credits: 2

This course is required for students not meeting full placement requirements for MATH 110 (Precalculus Algebra) in order to concurrently enroll in MATH 110. Fundamental topics and skills that are necessary for success in MATH 110 will be developed in close alignment with the material covered in MATH 110 over the course of the semester. Students enrolling in this co-requisite course must remain enrolled in both courses for the semester. Students will not be permitted to withdraw from one of the courses (either MATH 109 and MATH 110) and not the other. Grades are not counted toward GPA. Does not fulfill Arts and Sciences mathematics requirement. Does not count toward graduation.

Prerequisites: ALEKS Score of 35 or higher; or ACT Math Sub-score of 18 or higher; or SAT Math Sub-score of 500 or higher.

Co-requisites: MATH 110.

MATH 110 Precalculus Algebra Credits: 3

Functions and graphs. Inverses, compositions, and transformation of functions. Solving equations, systems of equations, and inequalities. Linear, quadratic, polynomial, and rational functions. Exponential and logarithm functions and applications.

Prerequisite: MATH 100 with a grade of B- or higher; or ALEKS Score of 51 or higher; or ACT Math Sub-score of 22 or higher; or SAT Math Sub-score of 540 or higher; or concurrent enrollment in MATH 109.

MATH 110 - MOTR MATH 130: Pre-Calculus Algebra**MATH 116 Mathematics For Liberal Arts Credits: 3**

A survey of elementary mathematics covering such topics as: logic, sets, counting methods, introduction to probability theory, introductory statistics, plane and coordinate geometry. The course will emphasize mathematical concepts and does not require the level of computational skill of College Algebra. Topics from the history of mathematics will be presented as well as the influence of mathematics on a variety of disciplines. Recommended preparation: Three units of high school mathematics Algebra I and higher.

MATH 116 - MOTR MATH 120: Mathematical Reasoning Modeling**MATH 120 Precalculus Credits: 5**

Functions and graphs. Inverses, compositions, and transformation of functions. Solving equations and systems of equations, and inequalities. Linear, quadratic, polynomial, and rational functions. Exponential and logarithm functions and applications. Trigonometric functions, trigonometric identities, triangles. Credit will be given for either MATH 110 or MATH 120, and for either MATH 120 or MATH 125.

Prerequisites: ALEKS Score of 56 or higher; ACT Math Sub-score of 24 or higher; or SAT Math Sub-score of 580 or higher.

MATH 120 - MOTR MATH 150: Pre-Calculus**MATH 125 Trigonometry Credits: 2**

Trigonometric functions, trigonometric identities, triangles, and complex numbers. Credit will be given for either MATH 120 or MATH 125.

Prerequisites: MATH 110 with a grade of C- or higher; or ALEKS Score of 63 or higher; or ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher.

MATH 206 Brief Calculus And Matrix Algebra Credits: 3

Brief review of selected topics in algebra. Introduction to matrix algebra. Introduction to differential calculus and optimization. Applications to problems in business.

Prerequisites: MATH 110 with a grade of C- or higher; or MATH 120 or higher with a grade of C- or higher; or ALEKS Score of 63 or higher.

MATH 210 Calculus I Credits: 4

Functions and graphs, rational, trigonometric, exponential functions, composite and inverse functions, limits and continuity, differentiation and its applications, integration and its applications.

Prerequisites: MATH 120 with a grade of C- or higher; or both MATH 110 and MATH 125 both with a grade of C- or higher; or ALEKS score of 76 or higher.

MATH 220 Calculus II Credits: 4

Techniques of integration, applications of the definite integral, improper integrals, sequences and series, power series. Taylor series and convergence, analytic geometry in calculus. Recommended preparation: MATH 210 or MATH 216.

MATH 250 Calculus III Credits: 4

Vectors, solid analytic geometry, vector functions and multiple variable functions, partial derivatives, multiple integrals, line and surface integrals with applications.

Prerequisites: MATH 220 or MATH 268.

MATH 266 Accelerated Calculus I Credits: 4

An accelerated first course in calculus focusing on application of differential calculus and basic vector and matrix calculations. Enrollment in this course requires permission from the School of Computing and Engineering.

Prerequisites: MATH 120 with a grade of B or higher; or both MATH 110 MATH 125 with a grade of B or higher; or ALEKS assessment score of 76% or higher.

MATH 268 Accelerated Calculus II Credits: 3

An accelerated second course in calculus focusing on application of integral calculus, analytic geometry, and vector analysis.

Prerequisites: MATH 266; School of Computing Engineering Student.

MATH 300 Linear Algebra I Credits: 3

Linear equations, matrix algebra, real vector spaces, linear transformations, determinants, eigenvalues and eigenvectors, orthogonality, and applications.

Prerequisites: MATH 250, (or MATH 220 and COMP-SCI 191).

MATH 301 On Solid Ground: Sets and Proof Credits: 3

This course is a transition from procedural mathematics, such as calculus, to advanced mathematics where proofs are the professional language of discourse. It covers basic set theory and logic, relations and functions, and how to analyze, construct, and write clearly reasoned, well-structured elementary proofs using universal techniques. This course satisfies a state requirement for teacher certification.

Prerequisites: MATH 220.

MATH 345 Ordinary Differential Equations Credits: 3

Students will study first order equations, linear second order differential equations, Taylor series and power series solutions, Laplace transforms, elementary systems of differential equations, numerical methods, and Fourier series and boundary value problems.

Prerequisites: MATH 250.

MATH 345L Ordinary Differential Equations Lab Credit: 1

This laboratory will enable the students to numerically solve first order, second order and systems of ordinary differential equations. Topics include Curve Fitting, Parameter Estimation, Numerical Solutions of Initial and Boundary Value Problems, and Model Specification.

Prerequisites: MATH 250.

MATH 402 Advanced Analysis I Credits: 3

Numerical sequences and completeness of the real numbers, numerical series, continuity and differentiation of real-valued functions of a real variable, integration and the fundamental theorem of calculus.

Prerequisites: MATH 250, MATH 301 (with a grade of B- or better).

MATH 406 Partial Differential Equations Credits: 3

Separation of variables, boundary value problems, Fourier series and integrals, wave equation, heat equation, potential equation, problems in several dimensions, and Bessel's differential equation.

Prerequisites: MATH 345 (or E&C-ENGR 241, or MEC-ENGR 272).

MATH 407 Introduction to Complex Variables Credits: 3

Complex numbers, complex differentiation, elementary functions, contour integration and the Cauchy integral formula, Taylor series and Laurent series, residue calculus and its applications, and special functions.

Prerequisites: MATH 250 and MATH 300 (or MATH 301 or MATH 345 or E&C-ENGR 241 or MEC-ENGR 272) with a grade of B- or better.

MATH 410 Modern Algebra Credits: 3

Groups, rings, integral domains, fields and polynomial rings.

Prerequisites: MATH 300, MATH 301 (with a grade of B- or better).

MATH 412 Advanced Analysis II Credits: 3

Topics in advanced analysis such as sequences and series of functions, power series and elementary functions, Fourier series, metric spaces, analysis in Euclidean spaces, or advanced integration.

Prerequisites: MATH 402.

MATH 420 Linear Algebra II Credits: 3

The topics of MATH 300 are expanded and presented in the context of vector spaces over a field, with rigorous justification. Vector spaces and linear transformations, determinants, eigenvalues and eigenvectors, inner product spaces and orthogonality.

Prerequisites: MATH 300, MATH 301 (with a grade of B- or better).

MATH 434 Introduction to Scientific Computing Credits: 3

This course provides a comprehensive introduction to numerical methods used in scientific computing. It focuses on solving math models arising from other fields such as physics, engineering, biology, and economics. The topics include mathematical foundations, numerical linear algebra, finite difference method, finite volume method, finite element method, and parallel computing. Recommended preparation: MATH 300.

MATH 464WI History Of Mathematics Credits: 3

Topics in the History of Mathematics from Babylonian times through the invention and consolidation of Calculus, with some modern subjects as time permits. The course will emphasize proofs, ideas, and arguments as given in original sources (in translation) from around the world and throughout history. In this writing intensive course, one or two term papers, in addition to several short essays and historical proof explications are required.

A field trip will be taken to the Linda Hall Library Rare Book Room. This course is of special interest to secondary mathematics teachers as well as mathematics majors. Recommended preparation: MATH 301.

MATH 469 Mathematical Modeling Credits: 3

This course introduces analytical and numerical techniques for modeling and analysis of real-world problems in areas such as economics, engineering, biology and physics. It is designed for students with basic knowledge of linear algebra and differential equations. Interdisciplinary modeling projects are the integral part of this course. Recommended preparation: MATH 300 and MATH 345.

MATH 490 Special Topics Credits: 1-3

Selected topics in various fields of mathematics. May be repeated for credit when the topic varies.

MATH 496 Internship/Practical Training in Mathematics or Statistics Credits: 1-3

This course provides an internship or other practical training arrangement using mathematics or statistics in an industrial, academic or other professional setting. Department approval of internship experience or practical experience required. Repeatable with up to a combined 3 credits toward the major. Recommended preparation: MATH 250.

Mechanical Engineering (MEC-ENGR)

Courses

MEC-ENGR 130 Engineering Graphics Credits: 3

Introduction to Engineering Graphics with the use of the Computer Aided Design tools AutoCAD and SolidWorks. Introduction to 2D design with AutoCAD includes: basic features, layer control, geometric constructions, orthographic projections, dimensioning and notes, tolerancing, section views, and working drawings. Introduction to 3D design with SolidWorks includes: part modeling, revolved features, sweeps, lofts, assembly modeling and engineering drawings. No previous 2D or 3D CAD experience is necessary to take this class.

Prerequisites: School of Computing and Engineering Student.

MEC-ENGR 131 Engineering Graphics-3D design Credit: 1

Introduction to Engineering Graphics using the 3D Computer Aided Design tool SolidWorks. Introduction to 3D design with SolidWorks includes: part modeling, revolved features, sweeps, lofts, assembly modeling, and engineering drawings. Some previous 2D AutoCAD experience is required to take this class. NOTE: This class starts halfway through the semester by joining in with MEC-ENGR 130 when they finish AutoCAD and begin SolidWorks.

Prerequisites: Departmental consent.

MEC-ENGR 219 Computer Programming for Engineers Credits: 3

Analysis and synthesis of structured computer algorithms for solving engineering problems using high level programming tools such as Excel, Matlab, Fortran and/or C++.

Prerequisites: MATH 266 (preferred) or MATH 220.

MEC-ENGR 270 Engineering Analysis I Credits: 3

This is an applied course with emphasis on physics and engineering applications. Topics include engineering applications using conics, parametric equations, polar coordinates, vectors, solid analytic geometry, vector valued functions, multi-variable functions, partial derivatives (including applications), multiple integration, vector calculus including Green's Theorem, Curl and Divergence, line and surface integrals and Stoke's Theorem.

Prerequisites: MATH 268.

MEC-ENGR 272 Engineering Analysis Credits: 3

An applied course using differential equations in solutions to engineering problems. Topics include applications in first-order differential equations, linear higher-order equations, Laplace transform, Series solutions of linear ODEs (Taylor, Power, and Fourier), Numerical solutions, introduction to systems of differential equations.

Prerequisites: MATH 268 or MATH 220.

MEC-ENGR 285 Engineering Dynamics Credits: 3

Fundamentals of engineering dynamics, including kinematics and kinetics of particles and rigid bodies. Analysis based on forces and accelerations as well as energy and momentum methods.

Prerequisites: CIV-ENGR 275.

MEC-ENGR 299 Engineering Thermodynamics Credits: 3

Fluid properties, work and heat, first law, second law, entropy, applications to vapor and ideal gas processes.

Prerequisites: MATH 268 (preferred) or MATH 220; and PHYSICS 250.

MEC-ENGR 306 Computer-Aided Engineering Credits: 3

Principles, analysis and application of numerical methods for the solution of engineering problems. Computer implementation.

Prerequisites: MEC-ENGR 272 and E&C-ENGR 216.

MEC-ENGR 324 Engineering Materials Credits: 3

The nature of the structure of engineering materials. The relationship of material structure to the physical properties. Mechanical behavior of engineering materials.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 276.

MEC-ENGR 324L Engineering Materials Lab Credit: 1

Introduction to the laboratory techniques used in studying the physical and mechanical properties of engineering materials. The material testing in this course is primarily of metallic materials. Physical and mechanical property variations as a result of various processing techniques are studied. Recommended preparation: Machine Shop Safety.

Co-requisites: MEC-ENGR 324.

MEC-ENGR 351 Fluid Mechanics Credits: 3

Concepts of the statics and dynamics of fluids, with emphasis on principles of continuity, momentum and energy. Boundary layers, dimensional analysis and drag are covered briefly. Thorough treatment of pipe flow.

Prerequisites: MEC-ENGR 272 or MATH 345 and CIV-ENGR 275.

MEC-ENGR 352 Mechanical Instruments Lab Credits: 2

Students will investigate random and systematic errors, and their effects on measurement uncertainty. Students will be introduced to various instrumentation equipment used in measuring displacement, velocity, acceleration, force, strain, fluid pressure, fluid velocity, fluid flow rate, and temperature.

Prerequisites: CIV-ENGR 276.

MEC-ENGR 353 Heat Transfer and Fluid Mechanics Lab Credits: 2

The course emphasis is on experiments related to thermodynamics, heat transfer, and fluid mechanics. Proper experimental methods, data and uncertainty analysis related to thermal and fluids measurements are discussed.

Prerequisites: MEC-ENGR 351.

Co-requisites: MEC-ENGR 399.

MEC-ENGR 356 Mechanical Component Design Credits: 3

Introduction to mechanical engineering design and its impact on human history, principles of design with ductile and brittle materials for static and dynamic loading, classical and reliability-based factors of safety, fracture mechanics in design, application to the design of selected machine components.

Prerequisites: CIV-ENGR 276.

MEC-ENGR 360 Applied Thermodynamics Credits: 3

Gas and vapor mixtures, cycles, availability, imperfect gases, thermodynamic relations, combustion, chemical equilibrium, power systems and design projects. Effects of design choices on the earth and living systems.

Prerequisites: MEC-ENGR 299.

MEC-ENGR 380 Manufacturing Methods Credits: 3

Introduction to manufacturing processes with emphasis on those aspects most relevant to methods, problems in force analysis, and practicum and experimentation in machine tool applications.

Prerequisites: MEC-ENGR 324.

Co-requisites: MEC-ENGR 324L.

MEC-ENGR 385 System Dynamics Credits: 3

Kinematics of mechanical systems. Introduction to the modeling and analysis of dynamic mechanical systems. Computer analysis.

Prerequisites: MEC-ENGR 272, MEC-ENGR 285.

MEC-ENGR 399 Heat and Mass Transfer Credits: 3

Fundamentals of conduction, convection, and radiation heat transfer. Use of nondimensional parameters. Theory of heat exchangers. Mass transfer.

Prerequisites: MATH 250 or MEC-ENGR 270; and MEC-ENGR 299, MEC-ENGR 351.

MEC-ENGR 400 Problems Credits: 1-6

Special design, experimental and analytical problems in mechanical engineering.

Prerequisites: Departmental consent.

MEC-ENGR 401CD Topics in Mechanical Engineering -- Applied CFD Credits: 3

The fundamentals of computational fluid mechanics. Introduction to the governing equations and boundary conditions of viscous fluid flows, turbulence and its modelling, and how to solve a fluid flow problem using commercially available CFD software.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 401T Topics in Mechanical Engineering Credits: 3

This course covers the application of Newton's laws and thermodynamics to analysis of fluid flow in turbomachinery.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 407 Advanced Dynamics and Modeling Credits: 3

Fundamental principles of advanced rigid body dynamics with applications. Special mathematical techniques including Lagrangian and Hamiltonian methods.

Prerequisites: MEC-ENGR 285 and MEC-ENGR 306.

MEC-ENGR 411 Introduction to Biomechanics Credits: 3

This course is to provide students with an introduction to the engineering principles of biomechanics.

Prerequisites: MEC-ENGR 219 or E&C-ENGR 216; or MEC-ENGR 285.

Co-requisites: MATH 300 or CIV-ENGR 319.

MEC-ENGR 412 Biodynamics Credits: 3

Introduction to musculoskeletal biomechanics including: computational biomechanics, movement simulation, motor control and musculoskeletal tissues. Recommended preparation: MEC-ENGR 411.

MEC-ENGR 413 Experimental Biomechanics of Human Motion Credits: 3

The purpose of this course is to provide an opportunity for students to gain a hands-on, in-depth understanding of the experimental measurement and analysis techniques used to quantify the biomechanics of human motion.

Prerequisites: MEC-ENGR 411.

MEC-ENGR 414 Material Science for Advanced Applications Credits: 3

Study of the physical and mechanical metallurgy of alloy systems of interest in engineering applications.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 415 Control Systems Theory Credits: 3

Introduction to feedback control theory for linear dynamic systems. Topics include root locus analysis, frequency response analysis, and controller design.

Prerequisites: MEC-ENGR 385.

MEC-ENGR 416 Biomedical Device Design Credits: 3

Project based course which exposes students to the entire design process from problem definition to prototype validation for biomedical device applications. Projects in the course are sponsored by real clients from the local biomedical industry, medical clinicians, and/or research labs. The course will cover the following main components: Problem Definition, Concept Generation and Evaluation, Detailed Design, Prototyping and Testing, Project Management, Regulations and Standards, and Technical Communication. **Prerequisites:** Senior standing.

MEC-ENGR 420 Human Powered Vehicle Design Lab Credits: 3

Introduction to the science of human powered vehicles (HPV) providing the background necessary for the design of such vehicles. Students will learn and utilize engineering design practices and apply them toward the creation of an aerodynamic, highly engineered land based HPV.

Prerequisites: MATE111A Machine Shop Safety, Consent of instructor.

MEC-ENGR 424 Non-Metallic Engineering Materials Credits: 3

Structures, properties and applications of ceramics, glasses, cermets, polymers and composite materials.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 425 Failure Analysis Credits: 3

Organize and perform a failure investigation. In addition, the course will cover the general procedures for a failure investigation and various failure mechanisms such as ductile fracture, brittle fracture, fatigue, wear, corrosion and elevated temperature.

Prerequisites: MEC-ENGR 324, MEC-ENGR 380.

MEC-ENGR 426 Introduction to Manufacturing Management Credits: 3

The objective of this course is to expose the student to various manufacturing management tools and techniques. Focus is on both the technical tools used in manufacturing as well as on the management tools needed to implement change in the manufacturing environment. As part of this course, students will research a successful company and present an analysis of manufacturing tools and techniques used.

MEC-ENGR 440 Heating and Air Conditioning Credits: 3

General principles of thermodynamics, heat transfer, and fluid dynamics are used to calculate building loads, size equipment and ducts, and evaluate system performance in maximizing human comfort. Consideration of indoor air quality and human health.

Prerequisites: MEC-ENGR 360, MEC-ENGR 399.

MEC-ENGR 441 Intermediate Fluid Mechanics Credits: 3

Topics in potential and viscous flow theory, and computational fluid dynamics.

Prerequisites: MEC-ENGR 351.

MEC-ENGR 444 Composite Materials Credits: 3

A survey of composite materials used in engineering, emphasizing fiber-reinforced composites as well as laminate and particulate composites.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 451 Power Plant Design Credits: 3

Preliminary component and system design. Optimum design of boilers, steam turbines, condensers and cooling towers and their integration into a system to minimize production costs and impact on the environment.

Prerequisites: MEC-ENGR 360, MEC-ENGR 399.

MEC-ENGR 452 Advanced Mechanics of Materials Credits: 3

Shear center; unsymmetric bending; curved beams; beams on elastic foundations; thick-walled cylinders. Energy methods. Torsion of noncircular sections. Theories of failure. Plate theory.

Prerequisites: CIV-ENGR 276.

MEC-ENGR 454 Power Generation Systems Credits: 3

Fundamentals of the power industry in a format suitable for all engineering disciplines. Survey of electric power systems, including fossil and nuclear steam cycles, combustion turbines, combines cycles, and renewable such as solar and wind. Introduction to major machinery components, systems, controls, and an overview of fuels, emissions, and emission control technologies.

Prerequisites: MEC-ENGR 299.

MEC-ENGR 455 Digital Control of Mechanical Systems Credits: 3

Introduction to digital control systems. Topics include Z-transforms, sampling, stability analysis, and digital controller design.

Prerequisites: MATH 345, MEC-ENGR 415.

MEC-ENGR 457 Mechatronic System Design Credits: 3

Theory and application of mechatronic systems through course instruction, laboratory activities, and student projects.

Co-requisites: MEC-ENGR 415.

MEC-ENGR 458 Modern Control Systems Credits: 3

Controller design for multiple-input/multiple-output systems; controllability and observability; stochastic control problems; regulators and tracking controllers; observers.

Prerequisites: MEC-ENGR 415.

MEC-ENGR 459 Robotics and Unmanned Systems Credits: 3

Students will develop, implement, and evaluate various path following (point mass, rigid body, and Dubin's) and trajectory generation (configuration spaces, roadmaps, cell decomposition, etc.) concepts on simulation and experimental platforms.

Prerequisites: MEC-ENGR 306, MEC-ENGR 457.

MEC-ENGR 460 Electromechanical Conversion Credits: 3

This course describes the operation and control of electro-mechanical devices such as motors transformers to mechanical civil engineering students, including an introduction to programmable logic controllers and variable speed drives.

Prerequisites: MEC-ENGR 220, MEC-ENGR 285.

MEC-ENGR 466 Applied Optimization and Decision Modeling Credits: 3

Introduction to mathematical programming techniques and applications. Linear and integer programming, transportation models, multiple objective and goal programming.

Prerequisites: MEC-ENGR 306.

MEC-ENGR 467 Fuel Cells and Renewable Energy Systems Credits: 3

This course will provide an overview of the fundamental phenomena that govern the design and operation of fuel cells. The thermodynamics of fuel cell systems will be explored including operation of ideal fuel cells and the physical and chemical phenomena that lead to losses within the fuel cell. The course will provide the methods and techniques required to analyze the performance of low, medium, and high temperature fuel cells within an overall energy system. The fueling of fuel cells from renewable resources will also be discussed.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 470 Experimental Design & Analysis Credits: 3

Presentation of concepts and methods of statistical analysis and the design of experiments. Concepts, techniques, interpretation, and use of results are stressed. Focus is on experimental strategy and objectives, and the application of the methods discussed, rather than the mechanics of derivation. Major sections include: a review of hypothesis testing and basic analysis of variance techniques; single factor experiments including 2k and 3k design, confounding, and Taguchi philosophy; nested and split plot designs; analysis of covariance and an introduction to response surface methods.

MEC-ENGR 484 Vibration Analysis Credits: 3

Vibration theory with application to mechanical systems.

Prerequisites: MEC-ENGR 306, MEC-ENGR 385.

MEC-ENGR 486 Applied Finite Element Analysis Credits: 3

The study of advanced simulation techniques for the solution to engineering problems. The use of Finite Element Method toward solving mechanical, structural, vibration and potential flow problems will be explored. The use of current commercial simulation tools will be used extensively.

Prerequisites: MEC-ENGR 306, MEC-ENGR 324, MEC-ENGR 385, MEC-ENGR 399.

MEC-ENGR 491 Internship Credits: 6

For International students who must register to cover off-campus employment which is approved as related to their degree by their departmental advisor and ISAO.

Prerequisites: Departmental consent.

MEC-ENGR 492 Mechanical Design Synthesis I Credits: 3

Introduction to and application of the Engineering Design Process including: product development, needs identification, benchmarking, information gathering, concept generation, creativity methods, concept selection, professional and ethical responsibilities, and computer-aided design and rapid prototyping applications. A comprehensive design project including 3D CAD models and functioning prototypes is required.

Prerequisites: MEC-ENGR 130 or MEC-ENGR 131; and departmental consent.

MEC-ENGR 493 Intermediate Dynamics Credits: 3

Theoretical discussion of kinematics and dynamics of rigid bodies in three-dimensional space. General theory of rotating coordinate frames, Euler's angles, Euler's equations of motion, angular momentum, work-energy principles, and Kane's method.

Prerequisites: MEC-ENGR 285.

MEC-ENGR 494 Robotic System Identification Credits: 3

Students will develop, implement, and evaluate various system identification and parameter estimation techniques. Students will quantify estimation accuracy through both theoretical and experimental exercises.

Prerequisites: MEC-ENGR 285, MEC-ENGR 306, MEC-ENGR 352.

MEC-ENGR 496WI Mechanical Design Synthesis Credits: 3

Modern design theories and methodologies, with emphasis on the initial stages of the design process. Effect of design choices on the earth and living systems. Principles of embodiment design and life-cycle considerations. A comprehensive group design project is required. The course satisfies the Writing Intensive requirement.

Prerequisites: ANCH 309 or MEC-ENGR 492; MEC-ENGR 356.

Military Sciences (MIL-SCI)

Courses

MIL-SCI 102 Leadership Practicum Credits: 2

Examines leadership in basic tactical and patrolling operations, Includes a tactical application exercise and participation in physical fitness conditioning as a course requirement. Students practice leadership according to 16 principles and learn basic soldier skills.

Co-requisites: MIL-SCI 116.

MIL-SCI 112 Leadership Practicum Credits: 2

Examines advanced squad and platoon tactical operations with emphasis on patrolling operations. Topics include: leadership techniques, basic first aid, and problem-solving exercises. A tactical field application exercise and physical fitness conditioning program are included as course requirements. Students perform duties as leaders of small units.

Co-requisites: MIL-SCI 126.

MIL-SCI 116 Foundations of Officership Credit: 1

The course introduces the student to issues and competencies that are central to a commissioned officer's responsibilities. These initial lessons establish a framework for understanding officership, leadership, and Army values. Additionally, the semester addresses life skills, including physical fitness and time management. This course is designed to give the student an accurate insight into the Army profession and the officer's role in the Army.

Co-requisites: MIL-SCI 102.

MIL-SCI 126 Basic Leadership Credit: 1

This course focuses on leadership theory and decision making. "Life skills" lessons in this course include: problem solving, critical thinking, leadership theory, followership, group interaction, goal setting, and feedback mechanisms. Upon completion of this course, students are prepared to advance to more complex leadership instruction concerning the dynamics of organization. Additionally, students will be increasingly required to demonstrate knowledge of leadership fundamentals and communications (written and oral).

Co-requisites: MIL-SCI 112.

MIL-SCI 202 Leadership Practicum Credits: 2

Course examines squad and platoon offensive and defensive operations and leadership procedures in patrolling operations. Includes a tactical application exercise and participation in physical fitness conditioning as a course requirement. Students will perform various leadership roles and present classroom instruction.

Corequisite: MIL-SCI 216

MIL-SCI 212 Leadership Practicum Credits: 2

Examines advanced squad and platoon offensive and defensive operations, reaction to obstacles, and leadership procedures in patrolling operations. Includes a tactical application exercise and participation in physical fitness conditioning as a course requirement. Students will perform in various leadership roles and present classroom instruction.

Co-requisites: MIL-SCI 226.

MIL-SCI 216 Individual Leadership Series Credits: 2

This course is designed to develop within the student a knowledge of self, self-confidence and individual skills. Through experiential learning activities, students will develop problem-solving and critical-thinking skills, apply communication, feedback and conflict-resolution skills. This course delves into several aspects of communication and leadership theory. The focus of the course is on critical life skills which enable the students future success. The course concludes with a major leadership and problem-solving case study which draws upon previous instruction.

Prerequisites: MIL-SCI 126.

Co-requisites: MIL-SCI 202.

MIL-SCI 226 Leadership and Teamwork Credits: 2

This course focuses on self-development guided by knowledge of self and group processes. Experiential learning activities are designed to challenge students current beliefs, knowledge and skills. This semester takes the approach of placing students in a wide variety of group exercises designed to emphasize various leadership competencies and insights. The instructor, acting as a facilitator, helps guide student processing of the events to derive the leadership, group dynamics and problem-solving lessons that the exercises offer. Practical life skills are emphasized throughout.

Prerequisites: MIL-SCI 216.

Co-requisites: MIL-SCI 212.

MIL-SCI 302 Leadership Practicum Credits: 2

Examines squad and platoon offensive and defensive operations, the patrol leader in patrolling operations, and a tactical application exercise. Participation in physical fitness conditioning and a tactical application exercise is required. Students will perform in various leadership roles and present classroom instruction. Recommended preparation: MIL-SCI 226.

Prerequisites: Departmental consent.

Co-requisites: MIL-SCI 316.

MIL-SCI 312 Leadership Practicum Credits: 2

Familiarization with military firearms; includes assembly and disassembly; tactical communications; and the field artillery request and a tactical application exercise. Participation in physical fitness conditioning and a tactical application exercise is required. Students will perform in various leadership roles and present classroom instruction.

Prerequisites: MIL-SCI 316.

Co-requisites: MIL-SCI 326.

MIL-SCI 316 Leadership and Problem Solving Credits: 3

Following an introduction to the principles of physical fitness and healthy lifestyles, lessons will cover: the Leader Development Program, planning and conducting individual and small unit training, basic tactical principles, reasoning skills and the military-specific application of these skills in the form of the Army's troop-leading procedures. The course concludes with a detailed examination of officership, which culminates in a five-hour officership case study.

Prerequisites: MIL-SCI 226.

Co-requisites: MIL-SCI 302.

MIL-SCI 326 Leadership and Ethics Credits: 3

Continues the focus from MIL-SCI 316 on doctrinal leadership and tactical operations at the small unit level. Instructional modules include: Army branches, Army leadership, philosophy, dynamics of a group environment, oral and written presentation skills, culminating in instruction in national and Army values and ethics. This critical semester synthesizes the various components of training, leadership and team building.

Prerequisites: MIL-SCI 316.

Co-requisites: MIL-SCI 312.

MIL-SCI 397 US Military History Credits: 3

This course examines the beginnings of human military history from pre-colonial through the birth of America and into the post-Cold War era. The course focuses on the origins of tactics and techniques and emphasizes the military as an aspect of American society and its role in political, social, economic, and international environments.

Prerequisites: Departmental consent.

MIL-SCI 402 Leadership Practicum Credits: 2

Practical applications in problem analysis, decision making, planning and organization, delegation and control, and development of interpersonal skills required for effective management. Participation in physical fitness conditioning and tactical application exercise is required. Students will perform in various leadership positions and present classroom instruction.

Co-requisites: MIL-SCI 416.

MIL-SCI 412 Leadership Practicum Credits: 2

Practical applications in problem analysis, decision making, planning and organization, delegation and control, and development of interpersonal skills required for effective management, includes a tactical application exercise. Participation in physical fitness conditioning is required. Students will perform various leadership roles and conduct classroom instruction.

Prerequisites: MIL-SCI 416.

Co-requisites: MIL-SCI 426.

MIL-SCI 416 Leadership And Management Credits: 3

A series of lessons designed to enable students to make informed career decisions as they prepare for commissioning and service as Second Lieutenants. Classes concentrate on Army operations and training management, and communications and leadership skills, which support the final transition from cadet/student to Lieutenant/leader. Subjects include: The Army Training Management System, coordinating activities with staffs, and counseling skills. At the end of this semester, students should possess the fundamental skills, attributes and abilities to operate as a competent leader in the cadet battalion.

Prerequisites: MIL-SCI 326.

Co-requisites: MIL-SCI 402.

MIL-SCI 426 Officership Credits: 3

A series of lessons that provide a review of the ethical dimensions of leadership, law in leadership, organizing for military operations to include historical case studies, personnel, supply and maintenance administration and management, personal financial planning and entering the service, The semester concludes with a 12-lesson experiential exercise simulating assignment as a new Lieutenant in a unit.

Prerequisites: MIL-SCI 416.

Co-requisites: MIL-SCI 412.

MIL-SCI 497 Leadership And Management Practicum - Directed Study Credits: 1-3

Practical application in military problem analysis, decision making, planning and organization, delegation and control, and development of interpersonal skills required for effective management.

Prerequisites: Departmental consent.

Natural Sciences (NAT-SCI)

Courses

NAT-SCI 130 Physics of Sports Credits: 3

A course intended for liberal arts students focusing on the physics involved in different sports. Physical laws and technological developments that impact sports will be studied.

NAT-SCI 140 How Things Work Credits: 3

A course intended for liberal arts students focusing on the principles of operations, histories, and relationships of objects from our daily environment. The areas of investigation include mechanical and thermal objects, electromagnetism, light, special materials and nuclear energy.

Co-requisites: NAT-SCI 140L.

NAT-SCI 140L How Things Work Laboratory Credit: 1

Simple experiments based on everyday experiences are analyzed in terms of conceptual physics. The material includes elements of mechanics of a rigid body, elastic properties of matter, fluid dynamics, thermodynamics, electromagnetism, optics and modern physics.

Co-requisites: NAT-SCI 140.

NAT-SCI 150 Astronomy: Motions of the Cosmos Credits: 3

An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the fundamental laws of gravity and motion crucial to the formation of stars and planetary systems, the growth of black holes and galaxies, and the evolution of cosmic structure.

NAT-SCI 153L Introductory Astronomy Laboratory Credits: 2

An introductory exploration of astronomical phenomena and concepts through quantitative laboratory activities requiring data collection, analysis and interpretation. This course is open to students from all majors. Concurrent enrollment in either NAT-SCI 150 or NAT-SCI 155 is encouraged but not required.

NAT-SCI 155 Astronomy: Starlight and Star Stuff Credits: 3

An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the interactions between light and matter crucial to the life and death of stars, the analysis of starlight and interstellar chemistry, and the interpretation of cosmic history.

NAT-SCI 171 Physics For Future Presidents Credits: 3

A course intended for liberal arts students focusing on the physics they need to be informed citizens in a democracy. Energy, global warming, terrorism, and health are examples of the important topics examined from the perspective of how science should inform policy.

NAT-SCI 375P Nature Of Science Credits: 4

Selected topics from the natural sciences. Provides students fundamental principles and concepts of various physical and mathematical sciences. Lectures, demonstrations and discussions provide an integrated approach to the natural sciences.

NAT-SCI 425P Introduction To Quantitative Methods Credits: 3

Topics addressed are the scientific approach to study of behavior (goals of science, research terminology, variables, distributions, measures of central tendency, confidence intervals, use of research methods and ethics in research), experimental design (validity, reliability, design and sampling techniques), and interpretation of research results. Course includes in-class computer data entry and analysis. Recommended preparation: COMP-SCI 101 and MATH 110 or MATH 116.

Nursing (NURSE)

Courses

NURSE 101 Introduction to Nursing Credits: 2

This introductory two-hour course is designed to facilitate role socialization into professional nursing. Beginning with a brief historical overview of professional nursing, nursing is defined and the philosophical and practice standards of the profession are discussed. The student explores nursing's image and power bases in relationship to professional accountabilities and roles. The value and tenets of evidence-based care are emphasized and integrated with use of nursing process in professional, reflective decision-making. A review of educational paths in professional nursing leads the student into a comprehensive survey of the multiple roles, responsibilities, and requisite skills of the professional nurse today and in the future.

NURSE 120 Anatomy & Physiology I Credits: 4

This course examines the structure and function of the human body from the molecular to the organismal level as they interact among all body systems across the life span. Instructors also attempt to correlate course materials with the clinical aspects of the application of physiological knowledge. Co-requisite laboratory exercises provide practical application of theoretical concepts. In this first term of two-term course, molecular biology, biochemistry, cellular biology, and histology are studied as well as the integumentary, musculoskeletal, and nervous systems.

Prerequisites: Pre-Nursing or Bachelor of Health Sciences Student.

NURSE 125 Medical Terminology Credit: 1

This course is designed to provide the student with a foundation in medical terminology and the components of health records. Course content will include how medical terms are formed; how medical terms are applied to organs, body systems and pathological conditions; how common medical abbreviations are used; and how health records are organized and compiled.

NURSE 127 Drug Calculations Credit: 1

The drug calculation course is designed to introduce the student to methods of drug dosage calculation needed for medication administration in the health care setting. This course will review basic mathematical concepts, introduce medication specific terminology, discuss interpretation of medication orders, identify key elements of the medication label and enable the student to calculate appropriate and accurate drug dosages.

NURSE 160 Anatomy and Physiology II Credits: 4

This course is a continuation of NURSE 120. Co-requisite laboratory exercises provide practical application of theoretical concepts. Physiologic systems including endocrine, cardiovascular, immune, respiratory, digestive, renal, and reproductive are studied as well as embryology and genetics.

Prerequisites: Pre-Nursing or Bachelor of Health Sciences Student.

NURSE 220 Fundamental Concepts & Skills Credits: 6

This course focuses on fundamental concepts, skills, and techniques that provide a foundation for clinical practice. The beginning student will identify factors that may influence the human system and applies the nursing process in health care setting using basic nursing interventions.

Prerequisites: Pre-Licensure or Direct Admit Nursing Program Student.

NURSE 230 Health In Aging Credits: 2

This course focuses on the role of the nurse in promoting and maintaining the health of the older adult population. Evidence based nursing care of the older adult that includes physiological, psychological, pharmacological, and nutritional considerations as affected by theories on aging, socio-cultural influences, legal and ethical issues, and health care resources are explored. Nursing assessment, diagnoses, interventions, and outcomes specific to a diverse older adult population are discussed. Opportunities are provided for interaction with the older adult population.

Prerequisites: Pre-Licensure or RN to BSN Student.

NURSE 250 Health Assessment for Nursing Practice Credits: 3

This course is designed to provide a systematic approach to the physiological, psychological, sociocultural and developmental assessment of individuals emphasizing findings considered to be within normal limits. The health history is emphasized as a tool for assessing mental and physical status. This course is designed for pre-licensure students. This three credit hour course consists of two didactic and one credit hour of clinical/lab per week.

Prerequisites: Pre-Licensure or Direct Admit Nursing Program Student.

NURSE 252 Human Growth and Development Credits: 3

This course provides a basic introduction to the theory for human growth and development across the life span. Emphasis is placed upon the biological and the psychosocial aspects of growth and development. Content is organized in a modified chronological order dividing information into major stages of growth and development across the lifespan.

Prerequisite: Pre-Licensure Nursing Program Student.

NURSE 255 Spanish for Health Care Pre-Professionals Credits: 3

This course focuses on conversational Spanish, medical terminology in Spanish and written/read Spanish. This course will provide the student with basic knowledge that will allow basic communication with clients who speak/read/write Spanish. This is a fast-paced course and will require practice of the language outside of the classroom in order to master the material presented. Recommended preparation: SPANISH 110.

NURSE 256 Pharmacology Credits: 3

This is a course in pharmacology that builds on prior knowledge of anatomy, physiology, chemistry, microbiology and pathophysiology. The major focus of the course is the basic and clinical concepts of pharmacology in evidence-based care. This course covers drug knowledge in the areas of pharmacotherapeutics, pharmacodynamics, pharmacokinetics, adverse reactions and contraindications, therapeutics indications and nursing implications.

Prerequisites: NURSE 127, NURSE 220, NURSE 230, NURSE 250, and NURSE 395.

NURSE 262 Management of Adult Health I Credits: 5

This medical-surgical course focuses on utilization of the nursing process to the specific illnesses of the adult client in the acute care setting. High volume disease processes with associated nursing care are emphasized. The effects on the individual as a holistic system are explored. Skills are developed in caring for persons with biological, psychological and social system alterations to facilitate optimal client outcomes.

Prerequisites: NURSE 127, NURSE 220, NURSE 230, NURSE 250, and NURSE 395.

NURSE 315 Health Literacy Credit: 1

In this course participants will explore the fundamentals of health literacy and demonstrate the impact on health outcomes. Students will be introduced to tools that health care professionals can use to assess the health literacy of their patients/clients. Tools and resources to provide health information at the correct health literacy level will be presented. Students will explore interventions that can increase an individual's health literacy.

NURSE 326 Applied Physiology Credits: 3

In this course, clinical applications to physiologic concepts are highlighted and emphasized among all body systems across the life span. Discussion will include anatomical landmarks critical to health assessment and clinical manifestations related to physiological processes. This three credit hour course consists of two credit hours of didactic and one hour of lab work that will further demonstrate these concepts through dissection, laboratory experiments, and case studies.

Prerequisites: Departmental consent.

NURSE 342 Legal & Ethical Issues Credits: 2

This course is designed to investigate medical-legal issues and explore the implications that legal intervention and interpretation as well as litigation have on the scope of nursing practice and the delivery of patient care. Ethical standards of nursing practice and diverse individual and group values are explored, and various ethical systems, concepts and principles used in ethical decision making are introduced.

Prerequisites: Pre-Licensure Nursing Program Student.

NURSE 345 Quantitative Analysis In The Health Sciences Credits: 3

This course focuses upon the skills required for the utilization of scientific findings in evidence-based care. The conceptual basis of descriptive and the inferential statistics found in the properties of the normal distribution, comprise the core of these skills. Using the normal distribution as a structure for understanding descriptive and inferential procedures, the course presents information necessary to the selection, computation and interpretation of basic statistics relevant to evidence based-care in the health sciences. Discussions of variables, measurement and tabular and graphic presentation of data precede the development of computation skills.

Prerequisites: MATH 110 or MATH 116 or STAT 115 or MOTRMATH 110 or higher level math course; or ALEKS score of 61 or higher; or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

NURSE 360 Management of Mental Health Credits: 4

This course is designed to introduce psychiatric mental health nursing through the study of sound psychiatric nursing theory. This course will focus on the nursing process framework, and the establishment and maintenance of a therapeutic nurse-client relationship. Emphasis is placed on assessment, therapeutic communication, neurobiological theory, and pharmacology. Nursing interventions will focus on all aspects of client care, communication, client/family teaching, and community resources and their practical application in a variety of clinical settings.

Prerequisites: Pre-Licensure or Direct Admit Nursing Program Student.

NURSE 362 Management of Adult Health II Credits: 5

This medical-surgical course focuses on application of the nursing process to the delivery and the management of adult clients across the care continuum. This course builds on Adult Health I content to include high risk disease processes with associated nursing care. Emphasis is placed on the interaction between the client, family, nursing, and the environment to result in optimal client outcomes.

Prerequisites: Pre-Licensure or Direct Admit Nursing Program Student.

NURSE 364 Management of Maternal & Family Health Credits: 4

This course focuses on the application of the nursing process in the adaptation of the childbearing family. Emphasis is placed on adaptation during pregnancy, labor, birth and the postpartum period. Key concepts to be addressed include maternal, fetal, neonatal and family adaptation throughout the maternity cycle, common alterations during the cycle and culturally sensitive, family-centered nursing care. Maternal, fetal and neonatal physiology, pathophysiology and pharmacology will be addressed.

Prerequisites: Accelerated or Pre-Licensure or Direct Admit Program Student.

NURSE 366 Management of Child & Adolescent Health Credits: 4

This course focuses on the application of the nursing process in the care of the pediatric client. Emphasis is placed on providing developmentally appropriate care to healthy, acutely ill and chronically ill pediatric clients holistically within the context of a family system. Key concepts to be explored include age appropriate anatomy, physiology, pathophysiology, and pharmacology and their application to the nursing strategies of health assessment, health promotion, disease prevention, pain management, family-centered and culturally sensitive care.

Prerequisites: Accelerated or Pre-Licensure or Direct Admit Program Student.

NURSE 395 Pathophysiology Credits: 3

This course will focus on alterations in biological processes that affect the body's internal homeostasis. A conceptual approach will be used to emphasize general principles of pathophysiology. The etiology, pathogenesis, clinical manifestations, and sequelae of various alterations of human structure and function will be examined. Knowledge from the basic and clinical sciences will be integrated.

Prerequisites: Pre-Licensure or RN to BSN Nursing Program Student.

NURSE 401 Health Assessment for Clinical Practice Credits: 3

This course is designed to provide a systematic approach to the physiological, psychological, socio-cultural and developmental assessment of individuals emphasizing findings considered to be within normal limits. The health history is emphasized as a tool for assessing mental and physical status. This course is designed for students with previous health care education, including knowledge of biochemical functions of systems and concepts of normal. This course consists of guided self-study and on-site clinical practicum.

Prerequisites: RN-BSN or Graduate Nursing Program Student.

NURSE 403A Comparative Weight Loss I Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Specific topics that will be addressed include risks of overweight/obesity; common psychological issues for the overweight/obese; societal perceptions and barriers for overweight/obese individuals. This course consists of one hour of didactic work with one module per week for four weeks.

NURSE 403B Comparative Weight Loss II Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Comparison of common medically recommended diets and diet programs and their efficacy/risks; exercise requirements for weight loss and weight maintenance. This course consists of one hour of didactic education with one module per week for four weeks.

NURSE 403C Comparative Weight Loss 3 Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Comparison of pharmacologic weight loss options and their efficacy/risks; non-prescription medications/nutraceuticals for weight loss and their efficacy/risks; and bariatric surgeries and efficacy/risks. This course consists of one hour of didactic work with one module per week for four weeks.

NURSE 404 Introduction to Social Justice Credit: 1

This course is designed to increase a student's knowledge regarding personal and social biases based on race, ethnicity, culture, religion, age, sex, sexual orientation, social and economic status, political ideology, disability and how these entities contribute to social injustice. The focus of the course will center on issues involving diversity, prejudice and oppression that impacts social justice. During the course, students will be introduced to tools for developing social justice literacy in order to take action towards establishing a more just society.

NURSE 408 Gender, Health and Development in Senegal Credits: 3

This course examines women's economic empowerment, health education initiatives, philanthropy, and social entrepreneurship in West Africa and Senegal in particular. In the main city of Dakar we will visit indigenous and global nonprofits to study their policies and processes. The culture, both urban and rural, will be experienced in order to provide a unique perspective on the Senegalese and their culture.

NURSE 417 Information Systems and Technology for Improved Health Care Credits: 3

This course provides a basic introduction to health information technology across health care settings. Students will acquire an understanding of key concepts associated with health informatics and network models, systems and management strategies, health information strategic planning, clinical and public health application, data retrieval and analytics, public policy, research, and one's professional responsibility to protect electronic health care records.

NURSE 419 Introduction to Social Epidemiology Credit: 1

This course is designed to increase a student's knowledge of Social Epidemiology, which is the branch of epidemiology that studies the social determinants of health. Social processes will be explored that center on social networks, social support, social capital, social cohesion, and contributing ecological factors that influence health and wellness. Students will discover how social relationships and institutions, such as familial relationships, group culture, policies, and global economic forces, promote or undermine the health of populations. Students will also explore how social inequity indicators involving income, health insurance, and access to care inter-relate and often lead to negative health outcomes.

NURSE 462 Special Topics Credits: 2

This course is designed to explore current issues and trends influencing nursing practice. Economical, political, social and cultural issues are analyzed as they relate to interdisciplinary healthcare topics. Special Topics is aimed at preparing nursing students for immediate and long term milestones in their practice, which includes NCLEX licensure study, current clinical and practice issues, and exposure to advance nursing roles in practice and research.

Prerequisites: Accelerated or Pre-Licensure or Direct Admit Program Student.

NURSE 465 Management of Community and Public Health Nursing Credits: 4

This course focuses on applying the nursing process to the care of target community population and the individual. Emphasis is placed in health promotion and disease prevention. Discussion will include epidemiological, social, political, economic and cultural factors that influence the health of a population. The clinical components will consist of application of the nursing process to identify, prioritize, and meet the health needs of aggregates across the lifespan.

Prerequisites: Pre-Licensure or Direct Admit Program Student.

NURSE 467 Management of Critical & Emergent Care Credits: 5

This course focuses on applying the nursing process to the care of critically ill clients. Key concepts are: assimilation, integration, and prioritization of information to take decisive client-focused action. Students will manage appropriately the interface between client and technology so that a safe, respectful, and caring environment is established and maintained. Nursing knowledge of cardiovascular/hemodynamic monitoring and acute management of pulmonary, neurological, renal, gastrointestinal, shock, and traumatic emergencies is included.

Prerequisites: Pre-Licensure or Direct Admit Nursing Program Student.

NURSE 468 Effectiveness in Complex Health Systems Credits: 4

This leadership course focuses on effectiveness in complex health systems, by building upon acquired personal and interpersonal knowledge, skills and effectiveness in health outcomes. Organizational culture and systems, leadership and management theories, cultural competence, internal and external politics, and the impact of future managerial and societal paradigm changes on health care and health care delivery systems are presented. Knowledge of budgeting and health care finance, use of the legislative system, quality management, customer service, and leadership and management styles are explored.

Prerequisites: Pre-Licensure, Accelerated or Direct Admit Nursing Program Student.

NURSE 468A Effectiveness in Complex Health Systems I Credit: 1.5

This first part of two leadership courses focuses on effectiveness in complex health systems by building upon acquired personal and interpersonal knowledge, skills, and effectiveness in health outcomes. The role of the registered nurse in advocating for clients in the health care system as well as political and regulatory processes is explored.

NURSE 468B Effectiveness in Complex Health Systems II Credits: 2.5

This is the second part of two leadership courses and focuses on effectiveness in complex health systems by building upon acquired personal and interpersonal knowledge, skills, and effectiveness in health outcomes. Organizational culture and systems, leadership and management theories, cultural competence, and the impact of future managerial and societal paradigm changes on health care and health care delivery systems are presented. Knowledge of budgeting and health care finance, use of the legislative system, quality management, customer service, and leadership and management styles are explored.

NURSE 472 Clinical Internship Credits: 5

This is the final clinical application course designed to complement didactic content from the core-nursing component of the baccalaureate program. The student will integrate and apply knowledge acquired in didactic course work and from previous clinical experiences. Emphasis is placed on effectiveness in personal, interpersonal, human health, and complex health systems. In collaboration with preceptors from the clinical unit, students will manage direct care for clients in health care settings.

Prerequisites: Pre-Licensure or Direct Admit Nursing Program Student.

NURSE 476 Research Methods in Health Sciences Credits: 3

This course focuses upon the development of inquiry skills necessary to identify relevant research-based literature and apply findings from research to practice. Students will develop an understanding of basic research concepts and evidence based practice in addition to skills in finding, appraising, and using health related literature.

Prerequisites: NURSE 345, HLSC 345, or STAT 235.

NURSE 481 Block I: Tools for Personal Effectiveness Credits: 6

This is the first in the four-course sequence. The student will discover that the foundation for professional nursing practice is personal effectiveness. Personal effectiveness is contingent upon an understanding of the historical roots of the profession, the meaning of professionalism, image and power bases, professional standards, moral development, political role socialization and professional values. Personal effectiveness is enhanced through critical reflection of personal perspectives and biases, valuing and use of theory and research, critical thinking and decision-making, informatics' technology, the ability to manage time and stress, and the use of a career plan and informatics.

Prerequisites: RN-BSN Nursing Program Student.

NURSE 482 Block II: Tools for Interpersonal Effectiveness Credits: 3

This is the second in the four-course sequence. The student will discover that interpersonal effectiveness is a prerequisite to effective management of the care of humans and of teams. Interpersonal effectiveness is contingent on an understanding of professional value and caring, ethics in health care, legalities of practice, communication theories, and the dynamics of groups and teams. Interpersonal effectiveness is enhanced through the use of such skills as conflict resolution and negotiation, delegation, managing change, advocacy, team membership, group management, political awareness, technology utilization, and communication techniques. Content appropriate to these areas will be covered within this course.

Prerequisites: RN-BSN Nursing Program Student.

NURSE 483 Block III: Effectiveness in Human Health Outcomes Credits: 6

This is the third in a four-course sequence. It builds upon the personal and interpersonal skills acquired in the first two block courses and focuses on effectiveness in human health outcomes. The student will discover that effectiveness in human health outcomes is a primary goal in the delivery of an optimum continuum of health care that encompasses health promotion, disease prevention and illness care across the lifespan. Achieving effectiveness in human health outcomes across the wellness-illness continuum and the individual-to-community continuum is contingent on acquiring an understanding of epidemiology, levels of care, communicable disease control, case management, theories applicable to aggregate populations, cultural competence, evidence-based care, and information technology.

Prerequisites: RN-BSN Nursing Program Student.

NURSE 484 Block IV: Effectiveness in Complex Health Systems Credits: 6

This is the final course in the four-course sequence. Students will build upon the knowledge and skills acquired in the prior three course in order to examine the essentials of structure and designs, behavior and culture, synergy, workplace diversity, health care finance, and power and politics within complex health systems. Organizational theories, leadership, management and nursing's social responsibility in an emerging global health care environment will also be explored.

Prerequisites: RN-BSN Nursing Program Student.

NURSE 485 Application to Practice I Credits: 3

This is the first of two clinical application courses designed to complement didactic content from the four-course block sequence (NURSE 481 - NURSE 484). Students will integrate an increasingly complex knowledge base with an emphasis on developing effectiveness: personally, interpersonally, and in the health management of populations of clients within systems of community and professional organizations and practice settings. Student cohort groups, in collaboration with personnel from health related organizations and faculty, assess population health needs, identify outcomes and develop action plans based on real need. The practice experience learning processes and outcomes will be collective and provide solutions for the health care community.

Prerequisites: RN-BSN Nursing Program Student.

NURSE 486 Application to Practice II Credits: 3

This is the second of two Practicum application courses designed to complement didactic content from the four-course block sequence (NURSE 481 - NURSE 484) to integrate complex knowledge for personal and interpersonal development in the health management of populations of clients. Student cohort teams will apply new skills and knowledge to real issues and problems in the delivery of nursing care with an emphasis on teamwork performance and action plan implementation and outcome evaluation. The processes and outcomes of those experiences will be collaborative and provide solutions for the health care community.

Prerequisites: RN-BSN Nursing Program Student.

NURSE 490 Special Topics Credits: 1-9

A course of study in a special area of interest in nursing under individual faculty direction.

Prerequisites: RN-BSN or Graduate Nursing Program Student.

NURSE 490AP2 Special Topics Credits: 1-9

Special Topics

Prerequisites: RN-BSN or Graduate Nursing Program Student.

Oboe (OBOE)

Courses

OBOE 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit towards the major.

OBOE 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury performance is required.

OBOE 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

OBOE 101 Freshman Oboe I Credits: 2-4

OBOE 102 Freshman Oboe II Credits: 2-4

OBOE 201 Sophomore Oboe I Credits: 2-4

OBOE 202 Sophomore Oboe II Credits: 2-4

OBOE 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

OBOE 301 Junior Oboe I Credits: 2-4

OBOE 302 Junior Oboe II Credits: 2-4

OBOE 401 Senior Oboe I Credits: 2-4

OBOE 402 Senior Oboe II Credits: 2-4

Organ (ORGAN)

Percussion (PERCSN)

Courses

PERCSN 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

PERCSN 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

PERCSN 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

PERCSN 101 Freshman Percussion I Credits: 2-4

PERCSN 101J Freshman Percussion I (Jazz) Credits: 2-4

PERCSN 102 Freshman Percussion II Credits: 2-4

PERCSN 102J Freshman Percussion II (Jazz) Credits: 2-4

PERCSN 201 Sophomore Percussion I Credits: 2-4

PERCSN 201J Sophomore Percussion I (Jazz) Credits: 2-4

PERCSN 202 Sophomore Percussion II Credits: 2-4

PERCSN 202J Sophomore Percussion II (Jazz) Credits: 2-4

PERCSN 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

PERCSN 301 Junior Percussion I Credits: 2-4

PERCSN 301J Junior Percussion I (Jazz) Credits: 4

PERCSN 302 Junior Percussion II Credits: 2-4

PERCSN 302J Junior Percussion II (Jazz) Credits: 4

PERCSN 401 Senior Percussion I Credits: 2-4

PERCSN 401J Senior Percussion I (Jazz) Credits: 4

PERCSN 402 Senior Percussion II Credits: 2-4

PERCSN 402J Senior Percussion II (Jazz) Credits: 4

Philosophy (PHILOS)

Courses

PHILOS 210 Introduction to Philosophy Credits: 3

An introduction to many of the central problems of philosophy. The various dimensions of philosophy are examined as it related to our relationships with each other, our understanding of our world and our understanding of ourselves. Connections between classical philosophers and contemporary issues are explored as philosophy is considered as a deeply personal and also as a social phenomenon.

PHILOS 210 - MOTR PHIL 100: Introduction to Philosophy



PHILOS 221 Contemporary Moral Issues Credits: 3

This course offers a philosophical examination of ethical issues in contemporary society. Topics for discussion include ethical conflicts arising in business and technology, engineering, healthcare, politics, and the environment. Moral concerns addressed may include reproductive rights and technologies, warfare, capital punishment, pornography, privacy, consumerism, euthanasia, sexuality, and animal welfare.

PHILOS 221 - MOTR PHIL 102: Introduction to Ethics



PHILOS 222 Foundations Of Logic and Scientific Reasoning Credits: 3

This course introduces the basic concepts and methods of modern logic, beginning with premise, inference, conclusion, and argument, with emphasis on understanding and reconstructing complex patterns of reasoning, and analysis and construction of valid arguments.

PHILOS 222 - MOTR PHIL 101: Introduction to Logic



PHILOS 250 Special Readings In Philosophy Credits: 3

An investigation of readings on a topic, a philosophical movement, or a philosopher to be selected by the instructor. The course is designed to meet the needs of students who are interested in a specific issue or person in philosophy but do not yet possess the necessary background and skill demanded of those who have taken work beyond the introductory course (s) in philosophy.

PHILOS 310WI Ancient Philosophy Credits: 3

A survey of the central figures of classical philosophy: the pre-Socratics, Socrates, Plato, Aristotle, the Stoics, the Epicureans and other philosophers of antiquity. The contributions of major philosophers to the development of science, religion, and social and political theories are studied. Recommended preparation: PHILOS 210 and PHILOS 222.

PHILOS 320WI History of Modern Philosophy Credits: 3

A survey of the central figures of modern philosophy: Rene Descartes, Baruch Spinoza, G.W. Leibniz, Thomas Hobbes, John Locke, George Berkeley, David Hume and Immanuel Kant. In addition to the philosophical issues of the period, cultural, historical and political matters are considered.

A secondary goal is the establishment of the pedigree of contemporary philosophical problems. Recommended preparation: PHILOS 210 and PHILOS 222.

PHILOS 321 Ethics Credits: 3

Attention is given to the nature of ethical ideas and the development and history of ethical theory.

Prerequisites: PHILOS 210, or PHILOS 221, or PHILOS 222.

PHILOS 325 Aesthetics Credits: 3

The basic problems of aesthetics are examined, with special emphasis on the character of the work of art, the aesthetic response of the viewer, the creative process of the artist, and the nature of aesthetic criticism. These topics are discussed in light of conflicting aesthetic theories. Recommended preparation: PHILOS 210 and PHILOS 222.

PHILOS 329 American Philosophy Credits: 3

The main trends of American thought are covered, with special emphasis on the philosophies of Peirce, James and Dewey.

Prerequisites: PHILOS 210 or PHILOS 222.

PHILOS 332 Existentialism Credits: 3

A study of the development of existentialism. Selections from the works of such thinkers as Kierkegaard, Nietzsche, Sartre, Heidegger, Camus and other related philosophers are considered. Special attention is devoted to the existential movements in literature, social science and medicine.

Recommended preparation: PHILOS 222.

PHILOS 333 Social And Political Philosophy Credits: 3

A consideration of representative views of the place of man in contemporary society. Contributions in psychology, political theory, economics, sociology and anthropology are investigated philosophically with a view toward offering a critical appraisal of the nature of man in the human community.

PHILOS 335 Philosophy Of Mind Credits: 3

A study of problems arising in connection with such topics as mental phenomena, the relation of mind to body, free will and determinism, the self and personal identity, and 'thinking' machines. Classical and contemporary treatments of such concepts as 'mind', 'intention', 'sensation', 'perception', 'stimulus', etc., and their relation to action and behavior are considered. Recommended preparation: PHILOS 210 or PHILOS 222.

PHILOS 337 Philosophy Of History Credits: 3

A discussion of methodological and substantive issues, including the nature of historical explanation, whether history can be a science, and various theories of history such as those of Vico, Hegel, Marx, and Collingwood.

Prerequisites: PHILOS 210 or PHILOS 222.

PHILOS 340 Philosophy Of Law Credits: 3

An analysis of major philosophies of law, including methods of justifying legal systems through natural law, legal positivism, sociological jurisprudence, theology, etc. Contemporary legal theories are critically analyzed. Recommended preparation: PHILOS 210 or PHILOS 222.

PHILOS 370 Environmental Ethics And Policy Credits: 3

Various philosophical approaches to issues such as the value of nature, human obligations to non-human animals, species, ecosystems and future generations; environmental justice; restoration; resource use; environmental politics; and the relation between environmental issues, policy and ethics will be discussed critically.

PHILOS 430 Plato Credits: 3

Selected dialogues of Plato are studied with a view to understanding Plato's philosophy and its position in the world of Greece and antiquity. Plato's philosophy is also examined with reference to his place in the Western tradition and in modern philosophy. Recommended preparation: PHILOS 210 or PHILOS 222.

PHILOS 431 Aristotle Credits: 3

Selected portions of Aristotle's works on logic, metaphysics, science, ethics, politics, and poetics are studied with a view to understanding Aristotle's philosophy and its position in the world of Greece and antiquity. Aristotle's philosophy is examined with reference to its place in the Western tradition and in modern philosophy. Recommended preparation: PHILOS 210 or PHILOS 222.

PHILOS 448 Recent Ethical Theories Credits: 3

An analysis and investigation of modern and contemporary ethical theories. Among the theories considered are ethical relativity, the emotive theory, utilitarianism, neo Kantianism, and situation ethics.

Prerequisites: PHILOS 321.

PHILOS 451 History and Philosophy of Bioethics Credits: 3

This course will provide an overview of the history of medicine and bioethics from antiquity to the present. In addition to key historical events, the course will provide an overview of foundational ethical theories. The course will explore key events in bioethics and the responses to them in the bioethics literature.

PHILOS 480 Selected Topics Credits: 1-3

Each time this course is offered a particular philosopher or particular area of philosophy will be the topic of discussion. The course may be repeated for credit when the topic varies.

Prerequisites: PHILOS 210 or PHILOS 222.

PHILOS 480A Selected Topics Credits: 1-3**PHILOS 480B Selected Topics Credits: 1-3****PHILOS 480E Selected Topics Credits: 1-3****PHILOS 490 Special Topics And Readings Credits: 1-3**

Intensive reading and/or research in an area selected by the student in consultation with the instructor. May be repeated for credit when the topic varies.

Prerequisites: Departmental consent.

PHILOS 490B Special Topics And Readings Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor. By permission only. May be repeated for credit when the topic varies.

Prerequisites: PHILOS 222, PHILOS 310WI, PHILOS 320WI, PHILOS 321.

PHILOS 490F Special Topics and Readings Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor. By permission only. May be repeated for credit when the topic varies.

Prerequisites: PHILOS 222, PHILOS 310WI, PHILOS 320WI, PHILOS 321.

PHILOS H310 Ancient Philosophy - Honors Credits: 3**PHILOS H321 Honors: Introduction To Ethics Credits: 3****PHILOS H332 Existentialism Credits: 3**

A study of the development of existentialism. Selections from the works of such thinkers as Kierkegaard, Nietzsche, Sartre, Heidegger, Camus and other related philosophers are considered. Special attention is devoted to the existential movements in literature, social science and medicine.

Prerequisites: PHILOS 210, PHILOS 222.

PHILOS H333 Social And Political Philosophy Credits: 3

A consideration of representative views of the place of man in contemporary society. Contributions in psychology, political theory, economics, sociology and anthropology are investigated philosophically with a view toward offering a critical appraisal of the nature of man in the human community. No prerequisites.

PHILOS H370 Environmental Ethics And Policy Credits: 3

Various philosophical approaches to issues such as the value of nature, human obligations to non-human animals, species, ecosystems and future generations; environmental justice; restoration; resource use; environmental politics; and the relation between environmental issues, policy and ethics will be discussed critically.

Physical Education (PHYS-ED)

Courses

PHYS-ED 106 Badminton Credit: 1

This course teaches the basic rules, skill techniques, terminology and strategy for badminton.

PHYS-ED 125 Golf Credit: 1**PHYS-ED 157 Weight Training Credit: 1**

Weight Training helps students build a solid foundation of current weight training knowledge and practice that can be used throughout their lifetime. Information in the course is consistent with recommendations of the National Strength and Conditioning Association (NSCA) and the American College of Sport Medicine (ACSM). Based on individual goals and assessments, beginning weight training students will create a personal training program and implement a record keeping system to keep track of their progress.

PHYS-ED 158 Advanced Weight Training Credit: 1

This course teaches free weight training exercises that are used within a well-balanced training program, and provides experience needed to design weight training programs.

PHYS-ED 174 Cross Training Credit: 1

This course provides knowledge, skill and opportunity to improve primary sport/activity performance or overall fitness, through designing and participating in a variety of cross training physical activities.

PHYS-ED 175 Personal Fitness Credits: 2

This course is designed to expose students to facts about and experiences in dealing with motor, physical, physiological, psychological and nutritional aspects of the human being. Specific areas of study include hypokinetic disease, physical fitness, nutrition and wellness concepts.

PHYS-ED 175L Lifetime Fitness Lab Credit: 1

This course is designed to provide supervised activity experiences including self assessment and self directed physical exercise programs that are coordinated with the lecture portion of the course.

PHYS-ED 180 Beginning Swimming Credit: 1

This course is designed to equip each student with basic water safety skills and knowledge in order to make them reasonably safe while in, on or about the water.

PHYS-ED 181 Fitness Swimming Credit: 1

This course is designed to challenge and encourage each student to develop an individualized fitness program based on personal goals. Lap swimming as well as water exercise will be incorporated in the class.

PHYS-ED 189 Special Topics: Activity Credit: 1

A course designed to deal with a special activity class which is not available in the regular course offerings. Activity class, instructors and prerequisites to be listed in the semester bulletin.

PHYS-ED 189AY Special Topics:Activity Credit: 1**PHYS-ED 189BE Special Topics: Activity Credit: 1****PHYS-ED 189YO Special Topics: Activity Credit: 1**

Special topics in physical education.

PHYS-ED 203 Aquatic Skills And Teaching Techniques Credits: 2

The purpose of this course is to train students to teach water safety and swimming courses through observation, participation and peer teaching.

Prerequisites: Swimmer level skill.

PHYS-ED 206 First Aid And Safety Credit: 1

Methods of administering first aid in case of accident or sudden illness; bandaging; resuscitation; and caring for wounds and injuries. Safety in schools will be stressed. (Elective).

PHYS-ED 207 Outdoor And Leisure Pursuits Credits: 2

Designed to acquaint students with opportunities for leisure and recreational activity in the outdoors. Emphasizes safety measures and planning skills as well as development of particular movement skills and knowledge about associated wildlife.

PHYS-ED 212 Self Defense Credit: 1

Study in the theory of self defense. Content focuses on: technique for eliminating dangers from daily living, methods for recognizing and avoiding dangers, and skills and strategies for employing physical defense when necessary.

PHYS-ED 300 Mechanical Analysis of Human Movement Credits: 3

Study of the kinesiology and biomechanical aspects of human motion with focus on application to sport skill, dance and exercise situations.

Prerequisites: HLSC 120 and HLSC 160 or concurrent enrollment.

PHYS-ED 300L Mechanical Analysis of Human Movement Lab Credit: 1

Lab activities that support the study of kinesiology and biomechanical aspects of human motion with focus on application to sport skill, dance, and exercise situations.

Co-requisites: PHYS-ED 300.

PHYS-ED 312 Physical Education For Elementary Schools Credits: 2

Identifies physical education needs of elementary school child in relation to his/her total development with emphasis on methods and materials.

PHYS-ED 312L Laboratory Experiences in Physical Educ for the Elementary School Credit: 1

This course consists of laboratory teaching experiences, with skill theme combinations of games, gymnastics, dance fitness.

Co-requisites: PHYS-ED 312.

PHYS-ED 323 Nutrition for Fitness and Sport Credits: 3

This course examines the role nutrition, complemented by exercise, may play in the enhancement of fitness and sport performance. Considerable attention will be devoted to the use of nutritional ergogenic aids with reference to athletic performance.

Prerequisites: BIOLOGY 218, BIOLOGY 218L, LS-PHYS 217.

PHYS-ED 350 Physiology of Sport and Exercise Credits: 3

Study of the concepts and principles of exercise physiology with the intent of learning how to apply them to exercise, sport and movement experiences. Includes development of fitness testing skills, program planning and exercise.

Prerequisites: HLSC 120 and HLSC 160 or concurrent enrollment.

PHYS-ED 350L Physiology of Sport and Exercise Lab Credit: 1

Using lab activities, the course uses the concepts and principles of exercise physiology and applies them to exercise, sport, and movement experiences. Includes the development of fitness testing skills, program planning and exercise.

Co-requisites: PHYS-ED 350.

PHYS-ED 361WI Sociology of Sport and Exercise Credits: 3

The critical examination of the function of sport in the American culture, in an interdisciplinary fashion, with a focus on the contemporary scene. The work of the course will include readings on sociological issues of sport and exercise, the writing of mini-research papers, and a long paper with a presentation. Recommended preparation: Introduction course in sociology.

PHYS-ED 370 Psychology of Sport and Exercise Credits: 3

Exploration of psychological constructs related to the competitive sport process and to physical activity.

PHYS-ED 389 Special Topics In Health And Physical Education Credits: 1-3

This course is designed to offer a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

PHYS-ED 391 Fitness Assessment and Exercise Prescription Credits: 3

This course introduces students to health appraisal and fitness assessment of individuals. The course proceeds with prescribing exercise and conditioning programs, to enhance health and develop physical performance.

Prerequisites: PHYS-ED 350.

PHYS-ED 401 Teaching Healthy Behaviors in the Schools Credits: 3

Study of school health and physical activity programs with emphasis on methods and materials for health, safety, and classroom physical activity instruction in grades K-8.

PHYS-ED 401L Health Teaching In The Schools Lab Credit: 1

Students will attain beginning level competence in skills related to teaching health in schools, including planning, preparation and presentation skills. Computer skills will be used to search internet, e-mail, and develop a computer generated presentation.

PHYS-ED 499 Internship Credits: 3-6

Extensive experience in a practical situation under supervision of university faculty and on-site personnel. Breadth and intensity of involvement will depend on student ability. Available only to upper-division majors.

Physical Sciences (PHY-SCI)

Courses

PHY-SCI 110 Foundations Of Physical Sciences I Credits: 4

Fundamental principles and concepts of the various physical and mathematical sciences, integrated by the history and philosophy of science.

PHY-SCI 110 - MOTR PHYS 110L: Essentials Physical Sciences w/Lab

**PHY-SCI 110L Foundations Of Physical Sciences, Laboratory I Credit: 1**

General laboratory and discussion sessions on various topics in the physical and mathematical sciences.

PHY-SCI 110L - MOTR PHYS 110L: Essentials Physical Sciences w/Lab

**PHY-SCI 130 Physics of Sports Credits: 3**

A course intended for liberal arts students focusing on the physics involved in different sports. Physical laws and technological developments that impact sports will be studied.

PHY-SCI 140 How Things Work Credits: 3

A course intended for liberal arts students focusing on the principles of operations, histories, and relationships of objects from our daily environment. The areas of investigation include mechanical and thermal objects, electromagnetism, light, special materials and nuclear energy.

Co-requisites: PHY-SCI 140L.

PHY-SCI 140L How Things Work Laboratory Credit: 1

Simple experiments based on everyday experiences are analyzed in terms of conceptual physics. The material includes elements of mechanics of a rigid body, elastic properties of matter, fluid dynamics, thermodynamics, electromagnetism, optics and modern physics.

Co-requisites: PHY-SCI 140.

PHY-SCI 150 Astronomy: Motions of the Cosmos Credits: 3

An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the fundamental laws of gravity and motion crucial to the formation of stars and planetary systems, the growth of black holes and galaxies, and the evolution of cosmic structure.

PHY-SCI 153L Introductory Astronomy Laboratory Credits: 2

An introductory exploration of astronomical phenomena and concepts through quantitative laboratory activities requiring data collection, analysis and interpretation. This course is open to students from all majors. Concurrent enrollment in either PHY-SCI 150 or PHY-SCI 155 is encouraged but not required.

PHY-SCI 171 Physics For Future Presidents Credits: 3

A course intended for liberal arts students focusing on the physics they need to be informed citizens in a democracy. Energy, global warming, terrorism, and health are examples of the important topics examined from the perspective of how science should inform policy.

PHY-SCI 410A Selected Topics In Contemporary Science Credits: 3**PHY-SCI 435 Selected Topics In The History Of Science Credits: 3**

Selected Topics In The History Of Science

Physics (PHYSICS)

Courses

PHYSICS 130 Physics of Sports Credits: 3

A course intended for liberal arts students focusing on the physics involved in different sports. Physical laws and technological developments that impact sports will be studied.

PHYSICS 131L Backyard Physics Credit: 1

This laboratory course uses readily available ingredients to develop a conceptual understanding of the laws of nature and mathematics. Experiments can be conducted in the residence hall, apartment, park or home using everyday, inexpensive equipment and materials.

PHYSICS 140 How Things Work Credits: 3

A course intended for liberal arts students focusing on the principles of operations, histories, and relationships of objects from our daily environment. The areas of investigation include mechanical and thermal objects, electromagnetism, light, special materials and nuclear energy.

Co-requisites: PHYSICS 140L.

PHYSICS 140 - MOTR PHYS 100L: Essentials in Physics with Lab



PHYSICS 140L How Things Work Laboratory Credit: 1

A course intended for liberal arts students focusing on the principles of operations, histories and relationships of objects from our daily environment. The areas of investigation include mechanical and thermal objects, electromagnetism, light, special materials and nuclear energy.

Co-requisites: PHYSICS 140.

PHYSICS 140L - MOTR PHYS 100L: Essentials in Physics with Lab



PHYSICS 150 Astronomy: Motions of the Cosmos Credits: 3

An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the fundamental laws of gravity and motion crucial to the formation of stars and planetary systems, the growth of black holes and galaxies, and the evolution of cosmic structure.

PHYSICS 153L Introductory Astronomy Laboratory Credits: 2

An introductory exploration of astronomical phenomena and concepts through quantitative laboratory activities requiring data collection, analysis and interpretation. This course is open to students from all majors.

PHYSICS 155 Astronomy: Starlight and Star Stuff Credits: 3

An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the interactions between light and matter crucial to the life and death of stars, the analysis of starlight and interstellar chemistry, and the interpretation of cosmic history.

PHYSICS 210 General Physics I Credits: 4

Introduction to mechanics, wave motion and sound and heat and thermodynamics. Three hours lecture and two hours laboratory per week.

Co-requisites: MATH 110 or MATH 120 (or higher); ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher.

PHYSICS 210 - MOTR PHYS 150L: Physics I with Lab



PHYSICS 220 General Physics II Credits: 4

Introduction to electricity and magnetism, light and optics and modern physics. Three hours lecture and two hours laboratory per week.

Prerequisites: PHYSICS 210.

PHYSICS 240 Physics For Scientists and Engineers I Credits: 5

Introduction to mechanics, wave motion and sound and heat and thermodynamics.

Co-requisites: MATH 210 or MATH 266.

PHYSICS 240 - MOTR PHYS 200L: Advanced Physics I with Lab



PHYSICS 250 Physics For Scientists and Engineers II Credits: 5

Introduction to electricity and magnetism, light and optics and modern physics. Four hours lecture and two hours laboratory per week.

Prerequisites: PHYSICS 240.

Co-requisites: MATH 220 or MATH 268.

PHYSICS 310 Mechanics I Credits: 3

Advanced statics and dynamics of particles and rigid bodies including gravitation.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

PHYSICS 311 Mechanics II Credits: 3

Continuation of Mechanics I, including mechanics of continuous media, Lagranges equations, tensor algebra and theory of small vibrations.

Prerequisites: PHYSICS 310.

PHYSICS 330 Methods Of Theoretical Physics I Credits: 3

Introduction to mathematical and numerical methods used in the theoretical modeling of physical systems. Treatments of linear systems in scientific and engineering applications will be emphasized.

Prerequisites: MATH 250 or MATH 268.

PHYSICS 342 Physics of Science Fiction Credits: 3

This course will quantitatively explore the representation of physics in science fiction books, movies and television shows. Many popular science fiction concepts will be explored, spanning centuries of physics from Galileo to string theory.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 120 or MATH 125.

PHYSICS 350 Modern Physics With Engineering Applications Credits: 3

An introduction to the theories that revolutionized science and technology in the twentieth century. Topics include special and general relativity, introductory quantum mechanics and atomic structure. Inventions and applications based on these are also examined.

Prerequisites: MATH 220 or MATH 268 and PHYSICS 220 or PHYSICS 250.

PHYSICS 353 Practical Astronomy Credits: 3

A practical overview of the basic methods of observational astronomy research, including the principles of telescopes, detectors and measurement theory.

Prerequisites: PHYSICS 250 and MATH 210 or MATH 220.

PHYSICS 355 Stellar Astrophysics Credits: 3

A mathematical and conceptual overview of the observed properties of stars and the fundamental astrophysics of radiative transfer, hydrostatic equilibrium, atomic processes and thermonuclear energy production that govern their structure, atmospheres and remnants.

Prerequisites: PHYSICS 240 and PHYSICS 250, MATH 210 or MATH 220.

PHYSICS 356 Galaxies Credits: 3

A mathematical and conceptual overview of the observed properties and astrophysics of galaxies highlighting star formation and evolution, the interstellar medium, the Milky Way, galaxy populations and demographics, active galactic nuclei, and galaxy formation and evolution.

Prerequisites: PHYSICS 250 and MATH 210 or MATH 220.

PHYSICS 385L Physics of Electronics Credits: 3

An introduction to the solid state physics of basic electronic components and their operation through both theory and practical labwork.

Prerequisites: PHYSICS 220 or PHYSICS 250.

PHYSICS 395L Computer Interfacing Laboratory Credits: 3

An introduction to data acquisition and automation by computer interfacing transduction and control equipment through the serial and parallel buses. The course is multidisciplinary, balancing the physics of transduction to the computer science of automation programming to the electrical engineering of bus protocols. Both high- and low-level programming are taught within the context of automating an experimental procedure. Digital-to-analog and analog-to-digital conversion is also covered.

Prerequisites: PHYSICS 385L.

PHYSICS 410 Thermal Physics Credits: 3

A study of the laws of thermodynamics and their applications, with an introduction to kinetic theory. Statistical methods are emphasized.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

PHYSICS 420 Optics Credits: 3

Geometrical optics, physical optics and introduction to selected topics in modern optics.

Prerequisites: PHYSICS 220 or PHYSICS 250 and MATH 210 or MATH 216 or MATH 266.

PHYSICS 450 Introduction To Solid State Physics Credits: 3

Crystal structure and binding, elementary lattice dynamics and energy band theory. Free electron models, theory of semiconductors and metals.

Prerequisites: PHYSICS 310 or PHYSICS 410.

PHYSICS 460 Electricity And Magnetism I Credits: 3

Static electric fields in free space and material media; Kirchoff's laws and direct current circuits; static magnetic fields.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

PHYSICS 461 Electricity And Magnetism II Credits: 3

Magnetostatics; alternating current circuits; Maxwell's equations and radiation; special relativity; topics in electromagnetism.

Prerequisites: PHYSICS 460.

PHYSICS 465 Cosmology Credits: 3

This course provides a foundation in both physical and observational cosmology. Students will acquire both a mathematical and conceptual understanding of the formation and dynamics of the Universe.

Prerequisites: PHYSICS 240 and PHYSICS 250, MATH 210 or MATH 220.

PHYSICS 472 Introduction To Quantum Mechanics Credits: 3

Introduction to the theory and applications of quantum mechanics with emphasis on the mathematical treatment of modern physics.

Prerequisites: PHYSICS 350.

PHYSICS 476LW Advanced Laboratory Credits: 3

This course offers a selection of important experiments in physics, performed with modern instrumentation. It is designed to give students a deeper understanding of physics and help them develop experimental abilities and improve their communication skills.

PHYSICS 490 Special Problems Credits: 1-3

The kind of problem and the amount of credit to be given by arrangement with the department.

PHYSICS 499 Undergraduate Research Credits: 1-3

Independent student research on a physics/astrophysics project under the supervision of a faculty member. Projects will engage students in aspects of the scientific process including data collection and analysis, research methods and strategies, scientific discussion and written/oral communication. Requires a minimum of 3-4 hours of research per week for each credit hour.

PHYSICS H150 Honors: Introduction To Astronomy Credits: 3

Honors: Introduction To Astronomy

PHYSICS H220 General Physics II Credits: 4

Fundamental principles of physics including sound, electricity, magnetism, optics, elementary modern physics, and applications of these principles to different interdisciplinary natural science.

Prerequisites: PHYSICS 210 (or equivalent).

PHYSICS H240 Physics For Science And Engineering I Credits: 5

Introduction to mechanics, wave motion and sound and heat and thermodynamics.

Co-requisites: MATH 210.

PHYSICS H250 Physics For Science And Engineering II Credits: 5

Introduction to electricity and magnetism, light and optics and modern physics.

Prerequisites: PHYSICS 240.

Co-requisites: MATH 220.

Piano (PIANO)

Courses

PIANO 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

PIANO 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

PIANO 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

PIANO 101 Freshman Piano I Credits: 2-4

PIANO 101J Freshman Piano I (Jazz) Credits: 2-4

PIANO 102 Freshman Piano II Credits: 2-4

PIANO 102J Freshman Piano II (Jazz) Credits: 2-4

PIANO 201 Sophomore Piano I Credits: 2-4

PIANO 201J Sophomore Piano I (Jazz) Credits: 2-4

PIANO 202 Sophomore Piano II Credits: 2-4

PIANO 202J Sophomore Piano II (Jazz) Credits: 2-4

PIANO 300 Studio Class Credits: 0

PIANO 301 Junior Piano I Credits: 2-4

PIANO 301J Junior Piano I (Jazz) Credits: 4

PIANO 302 Junior Piano II Credits: 2-4

PIANO 302J Junior Piano II (Jazz) Credits: 4

PIANO 401 Senior Piano I Credits: 2-4

PIANO 401J Senior Piano I (Jazz) Credits: 4

PIANO 402 Senior Piano II Credits: 2-4

PIANO 402J Senior Piano II (Jazz) Credits: 4

Political Science (POL-SCI)

Courses

POL-SCI 210 American Government Credits: 3

American government and politics, with special reference to the U.S. Constitution. This course meets the state requirement for study of the U.S. and Missouri Constitutions.

POL-SCI 210 - MOTR POSC 101: American Government



POL-SCI 220 Introduction To Comparative Politics Credits: 3

Introduces students to general concepts of political authority and systematically analyzes the causes and consequences of variation in political institutions, processes and policies across countries, illustrating concepts and themes with case studies of major European and Asian countries.

POL-SCI 220 - MOTR POSC 202: Introduction to Comparative Politic



POL-SCI 221 Introduction to Comparative Politics and Research Credits: 3

This course introduces students to general concepts of political authority, and systematically analyzes the causes and consequences of variation in political institutions, processes and policies across countries. This course also introduces students to research in comparative politics, with students developing an independent research project.

POL-SCI 230 International Relations Credits: 3

An analysis of relations among nations, with emphasis on structures of international power, causes of war, and approaches to peace.

POL-SCI 230 - MOTR POSC 201: International Relations



POL-SCI 301 Western Political Philosophy Credits: 3

An examination of the major theories of politics from Plato to today.

POL-SCI 303 Political Behavior Credits: 3

This course will survey research on conventional and unconventional forms of mass political behavior. Topics to be discussed include campaign participation, voting behavior, public opinion, the media, and participation in protests and revolutions. This course will also cover the methodological approaches to the study of political behavior.

POL-SCI 304 Politics of Developing Countries Credits: 3

The course examines the key arguments that have been advanced to account for differences across countries in rates and levels of economic and political development.

POL-SCI 308 Parties and Interest Groups Credits: 3

Introduction to parties and interest groups in the United States and their important role in the political process. Topics include the formation, organization, activities, and impact of political parties and interest groups in American politics.

POL-SCI 309 Public Opinion Credits: 3

Explores public opinion in the United States, surveying theories and empirical research on the measurement, formation, and distribution of public opinion.

POL-SCI 313 Politics In The American States Credits: 3

A study of the structures, functions, and politics of the institutions of American state governments and an assessment of their role in the federal system. This course is particularly interested in the extent to which political economy and political culture, broadly defined, influence public policy within the states.

POL-SCI 316 Terrorism And Political Violence Credits: 3

This course explores terrorism and armed struggle from theoretical and historical perspectives, and analyzes a number of violent movements with nationalist, ideological, and religious motivations.

POL-SCI 318 Political Psychology Credits: 3

The field of political psychology is an interdisciplinary field that draws on both psychology and political science to address topics in the political world. This course will focus on a variety of topics including inter-group conflict, stereotyping and prejudice, political socialization, attitude formation and change, political communication, decision heuristics and biases, public opinion, and the future of political psychology.

POL-SCI 319 Campaigns And Elections Credits: 3

This course will examine the role of campaigns in determining the outcome of both congressional and presidential elections and the way that electoral rules structure both campaign strategies and electoral outcomes. This course focuses on topics such as the role of the media, campaign advertising, campaign financing, public opinion, registration requirements, and the role of interest groups.

POL-SCI 336 American Foreign Policy Credits: 3

Understanding the contemporary debate over American foreign policy in terms of the premises and perspectives of several competing schools of thought.

POL-SCI 345 Women and Politics Credits: 3

This course investigates the role that women play in the political realm and how political institutions, laws, and norms shape women's experience in politics as citizens, activists, candidates and political leaders, plus the causes and consequences of women's participation and barriers to same.

POL-SCI 348 Constitutional Law: The Federal System Credits: 3

A study of the president, congress and state governments from the perspective of the Constitution, emphasizing powers and limitations on the exercise of authority.

POL-SCI 349 Constitutional Law: Civil Liberties Credits: 3

A study of civil liberties in American society, emphasizing factors and forces that restrict or enlarge their scope, as understood through constitutional interpretation.

POL-SCI 357 Western European Politics Credits: 3

This course explores democratic representation and political institutions in Western Europe.

POL-SCI 360 Labor, Politics and Society Credits: 3

This course explores many aspects of unions and the labor movement in society and the vital role organized labor plays as a pillar of democratic society. Unions impact the economy, growth, and the distribution of wealth, and the impact racial and gender equality, social security health and job safety, energy and the environment, and even foreign relations. As a social movement, labor has had a major impact on American history. This course covers these topics from a labor perspective. It examines current obstacles for union organizing, recent union campaigns, labor's political role, and the relationship between labor and the media. This course is part of the Certificate Program in Labor Studies and is offered on the University of Missouri Interactive Video Network at UMKC, UMSL, and UMC.

POL-SCI 362 Latin America and International Relations Credits: 3

This course we will survey the relations between Latin American states and between Latin America and the world. Taking the Latin American states as the key actors, we examine the history of US-Latin American relations, including current issues such as drug trafficking, immigration and terrorism. We will also study the region as a player on the international stage, examining Latin America's changing role in the world arena related to trade, development, and the environment. Finally we examine the emergence of new leadership in Latin America.

POL-SCI 365WI Congress and Parliaments Credits: 3

The objective of this course is to examine the election and behavior of legislators and legislatures in the United States compared to other countries' political systems, especially how these differences affect representation and policy making. Students will write and think critically about how structures of legislatures affect political outcomes.

POL-SCI 366 British Politics Credits: 3

This course focuses on the contemporary politics of the United Kingdom, particularly elections, institutions, and political parties.

POL-SCI 370 Labor Law Credits: 3

In this course, participants will examine the role of government in the regulation of labor-management relations in the United States. While the focus of the course will be on federal laws regulating private sector labor relations, parallel issues addressed in the Railway Labor Act and state public sector labor relations law will also be covered. Specific topics include the legal framework for the organization of workers, definition of prohibited or unfair labor practices of employers and unions, legal regulation of the collective bargaining process, regulation of the use of economic weapons in labor disputes, enforcement of collective bargaining agreements and the regulation of internal trade union activities.

POL-SCI 380 Political Science And Politics Credits: 1-6

Offered as a special course in the individual faculty member's area of research specialization. The course may be repeated for credit when the topic varies. The topic and instructor will be announced in advance.

POL-SCI 401 Legitimacy, Power, and the Survival of Political Systems Credits: 3

This course examines what allows political systems to survive, exert power, and maintain control over their population. It focuses on the concept of legitimacy – i.e. whether people believe a government has the right to make decisions that are binding on the mass public. The course covers how political systems and institutions develop legitimacy, how that legitimacy helps maintain control of the mass public, and why people sometimes choose to willingly follow commands issued by political authorities and other times choose to resist or rebel.

POL-SCI 404 Conflict Resolution Credits: 3

This course examines theories of peace and conflict resolution in the international system. Students will assess the challenges to conflict resolution, international cooperation, and peace as well as the means through which states and non-state actors overcome those challenges. Students will critically evaluate theories of conflict resolution and peace, while learning to apply those theories to current events.

POL-SCI 408 Judicial Politics Credits: 3

An examination of the judiciary in the American political process, emphasizing the role of judges, lawyers and the Supreme Court.

POL-SCI 425WI Seminar in Comparative Politics Credits: 3

A survey of the major research in comparative politics including state building, nationalism, democracy, nondemocratic regimes, economic development, and political violence. This course satisfies the College of Arts and Sciences Writing Intensive requirement.

Prerequisites: POL-SCI 220 or POL-SCI 221.

POL-SCI 452 Concepts in International Relations Credits: 3

This course exposes advanced undergraduate students to major conceptual and theoretical approaches to international relations. Recommended preparation: Prior course in international relations, politics, economics, or history.

POL-SCI 480 Government And Politics Credits: 1-6

This variable credit course will explore different contemporary issues and problems related to government and politics. Credit may apply to the major but will not satisfy any of the four subfields distribution requirements.

POL-SCI 491 Internship Credits: 1-6

With the written consent of the department chairman, students may participate in structured internship programs approved by the department for a maximum of six hours.

POL-SCI 493 Study Abroad Credits: 1-6

With prior approval from the department advisor, students may complete coursework at an approved foreign university and receive up to 6 hours of political science credit.

POL-SCI 497 Political Science Tutorial Credits: 2

Senior political science majors may apply to do independent study under a selected professor. Must have written consent of the professor prior to registration. Only one tutorial will count toward the major.

POL-SCI 498 Honors Tutorial Credits: 1-3

Senior political science majors with a grade point average of 3.4 or above in political science may apply to do independent study under a selected professor. Must have written consent of professor prior to registration. Only one tutorial will count toward the major.

Psychology (PSYCH)

Courses

PSYCH 151 College Study Skills and Resources Credits: 3

Course helps Propel students develop critical thinking, time management and academic skills, necessary for success in college and future employment. Students will learn about their individual learning styles and skills as well as the academic resources available to help them develop new skills. They will also explore and use various software and apps to help them stay organized and build self-sufficiency.

Prerequisites: Propel Student.

PSYCH 152 Developing a Person-Centered Life Plan Credits: 3

In this course students in the Propel Program will develop a person-centered plan that will serve as a foundation for their college experience and their future. The course approaches the topic with the belief that people with disabilities are people first and therefore the person-centered life engages the whole person and ensures person-centered supports.

Prerequisites: Propel Student.

PSYCH 153 Communication Skills for Networking, Employment, and Friendship Credits: 3

Through this course, students in the Propel program will gain communication skills, networking skills; learn how to build friendships; and gain important insight on personal safety.

Prerequisites: Propel Student.

PSYCH 154 Personal Finance and Disability Services Credits: 3

This course will introduce Propel students to disability services and systems that they will need in their adult lives. A second focus on personal finance will help students understand how disability benefits affect their personal finances.

Prerequisites: Propel Student.

PSYCH 155 Developing a Career Credits: 3

Career development is a journey of self-assessment and decision-making. Using an interactive discovery process, students identify possible careers that would match personality type, strengths, interests, skills, and/or values. With Career Center resources, Propel students identify strategies for leveraging the college experience to jumpstart a career.

Prerequisites: Propel Student.

PSYCH 156 Transition Skills Credits: 3

Propel students will learn how to identify, report and avoid abuse, neglect, and exploitation. They will also learn about their personal rights, including the right to confidentiality.

Prerequisites: Propel Student.

PSYCH 207 Orientation to the Psychology Major Credit: 1

This course provides an introduction to the field of Psychology, and to the Department of Psychology at UMKC. Students will explore major requirements, behaviors associated with academic success, campus resources, and faculty research and teaching interests.

Co-requisites: PSYCH 217.

PSYCH 210 General Psychology Credits: 3

A survey of the fundamental principles, theories, and methods of psychological science.

PSYCH 210 - MOTR PSYC 100: General Psychology

**PSYCH 212 Social Psychology Credits: 3**

Survey of behavior in the actual, imagined, and implied presence of others, including attitudes, the self, conformity, altruism, aggression, prejudice, and group processes.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 217 Academic and Career Opportunities in Psychology Credits: 2

This course explores post-BA career options for students majoring in Psychology. Students will examine psychology-related career opportunities with a bachelor's degree, and options for psychology-related careers after earning a graduate degree. Emphasis will be placed on students developing academic plans that will prepare them for professional success.

Prerequisites: PSYCH 207 (or coreq) and PSYCH 210 with C- or better. Must be Psychology BA major and have completed a minimum of 15 credit hours.

PSYCH 222 Child Psychology Credits: 3

Survey of child development from conception to adolescence, including major theories, developmental milestones and research related to the physical, cognitive, social and emotional growth of children.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 252 Psychology of Communicating Your Lived Experience Credits: 3

This course provides frameworks for people interested in communicating their lived experiences with disabilities. This course will not satisfy the College of Arts and Sciences' Social and Behavioral Science distribution or Humanities distribution degree requirements.

PSYCH 253 Disability Civil Rights Movements Credits: 3

A survey of disability civil rights movements. The course includes such topics as institutionalization and deinstitutionalization, education, protests, civil rights advocacy, and the Americans with Disabilities Act. Students will develop a timeline of disability history milestones and conduct oral history interviews with Kansas City area individuals with disabilities.

Prerequisites: Propel Student.

PSYCH 255 Accessible, Inclusive Internships Credits: 3

Through this experiential learning opportunity, students complete an internship with a company, non-profit, governmental or community-based organization. Through a combination of direct observation, reflection, and evaluation, students relate the experience to their academic study and to their career exploration.

Prerequisites: Propel Student.

PSYCH 257 Disability History and Culture Credits: 3

An examination of selected political, cultural, economic and social forces shaping disability from historical and present day perspectives. The course is taught with discussions and reflections with local disability leaders.

Prerequisites: Propel Student.

PSYCH 258 Leadership and Disabilities Credits: 3

Students learn about leadership theories and develop leadership skills as they apply theory to practical situations.

Prerequisites: Propel Student.

PSYCH 302 Research Design in Psychological Science Credits: 3

An overview of research designs and data collection methods used in psychological science. Emphasis is placed on comparing strengths and limitations of various research designs and data collection methods as well as identifying appropriate uses of those research designs and data collection methods.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 305 Psychology of Gender Credits: 3

An examination of theory and research on the biological, psychological, and social aspects of gender. Differences and similarities in men's and women's affect, cognition, and behavior will be explored. Perceptions of how gender affects cognitions and behaviors will also be discussed.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 316 Quantitative Methods In Psychology Credits: 3

Introduction to the use, calculation, reporting, and interpretation of descriptive and elementary inferential statistical techniques in psychological science.

Prerequisites: PSYCH 210 with a C- or better; and MATH 110 or MATH 116 or STAT 115 or MOTRMATH 110 or higher level math (with a grade of C- or higher); or ALEKS Score of 61 or higher.

PSYCH 320 Ethnic and Minority Perspectives in Psychology Credits: 3

The theory, methods and content of psychology relevant to the interests and needs of ethnic minorities, and the contributions of ethnic groups and other minorities to psychology.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 323 Theory and Methods of Personality Credits: 3

The development, organization, dynamics and determinants of personality. May not be taken for graduate credit.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 405 Motivation and Emotion Credits: 3

A review of the principles of both human and animal motivation from classical drive, behavioral, and cognitive perspectives. May not be taken for graduate credit.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 407 Cognitive Psychology Credits: 3

Historical foundations and current state of knowledge regarding human information processing and the mental processes that underlie human behavior.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 418 Brain and Behavior I Credits: 3

Introduction to the neural bases of human behavior, including movement, learning and memory, sensation and perception, emotion, cognition, psychological, and neurological disorders.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 433 Abnormal Psychology Credits: 3

Introduction to major psychological problems and disorders as well as consideration of some of the many interacting biopsychosocial influences viewed from an empirically-informed perspective. May not be taken for graduate credit.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 440 The Psychology Of Aging Credits: 3

Survey of concepts, theory, and methods in the psychology of aging, including biological and social influences on behavior.

Prerequisites: PSYCH 210 with a grade of C- or better.

PSYCH 450 Special Topics Credits: 1-3

Offered as the result of student demand, specialized faculty interests, or the availability of a visiting expert in a field related to psychology.

Prerequisites: PSYCH 210 with a grade of C- or better.

PSYCH 461 Field Practicum Credits: 1-6

Provides supervised human services experience in an external community agency or organization that addresses human or social problems.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 490 Directed Individual Research Credits: 1-6

Students work on an individual research project under the supervision of a departmental faculty member.

Prerequisites: PSYCH 210 with a grade of C- or better.

PSYCH 491 Psychology Research Externship Credits: 1-6

Provides supervised research experience in an external community agency or organization that examines basic or applied research questions.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 495WI Contemporary Issues in Psychology Credits: 3

In-depth analysis of a contemporary issue in psychology. Emphasis will be placed on reading and writing about empirical approaches to contemporary challenges in psychological science.

Prerequisites: PSYCH 210 and PSYCH 302 both with a C- or better.

PSYCH H210 General Psychology Credits: 3

A survey of the fundamental principles, theories, and methods of psychological science.

Prerequisites: Departmental consent.

Public Administration (PUB-ADM)

Courses

PUB-ADM 410 Research Methods In Public Administration Credits: 3

This introductory course focuses on quantitative empirical research design and statistical analyses in relation to public administration issues and concerns.

Prerequisites: Departmental consent.

PUB-ADM 420 Urban Environmental Policy Credits: 3

Our cities are a first line of action in our efforts to sustain our environment. Many have begun to examine and address the connection between city problems and environmental and climate change, and the disproportionate impacts that they often have on the disadvantaged, yet these initiatives address only the surface of the issue. It is essential for scientists, public administrators, environmentalists, and policy thinkers to pay greater attention to the environmental challenges of our cities. Students examine and assess the challenge of understanding, developing and implementing coherent environmental policy to address such challenges in urban communities.

PUB-ADM 421 Managing for Sustainability in an Urban Environment Credits: 3

Managing for sustainability requires an understanding of theories of organization, environmental management, and sustainability, including how to define and achieve sustainability. Students examine the complexities associated with issues of sustainability and the interrelationship between the global, the local and the personal. This includes consideration of how organizations function, the obstacles to sustainability confronted by sustainability managers, and specific management strategies and tools available to sustainability managers. It also involves the study of change models and their application by managers faced with the challenge of moving an organization from an old operational model to a more sustainable new organizational design.

PUB-ADM 422 Ethics for Nonprofit and Public Administrators Credits: 3

It is essential that organization and community leaders and managers understand the imperatives of ethical practice and ethical leader and manager behavior in nonprofit and governmental settings. Students are prepared to identify and assess the ethical implications of management and policy alternatives, to spot ethical issues before they become crises, and to competently and confidently develop and implement ethical decisions and actions in policy and practice. The ethical dimensions of democracy, political loyalty, pressure politics, interest group issues, pluralism, diversity and multi-cultural challenges, corruption and evil, honesty, the limits of ethical codes, whistle-blowing are included.

PUB-ADM 448 Leadership For Public Service Credits: 3

The two core purposes of this course are for students to learn about effective and ethical leadership, and for students to understand and develop their own capacity for leadership. The course is organized around three general themes: 1) leadership as relations with subordinates, including issues of work motivation; 2) leadership as lateral relations, including organizational politics and conflict management and resolution; and 3) leadership as influence in the organization's environment.

Prerequisites: Departmental consent.

PUB-ADM 455 Non-Profit Leadership Issues Credit: 1

Focusing on leadership issues in nonprofits, this course will explore issues in an intensive seminar format (fifteen class hours). Topics include building and renewing nonprofit boards, and the power of diversity in nonprofit organizations. Recommended for nonprofit management students.

PUB-ADM 455B Non-Profit Leadership Issues: Board-Staff Relations Credit: 1**PUB-ADM 487 Special Topics Credits: 3**

Special topics in public administration.

PUB-ADM 492 Creating and Measuring Social Impact Credits: 3

Students learn alternative approaches for conceptualizing and understanding the performance, effectiveness, and impact of nonprofit organizations and the programs they operate, and employ the basic frameworks and processes by which social impact can be measured and evaluated. This includes the use of logic models and theories of change to inform the design, operation, and evaluation of programs, with specific attention to data-based analytic approaches to impact assessment.

Prerequisites: Junior or senior standing.

PUB-ADM 493 Nonprofit Fundraising and Development Credits: 3

Examines the processes and functions by which nonprofit organizations plan, organize, implement and evaluate the work of fundraising and development to secure the financial resources needed to support and sustain their programs and activities. Students gain an understanding of and practical experience in employing the basic approaches and techniques used by nonprofits to raise and deploy philanthropic resources, including annual and multi-year giving programs, major gift solicitation, planned giving initiatives, capital campaigns, and prospect research and proposal writing.

Prerequisites: Junior or senior standing.

PUB-ADM 494 Leading and Managing Nonprofit Organizations Credits: 3

Examines the processes by which nonprofit charitable organizations and associations are governed, led, and managed, with particular attention to the work of the board, executives, and managers. Students learn a strategic framework by which to sustain and enhance the performance and impact of these nonprofit organizations. Among topics of special importance are the dimensions of governance, strategy and planning that are unique to nonprofit public service organizations, including stages of organization development, the planning and business model development associated with the financial management, human resource management, board leadership, ethical decision making, and organizational effectiveness and accountability.

Prerequisites: Junior or senior standing.

PUB-ADM 495 Voluntarism, Philanthropy & The Non-Profit Sector In The U.S. Credits: 3

Nonprofit organizations are omnipresent in our lives. They provide necessary social services to all sectors of society. They are important instruments of socialization. This course investigates this under-examined sector of our society. It looks to theoretical reasons for the sector, its empirical trends, and the significant challenges that it faces.

PUB-ADM 497 Special Topics In Public Administration Credits: 1-3

Study and research in areas of special interest under individual faculty direction.

Prerequisites: Departmental consent.

PUB-ADM 497B Special Topics In Public Administration Credits: 1-3

Public Health (PBHL)

Courses

PBHL 158 Public Health Principles Credits: 3

This course will introduce the student to the core functions of public health, the ten essential services, core public health competencies, and the difference between population-based and individual health services. Through case studies and practice-related exercises, students will examine current health trends and issues applying a public health perspective.

PBHL 245 Qualitative Research Methods for Public Health Credits: 3

This course explores the basics of qualitative research within public health and the community. The course will examine the definitions and methods of qualitative research. Research questions asked by qualitative researchers will be explored. The course will also introduce basics of qualitative research design, data collection, and qualitative analysis in public health. The relationship between qualitative and quantitative research, as well as mixed methods research, will be discussed.

Prerequisites: PBHL 158.

PBHL 335 Historical and Contemporary Issues in Public Health Credits: 3

This course examines the historical and present day roles and responsibilities of public health policy, practice, and professionals. Students will review and discuss successes and failures of public health practitioners and their impact on community health outcomes. Topics such as chronic, infectious and communicable diseases, urban crowding, environmental changes, immunizations, food production methods, increased global mobility, the persistence of poverty, mental health, and violence and injury prevention will be discussed.

Prerequisites: PBHL 158.

PBHL 358 Environmental Public Health Credits: 3

In this course, students will explore environmental factors affecting public health. Students will be introduced to public health and the food industry, vector control and disease, chemical and biological hazards found in the environment, and their impact on population health. During the course students will learn how environmental health policy decisions have the potential to impact the health of the population.

Prerequisites: PBHL 158.

PBHL 445 Core Competencies in Health Education Credits: 3

This course is designed to enforce the core areas of responsibility required to become a professional health educator. Course content will include the skills required to assess needs, assets and capacity for health education, plan, implement, and evaluate health programs, administer and manage health education programs, serve as a resource person, and communicate and advocate for health and health education. Students will begin preparing for the certification exam offered through the National Commission for Health Education.

Prerequisites: PBHL 158 (PBHL Major and Minor Students); HLSC 430 (PBHL Major Students).

PBHL 458 Communicable Disease Investigation Credits: 3

This course will introduce students to communicable disease control and investigation. Throughout the course, students will learn how to identify outbreaks, explore disease investigation tools, and identify disease causes. Students will investigate the spread of disease among humans, animals, and the environment. The history of disease containment, evolution of disease control, and specific interventions developed to protect the public will be explored.

Prerequisites: PBHL 158 and HLSC 410.

PBHL 490 Special Topics Credits: 1-9

A course of study in a special area of interest in public health sciences under individual faculty direction.

PBHL 496 Evidence-Based Public Health Capstone & Seminar Credits: 6

This course provides an experience-based capstone project for the senior student. Within the context of public health, the student will complete an evidence-based service learning, research, or problem-based project under the guidance of a site supervisor within the agency or organization, and a BSPH faculty member. The capstone will include a seminar session where students and faculty share learning, information, and understanding of their experience in a public health.

Prerequisites: Departmental consent.

Reading (EDRD)

Courses

EDRD 439 Language & Literacy across the Disciplines Credits: 3

Principles and application of disciplinary literacy in the middle and secondary classroom. Class will be primarily composed of discussion and lecture. As a part of the course, teacher candidates will inquire into and analyze disciplinary practices in 5-12 schools.

Prerequisites: Admission to teacher education program.

Real Estate (RL-EST)

Courses

RL-EST 321 Real Estate Principles Credits: 3

The student will be introduced to the very basics of real estate from the terminology, real estate's role in the economy, legal foundations, government controls, appraisal processes, valuation processes, brokering and closing transactions, time value of money, basic management issues and lease clauses, and basic standard form purchase contracts.

RL-EST 421 Real Estate Finance Fundamentals Credits: 3

This course will provide a fundamental understanding of basic financial concepts of real estate including compounding and discounting, construction of amortization tables and after-tax yield analysis for a simple real estate investment. It also touches on the basics of title insurance, ownership issues, fixed rate versus variable rate mortgages in residential real estate, understanding housing bubbles, and trends in valuation of residential real estate. In addition, the student will complete mathematical comparisons of leasing versus owning a home.

Prerequisites: ENT 301 or FIN 325.

RL-EST 425 Principles of Real Estate Property Management Credits: 3

Explores the complexities of managing apartments, condominiums, office buildings, industrial property, and shopping centers. This course covers rental markets, development of rental schedules, leasing techniques and negotiations, repairs and maintenance, tenant relations, merchandising, selection and training of personnel, accounting and owner relations.

RL-EST 496 Internship: Real Estate Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

Prerequisites: Departmental consent.

RL-EST 497 Special Topics: Real Estate Credits: 1-3

Study and research in areas of special interest under individual faculty direction.

Prerequisites: Departmental consent.

Religious Studies (RELIG-ST)

Courses

RELIG-ST 400 Special Topics In Religious Studies Credits: 1-3

Special topics in religious studies which are not offered regularly. The focus of the course varies by semester and instructor.

RELIG-ST 497RS Special Topics And Readings Credits: 1-6

Intensive reading and/or research in an area selected by the student in consultation with the instructor. May be repeated for credit when the topic varies.

Saxophone (SAXOPH)

Courses

SAXOPH 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

SAXOPH 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

SAXOPH 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

SAXOPH 101 Freshman Saxophone I Credits: 2-4

SAXOPH 101J Freshman Saxophone I (Jazz) Credits: 2-4

SAXOPH 102 Freshman Saxophone II Credits: 2-4

SAXOPH 102J Freshman Saxophone II (Jazz) Credits: 2-4

SAXOPH 201 Sophomore Saxophone I Credits: 2-4

SAXOPH 201J Sophomore Saxophone I (Jazz) Credits: 2-4

SAXOPH 202 Sophomore Saxophone II Credits: 2-4

SAXOPH 202J Sophomore Saxophone II (Jazz) Credits: 2-4

SAXOPH 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

SAXOPH 301 Junior Saxophone I Credits: 2-4

SAXOPH 301J Junior Saxophone I (Jazz) Credits: 4

SAXOPH 302 Junior Saxophone II Credits: 2-4

SAXOPH 302J Junior Saxophone II (Jazz) Credits: 4

SAXOPH 401 Senior Saxophone I Credits: 2-4

SAXOPH 401J Senior Saxophone I (Jazz) Credits: 4

SAXOPH 402 Senior Saxophone II Credits: 2-4

SAXOPH 402J Senior Saxophone II (Jazz) Credits: 4

Sociology (SOCIOL)

Courses

SOCIOL 101 Sociology: An Introduction Credits: 3

An introduction to the study of society and the basic concepts of sociology.

SOCIOL 101 - MOTR SOCI 101: General Sociology



SOCIOL 201 Introduction To Social Psychology Credits: 3

Exploration of the relationships between human behavior and social context. The course focuses on how realities are socially constructed and sustained, the role of symbol systems, definitions of the situation, the self as a product of interaction, and the relationship between language, thought and culture.

SOCIOL 203 Social Problems Credits: 3

An examination of major social problems of modern Western society, including issues of racial conflict, war, civil rights, youth movements, the mass media, urban poverty, and crime. The topics will vary from year to year depending upon the instructor.

SOCIOL 211 Social And Psychological Development Through The Life Cycle Credits: 3

A survey of significant psychosocial issues, events and crises throughout the human life span. The life cycle of the family is examined as the primary context within which individual development occurs. Although the primary emphasis will be on normal adjustment and development, attention will also be given to the occurrence of special problems and deviations at each life stage.

SOCIOL 300 Special Topics in Sociology Credits: 1-3

Each time this course is offered, a different area of sociology, to be announced, will be given. On demand.

SOCIOL 300A Special Topics In Sociology Credits: 1-3

Each time this course is offered, a different area of sociology, to be announced, will be given.

SOCIOL 302 Social Stratification Credits: 3

The distribution of power, privileges and prestige are examined in a historical and comparative perspective. The process whereby distribution systems develop, become institutionalized, and become transformed are analyzed.

SOCIOL 306 Culture, Emotion, and Identity Credits: 3

This course introduces students to some of the key theoretical perspectives and debates within the field of psychological anthropology. By drawing upon cross-cultural studies of emotion, personhood, sexuality, illness, and consciousness it seeks to understand some of the ways that culture and society influence human psychology and experience.

SOCIOL 310R Families And The Life Course Credits: 3

This course is an upper level introduction examining the sociological, historical, and social psychological research on the family, focusing primarily on the United States. The course examines families of varied ethnicity, as well as family compositions at different stages of the life course. Emphasis is placed on the interdependence of family members, as well as how society and policy influence the family.

SOCIOL 313R Sociology Of Gender Credits: 3

This course is an introduction to the sociological study of gender in contemporary U.S. society. Special attention is directed to how gender is experienced inter-sectionally with other social categories, including social class, race, sexuality, and age.

SOCIOL 316 Sociology Of Death And Dying Credits: 3

Examination of attitudes, behaviors and institutions related to death and dying in contemporary American society. Topics include the status of death in American society, effects of the setting on dying, interaction with the dying, funeral practices, bereavement customs, surviving spouse, and suicide.

SOCIOL 317 Policies Of Drug Use And Control Credits: 3

Utilizing both historical and contemporary information, this course provided an assessment of the "drug problem" in the U.S. and policies of control developed in response to the problem. Drug use criminalization, legalization, medical treatment and prevention strategies and related issues are considered in regard to scientific knowledge related to the patterns, causes and impact of substance abuse.

SOCIOL 320 Social Deviance Credits: 3

The dominant sociological perspectives on deviance will be discussed with special attention given to the processes that define behavior and persons as deviant and the impact of such definitions on social relationships and identity.

SOCIOL 322 Race And Ethnic Relations Credits: 3

The nature, origin and dynamics of ethnic and race relations in the U. S. and other societies. Specific attention will be given to the historical and contemporary contexts of prejudice discrimination and confrontation.

SOCIOL 326 Consumer Society Credits: 3

This course explores the emergence of Consumer Society as both a sociohistorical development and as an object of social scientific inquiry. Students will explore how the study of Consumer Society has been animated by different scholarly questions, debates, and analytic approaches.

SOCIOL 328 Body and Society Credits: 3

Body and Society is an interdisciplinary and comparative approach to the study of the body as the subject and object of social processes. Interdisciplinary approaches to topics such as meaning, ritual, performance, and practice will provide a framework for classical as well as contemporary explorations of bodily representation and experiences across a variety of cultural contexts.

Prerequisites: ANTHRO 103.

SOCIOL 332 Sociology Of Political Life Credits: 3

The concept of power, community power structure and decision making. The social basis of liberal democracy; consensus and legitimacy; political stability and instability. Power and politics in a mass society; elites and masses; democracy and oligarchy; alienation; bureaucracy; pluralism and totalitarianism. Ideology and social movements.

SOCIOL 337 Community Development In Urban America Credits: 3

The focus in this course is on experiential learning in which the student participates in several urban community development projects that allow for learning about collaboratives, networking, problem-solving, and requisite skills to successfully manage a project. Principles of community development are presented to give the student background for understanding the projects visited.

SOCIOL 348 Latinx Immigrants, Migrants, and Refugees in the U.S Credits: 3

This course addresses the culture of societies of U.S. citizens, immigrants, and refugees of Latin American heritage living in the U.S. The course emphasizes recent anthropological, historical, cultural, and sociological studies.

SOCIOL 357 Social Movements Credits: 3

This course focuses on the link between social movements and political change in the modern world. Social movements arise outside official channels and against established political orders. Students will develop an understanding of the relation between social mobilization and institutional change in various countries, especially in the United States.

SOCIOL 358 Culture and Society Credits: 3

This course examines the "culture concept" at the heart of the contending theories of society, which is used to describe a society or way of life, a whole social order, or particular aesthetic styles and objects. The course links these various topics together in a concluding section on culture in the age of the Internet and globalization.

SOCIOL 359 Media and Society Credits: 3

This course examines the rise, development and change of mass media in American society from broadsheets and news flyers through contemporary media formats.

SOCIOL 361 Social Theory Credits: 3

A survey of the major orientations in social theory, their historical development, and contemporary issues and controversies in social theory. Recommended preparation: A course in social science.

SOCIOL 362 Methods Of Sociological Research Credits: 3

Experimental and observational schemes; survey analysis; interview and questionnaire designs; scaling techniques; sampling. Recommended preparation: A course in Social Science.

SOCIOL 363 Introduction to Statistics in Sociology/Criminal Justice Credits: 3

A first course in the statistical analysis of quantitative data. Course emphasizes descriptive statistics, probability theory, parameter estimation, bivariate hypothesis testing, and computer applications.

Prerequisites: MATH 110 or higher, or STAT 115 or MOTRMATH 110.

SOCIOL 380 Technology and Society Credits: 3

This course will help students explore the ways technology shapes and is shaped by human interaction. Students will read interdisciplinary literature that builds theoretical and interpretive frameworks around classical and contemporary case studies. A fundamental question to be addressed throughout the course: how does the comparative study of technology help us understand what it means to be human?

SOCIOL 390R Directed Field Experience I Credits: 1-6

The student will work within one or more social agencies or organizations in the city under the joint supervision of a professional within the organization and a member of the Sociology Department. In-class discussion will cover the major problems of social organization.

SOCIOL 391 Directed Field Experience II Credits: 1-6

A continuation of SOCIOL 390R.

SOCIOL 397 Independent Readings In Sociology Credits: 1-3

Intensive readings in an area selected by the student with prior consultation with instructor. Recommended preparation: Twelve hours of sociology coursework.

SOCIOL 398 Independent Research In Sociology Credits: 1-6

Intensive research in an area selected by the student with prior consultation with instructor.

Prerequisites: Twelve hours of sociology.

SOCIOL 404WI The Sociology Capstone: Senior Seminar Credits: 3

This seminar explores the interrelationships between sociology theory, research methods, and statistics. It may focus on major contemporary issues building on and integrating knowledge obtained in previous courses. Recommended preparation: SOCIOL 362.

Prerequisites: SOCIOL 363.

SOCIOL 410R Aging In Contemporary Society Credits: 3

Attitudes and stereotypes, the status of the aged in American society; the social psychology of the aging process; the response of societal institutions such as the family and political system to the aging of the population as a whole. Applications and potentials of research are considered.

SOCIOL 411 Sociology Of Human Sexuality Credits: 3

A cross cultural examination of the most fundamental dichotomy in human society: male and female. Considering sex both as a biological and social category, this course compares diversity and similarity in the interrelationships of male and female in patterns of behavior and social organization found in human societies across time and space.

SOCIOL 418 Feminist Theories Credits: 3

This class introduces the major feminist theories and their primary authors over the last 200 years. The class takes both a historical view (beginning with two millennia of male-centered theories about women) and a conceptual approach (theories are grouped by common ground) and familiarizes the student with both the historical processes that necessitate feminist theories as well as with the breadth and depth of the historically and currently available scholarship.

Prerequisites: WGS 201.

SOCIOL 431 Social Organization Of The City Credits: 3

An examination of the social structure of the American city with special reference to the historical development of American cities. Attention will be focused on the role of social institutions as they have changed in relation to urban problems.

SOCIOL 433 Immigration and the City Credits: 3

This course examines key issues and controversies in immigration research. Special attention will be paid to the social, economic, and historical developments of urban immigrant communities.

SOCIOL 434 Spatial Thinking in Social Science Credits: 3

This course will review ways in which social scientists have incorporated the concepts of space, place, and distance into their theories and research. Readings will be drawn from interdisciplinary work in the areas of urban sociology, criminology, health and demography that deal with spatial organization of communities and cities, spatial disparity of health and crimes, and mobility.

Prerequisites: junior, senior, or graduate standing.

SOCIOL 440R Sociology Of Medicine Credits: 3

Relationship of basic concepts in sociology to health and medical care. Cultural and class variations in health status. Social and cultural aspects of health. Recommended preparation: A course in social science.

SOCIOL 441 Globalization and Development Credits: 3

Focuses on issues of economic development, social stratification, political institutions, and political mobilization in societies where colonialism provided the context for their long-term disadvantages in the international economic order. Specific attention is paid to the intersection of the international components that define the options and limits for societal development (e.g., market shifts, international institutions and contracts, foreign policies, and migration) and the distinct social, political and cultural implications of these factors for developing societies.

Spanish (SPANISH)

Courses

SPANISH 110 Elementary Spanish I Credits: 3

The goals of this course are an ability to speak and to understand simple (spoken) Spanish as well as to read and write simple prose.

SPANISH 110 - MOTR LANG 103: Spanish I

**SPANISH 120 Elementary Spanish II Credits: 3**

Continuation of SPANISH 110.

SPANISH 120 - MOTR LANG 104: Spanish II

**SPANISH 211 Second Year Spanish I Credits: 3**

Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.

SPANISH 216 Spanish For The Health Sciences Credits: 3

This course will enable the student to converse with Hispanic patients and/or hospital personnel in situations such as admissions, patient care, lab work as ordered by a physician or dentist, emergency room procedures, etc. In addition, medical readings in Spanish will give professional and paraprofessional students an increased vocabulary related to the many fields within the health sciences. This course will satisfy one semester of the AS language requirement.

SPANISH 221 Second Year Spanish II Credits: 3

Continuation of SPANISH 211.

SPANISH 280 Special Intermediate Spanish Topics I Credits: 1-4

Instruction of Spanish on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses.

SPANISH 290 Special Intermediate Spanish Topics II Credits: 1-4

Continuation of SPANISH 280.

Prerequisite: SPANISH 221.

SPANISH 301 Introduction to Literary Studies Credits: 3

Emphasis will be placed on the study of literary theory and the philosophical ideas behind the literary movements, their relations and differences. A representative work or works of each genre will be thoroughly studied and analyzed. Critical reports will be written about different features of the literary works under consideration. Strongly recommended for all majors, to be taken before 400-level literature courses.

Prerequisites: SPANISH 221.

SPANISH 315 Intermediate Conversation And Composition I Credits: 3

Grammar review, practice in speaking and writing Spanish; emphasis on idiomatic usage and practical vocabulary. Required for major.

Prerequisites: SPANISH 221.

SPANISH 316 Spanish for Health Sciences II Credits: 3

The purpose of this class is to progressively develop the ability to communicate well with native speakers in a medical setting. Communicative and cultural goals are achieved through listening, speaking, reading and writing in the Spanish language.

Prerequisites: SPANISH 216 or SPANISH 221.

SPANISH 325 Intermediate Conversation And Composition II Credits: 3

Continuation of SPANISH 315. Required for major.

Prerequisites: SPANISH 221.

SPANISH 351 Latin American Civilization Credits: 3

Historical development of Latin America. Readings from representative literary works.

Prerequisites: SPANISH 221.

SPANISH 365 The Search for Mexican Identity Credits: 3

The goal of the course is to familiarize the student with the poignant search for self awareness and definition witnessed in the letters and fine arts of Mexico in the 20th-century. Readings will include works by Vasconcelos, Reyes, Ramos, Paz, Rulfo and Fuentes, and will be complemented by slide presentations of pertinent works by major artists.

Prerequisites: SPANISH 221.

SPANISH 374 Spanish Literature and Culture II Credits: 3

A study of the development of Spanish peninsular literature and cultures from 1700 to present.

Prerequisites: SPANISH 221.

SPANISH 380 Special Topics Credits: 1-3

Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

SPANISH 384 Spanish American Literature and Cultures II Credits: 3

The 19th and 20th-centuries. Selected readings from prose and poetry of Spanish-American writers.

Prerequisites: SPANISH 221.

SPANISH 403 History of the Spanish Language Credits: 3

An introduction to the history of the Spanish language from Latin to the present, with an overview of dialects in the Peninsula and in the Americas.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 414 Early 20th Century Peninsular Literature Credits: 3

Selected topics in early 20th century Spanish literature and culture. May be repeated for credit when the topic changes.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 415 Advanced Conversation And Composition I Credits: 3

Continued practice in speaking and writing Spanish, with attention to the elements of style. Continued in SPANISH 425. First semester required of all majors and second semester recommended. Both semesters required of prospective high school teachers. Either or both semesters may be repeated with the consent of the instructor and the Spanish section head. No more than six hours credit may be applied towards a degree.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 425 Advanced Conversation And Composition II Credits: 3

Continuation of SPANISH 415. See SPANISH 415. Required for teacher certification in Spanish.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 426 Golden Age Spanish Literature Credits: 3

Selected readings in Spanish Golden Age literature and culture. May be repeated for credit when the topic changes.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 427 Pre-Columbian And Spanish Colonial Literature Credits: 3

A study of the pre-Columbian works in drama, narrative, and poetry (Popol Vuh, Apu-Ollantay, Incan and Aztec poetry) leading into a survey of Spanish-American colonial literature.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 428 Contemporary Spanish Poetry Credits: 3

A comprehensive and intensive study of 20th-century Spanish poetry. Poets and poetry will be studied in the light of literary movements, foreign influences, political tendencies and philosophical ideas.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 436 Spain's Transition to Democracy: Literature and Film Credits: 3

This course reviews the cultural production between the death of Francisco Franco in 1975 and the entrance in the European Union in film, literature and music, within its historical and political context.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 453 Spanish-American Short Story Credits: 3

A study of Spanish-American short stories from Romanticism to the present.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 480 Special Topics Credits: 1-3

Each time this course is offered a particular genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 490 Special Readings Credits: 1-3

Intensive readings in field or literary figure to be selected by the student in consultation with the instructor. Available, by permission only, to advanced students of Spanish; available only when student cannot take regularly scheduled courses.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 499 Senior Seminar (Capstone) Credits: 3

Required for major. Covers seminal works of Peninsular and Latin American literature in their historical and cultural context. Course content varies, but will include such elements as geography, politics, folklore, history of the language, architecture, art and music. To be taken during final Fall Semester of residence.

Prerequisites: SPANISH 315 or SPANISH 325.

Special Education (EDUC-SP)

Courses

EDUC-SP 407 Educating Exceptional Children And Youth Credits: 3

An introductory course in special education concerning issues, theories, and practices for educating the exceptional student in both general and special classrooms or settings; identification and educational intervention procedures for children and adolescents with exceptionalities, including behavior disordered; learning disabled, mentally retarded, speech impaired; visually impaired, physically impaired, hearing impaired, multihandicapped and gifted.

Statistics (STAT)

Courses

STAT 115 Statistical Reasoning Credits: 3

This course is intended for majors in less quantitative fields. The focus of the course will be on developing critical thinking abilities and decision making using data in everyday life. Emphasis will be on statistical reasoning underlying the methods of sampling, statistical inference in terms of evaluating the accuracy of an estimate in the context of uncertainty, drawing conclusions from data and studying relationships in data. Students will be trained to perform hands-on-analysis of real data sets using a computer package. No previous computing experience is required.

STAT 115 - MOTR MATH 110: Statistical Reasoning

**STAT 235 Elementary Statistics Credits: 3**

An introduction to descriptive and inferential statistics. Organization and presentation of data, averages and variations, elementary probability, random variables, special discrete distributions, normal distributions, sampling distributions, point estimation, confidence intervals, and hypothesis testing.

Prerequisites: MATH 110 with a grade of C- or higher; or MATH 120 or higher with a grade of C- or higher; or ALEKS Score of 61 or higher.

STAT 436 Introduction To Mathematical Statistics I Credits: 3

This course is the first of a calculus-based statistics sequence. It begins with basic concepts of probability, discrete and continuous distributions, expectation and variance, and ends with the central limit theorem. Recommended preparation: MATH 301 or COMP-SCI 191.

Prerequisites: MATH 220.

STAT 441 Introduction To Mathematical Statistics II Credits: 3

Sampling Distributions; point estimation; internal estimation; hypothesis testing; analysis of variance; nonparametric methods; statistical software applications; topics in Applied Statistics.

Prerequisites: STAT 436.

STAT 480 Statistical Models in Actuarial Science Credits: 3

This course covers the statistical foundation of actuarial models and their applications. Topics include survival and severity models, Kaplan-Meier and Nelson-Aalen estimators, aggregate and credibility models for insurance losses, discrete time Markov chains, ruin theory, and simulation.

Prerequisites: STAT 441.

STAT 482 Statistical Models for Life Contingencies Credits: 3

The basic statistical theory of actuarial models for life uncertainties such as time of death. Multiple life and multiple decrement models, statistical models for life and contingent insurance; last survivor, disability, withdrawal, retirement and reserving models for life insurance.

Prerequisites: STAT 441.

STAT 496 Internship/Practical Training in Mathematics or Statistics Credits: 1-3

This course provides an internship or other practical training arrangement using mathematics or statistics in an industrial, academic or other professional setting. Department approval of internship experience or practical experience required. Repeatable with up to a combined 3 credits toward the major. Recommended preparation: MATH 250.

String Bass (STR-BASS)

Courses

STR-BASS 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

STR-BASS 100B Applied Study Of A Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

STR-BASS 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

STR-BASS 101 Freshman String Bass I Credits: 2-4**STR-BASS 101J Freshman St Bass I (Jazz) Credits: 2-4****STR-BASS 102 Freshman String Bass II Credits: 2-4****STR-BASS 102J Freshman St Bass II (Jazz) Credits: 2-4****STR-BASS 201 Sophomore String Bass I Credits: 2-4****STR-BASS 201J Sophomore St Bass I (Jazz) Credits: 2-4****STR-BASS 202 Sophomore String Bass II Credits: 2-4****STR-BASS 202J Sophomore St Bass II (Jazz) Credits: 2-4****STR-BASS 300 Studio Class Credits: 0**

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

STR-BASS 301 Junior String Bass I Credits: 2-4

STR-BASS 301J Junior St Bass I (Jazz) Credits: 4

STR-BASS 302 Junior String Bass II Credits: 2-4

STR-BASS 302J Junior St Bass II (Jazz) Credits: 4

STR-BASS 401 Senior String Bass I Credits: 2-4

STR-BASS 401J Senior St Bass I (Jazz) Credits: 4

STR-BASS 402 Senior String Bass II Credits: 2-4

STR-BASS 402J Senior St Bass II (Jazz) Credits: 4

Teacher Education (TCH-ED)

Courses

TCH-ED 130 Number Systems and Related Topics Credits: 3

This course is designed for elementary preservice teachers to meet certification requirements for a course in number theory. The course provides a constructive development of the real number system, introduces concepts from elementary number theory and applies this knowledge of quantitative systems to solve various types of problems. Recommended preparation: High School Algebra and Geometry.

TCH-ED 140 Geometry for Elementary Teachers Credits: 3

This course is designed for elementary preservice teachers to meet certification requirements for a course in geometry. It provides a constructive development of axiomatic geometry and introduces concepts from transformation geometry. Elements of spatial sense and measurement are included and an emphasis is placed on applying this knowledge to solve various types of problems. Recommended preparation: High School Algebra and Geometry.

TCH-ED 150 Foundations of Urban Education Credits: 3

This course is designed to introduce students to the social and philosophical issues in urban education and will include an emphasis on culture, race, class, and ethnicity as they relate to schooling in urban America.

TCH-ED 151 Introduction to Urban Education Field Experience Credits: 2

Introduction to Urban Education Field Experience. The field experience is intended to give students an opportunity to see the application of learning theory in authentic classroom situations. Students are encouraged to become involved in the learning of the classroom and provide a helping hand to the teacher.

TCH-ED 152 Urban Education Seminar 1: Social Justice Credits: 2

Introductory seminar to the field of urban education. This seminar aligns with the other fall semester experiences and allows students an opportunity to dialogue about the possible application of their experience work as it applies to teaching in an urban school. Students will be introduced to current topics in education and society; identify, develop and enhance study strategies; observe, listen and think critically, sharpen writing skills; and work effectively in groups.

TCH-ED 153 Math Methods for Urban Education teachers: Number Systems Credits: 2

Designed for elementary school teacher. A constructive development of the real number system beginning with the system of whole number, concepts for the elementary number theory; applications of quantitative systems to problems in discrete mathematics.

TCH-ED 160 Introduction to Teaching Credits: 3

Introduction to the historical, social and philosophical dimensions of teaching. Prospective teacher candidates gain greater insight into the commitment, purpose, and responsibility associated with professional teaching practice. Particular focus is place on productive teaching practices and the habits of mind of expert teachers.

TCH-ED 201 Children's Literature Credits: 3

This course emphasizes the critical analysis and selection of a variety of genres of multicultural children's literature in order to create "windows and mirrors" (Bishop, 1990) through literature for diverse educational settings. It will emphasize the skills and dispositions needed to share literature with culturally and linguistically diverse groups of children and explore prevalent myths and stereotypes in society that are often reflected in children's and young adult literature.

TCH-ED 202 Literature for Adolescents Credits: 3

Focus upon literature for adolescents and ethnic literature, specifically, and upon the special reading interests of the adolescent in relation to the methods and materials of reading in grades 6-12, generally. Attention to literature selection standards, censorship, individualized instruction, and literary theory.

TCH-ED 203 Health, Safety, and Nutrition in Early Childhood Education Credits: 3

This course is an introduction to wellness in Early Childhood Education grounded in cultural funds of knowledge and community histories of learners and their families. Students examine and act upon systemic inequities related to health, safety, and nutrition; investigate scheduling, procedural, and policy elements related to health, safety, and physical activity/rest; design space elements that nurture physical development, social interactions, and emotional well-being; and create learning experiences that promote health and physical development.

TCH-ED 251 Child and Adolescent Development for Urban Educators Credits: 3

This course is designed to provide students with the information they will use as educators to design developmentally appropriate practices for the children they will work with in the classroom setting, thus discussions about how the information is translated into the classroom will be applied.

TCH-ED 252 Field Exp: Child/Adolescent Development Credit: 1

This field experience is designed in conjunction with TCH-ED 251 to provide students with real-world interactions to study the development of children from birth to adolescence. Field experience settings have been arranged to provide students with an opportunity to observe and interact with children as they study the four stages of development.

TCH-ED 253 Urban Education Seminar II: Social Justice Credit: 1

This seminar aligns with the other semester experiences and allows students an opportunity to dialogue about the possible application of their experience work as it applies to teaching in an urban school. Students will be introduced to current topics in urban education and society; identify, develop and enhance study strategies; observe, listen and think critically, sharpen writing skills; and work effectively in groups as they explore social justice and the relationship between society and schools.

TCH-ED 254 Math Methods for Urban Teachers: Geometry Credits: 2

Designed for elementary school teachers. A constructive development of geometry and concepts from elementary teacher education; applications will be made to connect with elementary curriculum.

TCH-ED 255 Intergrated Music and Visual Arts Credits: 3

Basic principles of creativity and their application in the multicultural teaching of art, creative dance and musical and rhythmic interpretation will be explored. An emphasis is placed on interrelationship of these disciplines and their integration into the curriculum. Special emphasis will be placed on helping students to develop a wider and more respectful understanding of our nation's cultural diversity as reflected in all art forms. Students will be exposed to the literature, poetry, theater, visual art and music contributed by African-Americans, Hispanic Americans and Native Americans among other.

TCH-ED 256 Field Experience: Music and Visual Arts Credit: 1

The field experience is intended to give students an opportunity to see the application of learning theory and integration of the arts in authentic classroom situations.

TCH-ED 258 Math Methods for Urban Teachers: Probability and Statistics Credits: 2

Designed for Elementary and Middle School Teachers. This course is designed to provide undergraduate students in elementary and middle school mathematics with the foundational knowledge of the teaching of probability and statistics and how to use the elements of statistics to interpret and solve problems in elementary and middle school classrooms.

TCH-ED 259 Introduction to Urban Teaching Credits: 3

This course is designed to introduce students to the sociopolitical context of urban education, schooling, teaching and learning. It will provide an overview of education in a multicultural democracy, mostly African Americans, Latino Americans, and other racial/ ethnic groups and immigrants. Specifically, it will introduce students to the notion of teaching for social justice, the social justice teacher and social empowerment. Opportunities will be provided for students to review research, debunk stereotypes, negative views, and to recognize urban learners as capable, motivated, and resilient. The ultimate goal of this course is to facilitate experiences that will enable students to develop the knowledge, skills and dispositions needed for learning in urban schools.

TCH-ED 265 Field Experience: Urban Teaching Credit: 1

As a co-requisite to Introduction to Urban Teaching, students will spend 60 hours in urban schools working with diverse student populations, specifically; students will work with African Americans, Latino Americans, and English Language Learners grades K-8. Reflection and discussion of clinical experiences will occur during the urban education seminar and Introduction to urban education classes. Students will keep a reflective journal of their experiences working with diverse learners.

TCH-ED 266 Urban Education IV: Classroom Management Credit: 1

This course will present the foundations for developing expertise in classroom management. Theory and activities will introduce students to strategies and procedures to manage student's behavior as well as keep them on task throughout the school day. The intent of this course is to provide the prospective teacher with the skills and the expertise necessary to manage the classroom behavior of students effectively while creating a caring and supportive atmosphere.

TCH-ED 300 Summer Community Experience Credits: 3

This course provides an in-depth examination into both the evolution of ghetto communities and dynamics of community building in inner cities, with special emphasis on Kansas City, Missouri. In addition, theories of educational psychology as well as child and adolescent behavior will be infused to assist participants in developing age appropriate mentoring/teaching strategies and activities.

TCH-ED 310 Classroom Climate and Organization Credits: 3

This course is focused on understanding classroom practices that support student cognitive and social development, that supports learning for students from diverse cultural and experiential backgrounds; and developing a well-organized, attractive and functional physical space for learning.

TCH-ED 311 Curriculum and Learning Theory Credits: 4

Focus on classroom organization, building relationships with students, and applying theoretical knowledge of child development to the analysis of contexts impacting students' educational experiences. Classroom processes and teacher interactions that undergird effective instruction and proactive classroom management.

TCH-ED 312 Legal and Ethical Aspects of Teaching Credits: 3

This course provides an introduction to landmark court cases, federal and state laws, and regulations that frame students' and teachers' rights and responsibilities and that provide guidance for ethical professional practices.

TCH-ED 314 Cultural Diversity and Teaching English Language Learners Credits: 3

Foundational knowledge on teaching diverse populations and practical instructional approaches for meeting the needs of linguistically and culturally diverse learners. Emphasis on studying and applying instructional strategies that are appropriate for addressing the unique needs of children whose primary language may not be English.

TCH-ED 315 Assessment and Data Literacy Credits: 3

Data collection and assessment strategies—including formative, summative, formal, and informal—to be used in developing student learning profiles, planning learning experiences, and monitoring student progress toward academic goals. Topics include the impact of assessment on equitable education for diverse learners, critical observation and questioning, basic qualitative and quantitative data analysis, working with data teams, collaboration/communication with families and other educational stakeholders, setting and monitoring learning goals, and the ethics of data collection and sharing.

TCH-ED 316 Reading and Language Arts I Credits: 4

This course emphasizes learning theories and methods for teaching and assessing literacy. It will primarily focus on the components of a culturally responsive literacy curriculum for elementary students in diverse, urban contexts. This course is field-based and there will be multiple opportunities for observing, teaching, and assessing elementary school children.

Co-requisites: TCH-ED 397.

TCH-ED 317 Reading and Language Arts II Credits: 4

This course emphasizes methods for elementary literacy instruction and assessment. The course will primarily focus on the components of a culturally responsive writing curriculum for elementary students in diverse, urban contexts. This course includes a supervised field experience where teacher candidates implement literacy assessment and instruction with students.

Prerequisites: TCH-ED 316.

TCH-ED 318 Literacy Assessment and Instruction Credits: 3

Focus on using formal and informal assessments to design appropriate literacy instruction for diverse learners in urban elementary classrooms.

TCH-ED 330 Analyzing Learning Environments in Urban Contexts Credits: 3

This course serves as the major vehicle for articulating a programmatic construction of classroom management as establishing productive learning environments, facilitating social interaction, and planning relevant and engaging learning experiences based upon deep knowledge of individual students' contexts and cultures.

Co-requisites: TCH-ED 422.

TCH-ED 333 Learning Environments: Birth to Grade 3 Credits: 3

Course provides an analysis of learning environments (community, school, and classroom) as socio-emotional and physical spaces that nurture learning and development of early childhood learners in urban settings. Teacher candidates use the analysis to frame the design of learning environments as context and content of meaning making.

TCH-ED 350 Multi-Media Production For The Classroom Credit: 1

An introductory course in the media production techniques involving knowledge and practical use of computers, scanners, digital video, digital audio and graphics to create professional multimedia for use in the classroom. The class is designed for prospective and current classroom teachers.

TCH-ED 351 Literature for a Lifetime Credits: 6

This course will provide students with an encompassing survey of fiction and non-fiction literature appropriate for all age ranges from the young child to adult. Lectures and discussions will focus on the value of literature as a tool for thinking, as a way of illuminating modern life, as a means of understanding history and human behavior, and as a source of aesthetic pleasure and lifelong enjoyment. Students will learn how to select and critique both the media used in illustrated books and the literacy techniques and forms of the many genres of literature. In this course special emphasis will be placed on literature that reflects life in many cultures and periods of history, in particular from those racial and ethnic sources that make modern America such a pluralistic and diverse society. There will also be an emphasis on the universal themes that run through literature of the societies.

TCH-ED 365 Seminar in Teacher Identity, Power and Privilege Credit: 1

Focus on developing teacher candidates' knowledge of themselves and their roles in facilitating learning for diverse student populations. Acquaints pre-service teachers with three areas of multicultural education: knowing one's self, knowing diverse student populations, and knowing effective practices which will accelerate the learning of the diverse student populations.

TCH-ED 366 Field Experience: Literacy Credit: 1

Students will spend 100 hours working in an urban school classroom. Students will have the opportunity to apply learning and lessons designed in the semester's pedagogical courses, particularly Integrated Instruction: Language Arts and Social Studies. Students will work with their seminar leader, having the opportunity to be observed and conference about their teaching.

TCH-ED 385 Teaching and Learning with Technology Credits: 3

This course addresses the fundamentals of using technology in education and planning instruction to engage PK-12 students in problem solving and critical thinking using technology. Topics within the course are informed by International Society for Technology in Education Standards (ISTE), InTASC Model Core Teaching Standards and Learning Progressions for Teachers 1.0, Missouri Teacher Standards and Quality Indicators, and Missouri Learning Standards.

TCH-ED 396 English Language Study for Middle and High School Teachers Credits: 3

Explores the fundamentals of teaching English language and grammar study, emphasizing patterns in the English language including sounds, words, sentences, meaning, and discourse as they are manifested in daily lives. Educationally relevant topics, such as applications of sociolinguistics to the teaching of English language and literature, varieties of grammar, and linguistic descriptions of styles and registers are an integral part of the course.

TCH-ED 397 Practicum I - Elementary Credit: 1

The overarching goal for this introductory field experience is to help teacher candidates shift their perspectives from that of a student to that of a classroom teacher. Emphasis is on observing the relationship among students' experiences within and outside of school, and planning specific learning experiences for academic and social growth and development. Additionally, teacher candidates attend to the individual student's responses to learning experiences, as well as the social dynamic among students as they work together in a classroom.

TCH-ED 398 Practicum II – Elementary Credit: 1

This field experience is part of Block 2—the second field experience within a four-block sequence. The overarching goal is for teacher candidates to observe the implementation of the school curriculum in specific disciplines. Topics include the structure of the discipline, interrelatedness among basic concepts, discipline specific practices, and the design of instruction to facilitate deep learning.

Prerequisites: TCH-ED 397.

TCH-ED 399 Continuous Enrollment Credit: 1

A practicum experience for students delaying student teaching for one semester.

TCH-ED 400 Child Development Credits: 3

Intellectual and social development from birth through adolescence and their implications for the educative process.

TCH-ED 402 Integrated Arts Credits: 3

Basic principles of creativity and their application in the multicultural teaching of art, creative dramatics, creative movement and musical rhythmic interpretation will be explored. An emphasis will be placed on the interrelationship of these disciplines and integration into the curriculum.

TCH-ED 403 Educational Psychology Credits: 3

This course will provide an introductory examination of psychological research and theory which have implications for, and applications to learning and instruction in interactive social contexts, such as classrooms.

TCH-ED 404 Education of the Exceptional Child and Youth Credits: 3

Students will be introduced to identification and educational intervention strategies for educating exceptional children and adolescents in inclusive classroom situations. This course requires a 10-hour field experience.

TCH-ED 405 Practicum I Credit: 1

Taken in conjunction with elementary and middle school methods courses. Students are expected to spend 60 hours at classroom sites throughout the semester.

TCH-ED 406 Practicum II: Elementary Credit: 1

Taken in conjunction with elementary courses. Students are expected to spend 60 hours at classroom sites during the semester.

TCH-ED 407 Practicum III - Elementary Credit: 1

Taken in conjunction with the elementary courses. Students are expected to spend 60 hours at classroom sites during the semester.

TCH-ED 408WI Advanced Foundations Credits: 3

The course will concentrate on the development of a philosophical, historical and social model to assist in understanding the complexities, strengths and problems of present day education.

TCH-ED 409 Curriculum and Assessment Credits: 3

Curriculum and Assessment is the first of a three-part course sequence designed to assist the preservice teacher in acquiring the knowledge and skills to become an effective practitioner in a world of constant change. The preservice teacher in turn will become a professional educator and facilitator of learning by developing an understanding of the varied roles and relationships that are an integral part of the teaching/learning process. This course focuses on the meaning of curriculum, the role of standards in curriculum design and implementation, the role of assessment is used to effectively enhance instruction and student learning.

TCH-ED 410 Teacher in the Classroom Credits: 2

This is the second of a three-part sequence designed to assist the preservice teacher in acquiring the knowledge and skills to become an effective practitioner in a world of constant change. The preservice teacher in turn will become a professional educator and facilitator of learning by developing an understanding of the varied roles and relationships that are an integral part of the teaching/learning process. It is designed to assist preservice teachers in not only make the transformation from to student to professional educator, but also in developing the knowledge, management, and reflective skills to implement a well-planned and effective curriculum that meets the needs, interests challenges and lives of students who live in and will function in an increasingly culturally diverse, democratic society in an interdependent world.

TCH-ED 412 Language Arts in the Elementary and Middle School Credits: 3

Provides instruction in planning, implementing and assessing language arts activities. Critical analysis in classroom settings is emphasized. Other issues discussed include: literature-based instruction, multicultural perspectives, special needs students and professional behaviors.

TCH-ED 413 Mathematics in the Elementary School I Credits: 3

Mathematics-specific pedagogy. Methods, techniques, tools and materials for the effective teaching of mathematics. Focuses on the principles, methods, and materials of elementary school mathematics instruction and state curriculum in the context of diverse student backgrounds.

TCH-ED 414 General Methods Elementary and Middle - 3 Credits: 2

To summarize and synthesize the pre-service educational experience. To become knowledgeable about the realities of a school life in a "real" classroom.

TCH-ED 415 Reading I: Intro to Literacy and Reading Instruction Credits: 4

This course introduces concepts about literacy processes; i.e., social, cultural, cognitive and linguistic foundations of reading and writing processes. The major focus of the course is on learning components of a comprehensive reading curriculum, and a range of instructional approaches and methods appropriate for learners at different stages of literacy development.

TCH-ED 416 Reading II: Assessing and Teaching Diverse Learners Credits: 4

This course focuses on understanding the major components of reading processes (phonemic awareness, word identification and phonics, vocabulary and background knowledge, fluency, comprehension strategies, and motivation) and how they are integrated in fluent reading for individual students at different stages of literacy development. The major project for the course involves assessing and teaching an individual student of the course of the semester. Teacher candidates should also assess and teach small groups of readers.

Prerequisites: TCH-ED 415, admission into teacher education program.

TCH-ED 417 Science Methods in the Elementary School Credits: 3

Prepares teacher candidates in teaching methods focused on ways of involving elementary-aged children (grades 1-6) in science activities and experiences designed to promote curiosity, inquiry-based investigation, and application of scientific concepts as they explore the world.

TCH-ED 418 Social Studies in the Elementary School Credits: 3

The social studies methods course is designed to provide the prospective teacher with the theory, content, powerful teaching practices, and understanding of the role of social studies in a global and multicultural society. The prospective teacher will acquire the knowledge, skills and dispositions needed to design and enact a transformative social studies curriculum that prepares the young to develop civic competence.

TCH-ED 419 Student Teaching in Elementary School Credits: 3-12

Culminating field experience in an elementary school (grades 1-6). Elementary program student teachers engage in an all-day, full semester placement in an elementary classroom. Elementary majors must enroll in 9 credit hours. Hours for other programs using this field experience vary. Teacher candidates should seek advisor approval.

TCH-ED 420 Adolescent Development Credits: 3

Various aspects of physiological, emotional, cognitive, social and moral development in the transition from childhood to adolescence will be considered. Attention is focused on a conception of adolescence that is grounded on current research and theory.

TCH-ED 422 Practicum I - Middle and High School Credit: 1

The overarching goal for this introductory field experience is to help teacher candidates shift their perspectives from that of a student to that of a classroom teacher. Emphasis is on observing the relationship among students' experiences within and outside of school, and planning specific learning experiences for academic and social growth and development. Additionally, teacher candidates attend to the individual student's responses to learning experiences, as well as the social dynamic among students as they work together in a classroom.

Prerequisites: Admission to the Teacher Education Professional Program.

TCH-ED 423 Practicum II - Middle and High School Credit: 1

This field experience is part of Block 2—the second field experience within a four-block sequence. The overarching goal is for teacher candidates to observe the implementation of the school curriculum in specific disciplines. Topics include the structure of the discipline, interrelatedness among basic concepts, discipline specific practices, and the design of instruction to facilitate deep learning.

Prerequisites: TCH-ED 422.

TCH-ED 424 Practicum III - Middle and High School Credit: 1

This field experience is part of Block 3—the third field experience within a four-block sequence. The overarching goal for this field experience is for teacher candidates to apply conceptual and theoretical knowledge to practice in identifying appropriate instructional strategies, planning instruction, and assessing learning. The emphasis is on understanding the relationships among instructional practices, learner characteristics, and learning outcomes.

Prerequisites: TCH-ED 423.

TCH-ED 425 General Methods - Secondary 2 Credits: 2

The intent of this course is to prepare pre-service teachers to be effective managers of instruction who are skillful in interpersonal communication. Course activities include opportunities for applying techniques based upon a variety of management/discipline models. Field experiences permit on-site observation of various management styles.

TCH-ED 427 Reading in the Secondary School Credits: 3

An examination of the reading process and study of methods and materials used by the secondary school classroom teacher in assessing student reading ability, determining the readability of content area materials and teaching students of all reading levels how to comprehend their textbooks and other printed instructional materials in various content area subjects.

TCH-ED 429 Mathematics in the Elementary School II Credits: 3

Mathematics-specific pedagogy. Methods, techniques, tools and materials for the effective teaching of mathematics. Focuses on the principles, methods, and materials of elementary school mathematics instruction and state curriculum in the context of diverse student backgrounds.

Prerequisites: TCH-ED 413.

Co-requisites: TCH-ED 479.

TCH-ED 430 Gateway to Teaching Credits: 3

This course is designed to introduce pre-service teachers to the education profession and to the teacher education program at UMKC. Through lecture discussion and field experiences the students will examine the social, political, cultural and professional aspects of teaching in 21st century America. In addition, the students will be given an overview of the teacher preparation program and the requirements and expectations for completing the program and qualifying for a certificate to teach in the state of Missouri.

Prerequisites: Admission into the Teacher Education program.

TCH-ED 431 Summer Community Experience Credits: 3

This field-based course provides an in-depth examination into both the evolution of urban communities and dynamics of community building in inner cities, with special emphasis on Kansas City, Missouri. In addition, theories of educational psychology as well as child and adolescent behavior will be infused to assist participants in developing age appropriate mentoring/teaching strategies and activities. Students in the course are engaged with the community through field trips, simulations, course events, and community service.

TCH-ED 432 Special Methods of Teaching English in Middle and High Schools Credits: 3

This course stresses the skills, knowledge, and dispositions pertinent to teaching English Language Arts in middle schools and high schools.

TCH-ED 433 Special Methods of Teaching Mathematics in Middle and High Schools Credits: 3

This course stresses the skills, knowledge, and dispositions pertinent to teaching mathematics in middle schools and high schools.

TCH-ED 434 Seminar in Social Science Curriculum Credits: 3

This seminar course is designed to strengthen teacher candidates' content knowledge for designing and enacting transformative social science curriculum and pedagogy. Students will actively examine key content, concepts, themes, issues, multiple perspectives, and enduring questions embedded in the social science disciplines such as history, geography, economics, anthropology, sociology, political science and psychology and cultural and social contexts to enhance their knowledge, skills, and confidence for designing and enacting a transformative social science curriculum for diverse middle and high school students' development of civic competence.

TCH-ED 435 Special Methods of Teaching Science in Middle and High Schools Credits: 3

Provides an opportunity for future science teachers to refine their skills as science educators and at the same time to reflect upon the ways and whys of teaching science.

TCH-ED 436 Special Methods of Teaching Social Science in Middle and High Schools Credits: 3

This course will assist teacher candidates in developing the knowledge, skills, and dispositions needed to design and enact powerful transformative social studies curricular experiences, to foster middle and secondary school students' abilities to make informed, reasoned decisions and actions for the public good. Students will be introduced to powerful teaching practices, issues, and resources in secondary school social science.

TCH-ED 437 Student Teaching in High School Credits: 3-9

Culminating experience in a secondary school (grades 9-12).

TCH-ED 438 Culturally Responsive Strategies for Teaching Diverse Learners Credits: 3

This course is designed to move students from cultural awareness to the application of culturally responsive practice. Specifically, this course will heighten students' understanding of cultural characteristics and their relationships to teaching and learning. Students will learn culturally responsive strategies and their enactment in instruction for diverse learners.

TCH-ED 440 Introduction To Early Childhood Education Credits: 3

This course is an introduction to the historical, theoretical, ethical, and pedagogical underpinnings of the early childhood education profession. Teacher candidates explore play, inquiry-based learning, documentation, and the role of family and community within diverse curriculum approaches to early childhood education.

TCH-ED 441 Language Development Credits: 3

An introduction to what language is, how first and second languages are acquired, and how to support language development in early childhood classrooms in collaboration with families and communities. Teacher candidates construct knowledge through university classroom experiences, observations of focal children in urban educational settings, and family interviews.

TCH-ED 442 Assessment, Screening, and Data-Informed Early Childhood Teaching Credits: 3

This course provides analysis of assessment methods, application of authentic assessment throughout the teaching cycle and investigation of data-based decision-making through focused inquiry and application in the practicum setting.

TCH-ED 443 Mathematics in Early Childhood II Credits: 3

Approaches to assessing and developing mathematical competencies in young children, birth through Grade 3. Emphasis is placed upon mathematics as a sense-making tool through which actions such as observation, classification, ordering, pattern seeking, and testing of ideas drive experiences and problem solving in the child's immediate environment.

Prerequisites: TCH-ED 444.

TCH-ED 444 Mathematics in Early Childhood I Credits: 3

Approaches to developing mathematical competencies in young children, through Grade 3. Emphasis is placed upon mathematics as a sense-making tool through which actions such as observation, classification, ordering, pattern seeking, and testing of ideas drive experiences and problem solving in the child's immediate environment. A variety of materials and tools are studied in terms of the ways they help children explore, develop and test ideas, construct meaning, and communicate ideas.

TCH-ED 445 Science In Early Childhood Credits: 3

This course provides an exploration of the major concepts and culturally responsive teaching strategies in early childhood science (birth –Grade 3). Teacher candidates analyze inquiry processes and tools in science to develop integrated learning experiences that ensure mastery of content and promote curiosity, creativity, inquiry, and self-awareness as learners explore their world.

TCH-ED 446 Early Childhood Creative Activities Credits: 3

Analysis of symbolic representations, creativity, and imagination as a foundation for learning and development of diverse learners in urban early childhood settings. Hands on exploration of creative materials and activities from different representational systems to shape planning of learning experiences and environments that enhance learning and promote children's creative abilities development.

TCH-ED 447 Social Studies in Early Childhood Credits: 3

This course provides an exploration of the major concepts and teaching strategies in early childhood social studies (birth-Grade 3). Teacher candidates analyze the processes and tools of scientific inquiry related to social studies to design integrated learning experiences that incorporate authentic local and global issues relevant to the learners.

TCH-ED 450 Integrating The Curriculum In Early Childhood Education Credits: 3-4

A culminating curriculum course for early childhood students. The overall goal is to help students become more aware, skilled and informed about developmentally and educationally appropriate practice and curriculum for children during early childhood. Its focus is on constructing an integrated curriculum. A field-based experience is included.

TCH-ED 451 Child Guidance in Early Childhood Classrooms Credits: 3

This course provides an analysis of theory and research on child guidance to frame teacher candidates' development of guidance procedures that meet ethical guidelines and foster a classroom environment conducive to optimal learning and development of early childhood learners.

TCH-ED 452 Family and Program Relationships in Early Childhood Education Credits: 3

This course provides an analysis of purposes and procedures of family, school and community partnerships that frame teacher candidates' collaborations, consultation, and teaching of early childhood learners in urban settings.

TCH-ED 453 Learning from Parents Credits: 2

Designed to provide students with direct interactions with parents whose children are participating in early childhood programs, birth to age 8. Emphasis is placed upon students' understanding of, and sensitivity to, parents' perspectives regarding the care and education of their young children and recognition of parents as significant informants about their children.

Co-requisites: TCH-ED 452.

TCH-ED 454 Human Relations In The Early Childhood Classroom Credits: 3

Students will analyze the connections between an effective helping relationship and effective teaching in the early childhood classroom. Effective interpersonal communication skills will be identified and practiced. The development of self-concept will be discussed.

TCH-ED 455 Student Teaching In Preschool Credits: 6-10

Observation and student teaching under supervision in a preschool setting.

TCH-ED 456 Student Teaching in Early Childhood Credits: 9

Culminating field experience in Early Childhood. Student teachers engage in an all day, full-semester placement in a K-3 early childhood setting.

Co-requisites: TCH-ED 486.

TCH-ED 457 Infant and Toddler Care and Education Credits: 3

This course provides an investigation into infant/toddler care and education theories and practices. Teacher candidates explore relevant curriculum and teaching methods, visit infant and toddler programs, analyze state regulations and national standards for quality care, and evaluate early learning environments.

TCH-ED 458 Practicum For Learning About Infants And Toddlers Credit: 1

The purpose of this course is to learn about child care and education practices in various centers. We will discuss how practices are influenced or constrained by human biology and developmental stages, as they are by ecological and environment pressures such as mothers' work roles. The central themes of the course can be summarized by the phrases purposeful care practices and the optimal practices for infants and toddlers.

TCH-ED 459 Early Childhood Program Management Credits: 3

This course provides an exploration of the program manager's role as a leader who establishes school culture, implements and maintains policies and procedures, and partners with families and communities to facilitate high performing urban early childhood learning environments. Teacher candidates analyze licensing and accreditation regulations that contribute to health, safety and nutrition of learners; interview administrator and community members; and observe at an urban early childhood program.

TCH-ED 460 Middle School Curriculum Credits: 2

This course offers the pre-service teachers an overview of middle school goals, basic principles, and organizations. The course explores interdisciplinary teaming, flexible scheduling, exploratory and advisory programs, and other aspects of the organization within the context of middle school goals and practices.

TCH-ED 461 Student Teaching In Middle School Credits: 6-9

Culminating field experience in a middle school setting. Student teachers engage in an all-day, full semester placement in a middle school classroom. Middle School Education majors must enroll in 9 credit hours. Hours for other programs using this field experience vary. Teacher candidates should seek advisor approval.

Prerequisites: TCH-ED 424.

TCH-ED 462 Middle School Philosophy and Organization Credits: 3

This course offers teacher candidates an overview of middle school goals, basic principles, and organizations. Topics include interdisciplinary teaming, flexible scheduling, exploratory and advisory programs, and other aspects of the organization within the context of middle school goals and practices.

TCH-ED 463 Literacy Intervention across the Disciplines Credits: 3

Examination of research, policy, and effective practice of literacy intervention in middle and secondary disciplinary classrooms (i.e. English/language arts, mathematics, science, social studies). Topics will include recognition of reading and writing difficulties, response-to-intervention (RTI), scaffolding instruction for grade level reading comprehension, metacognition, and culturally responsive literacy instruction.

TCH-ED 464 Math Methods for Urban Teachers Credits: 3

Mathematics-specific pedagogy for urban teachers. Methods, techniques, tools and materials for the effective teaching of mathematics. Emphasis on problem solving and reasoning skills in applying mathematics and on teaching in the context of diverse student backgrounds. Portions of this course will occur in urban school classrooms. Students will apply learning to urban classrooms.

Prerequisites: Admission into the Institute for Urban Education.

TCH-ED 465 Urban Education VI: Teaching Diverse Students Credit: 1

This interactive course will investigate and examine the principles of teaching diverse students and factors influencing effectiveness of instruction, including empowering African American males, teaching students from diverse populations and working with students with special needs. Some of the class sessions will be taught electronically and work will be submitted electronically.

Prerequisites: Admission into the Institute of Urban Education.

TCH-ED 466 Field Experience: Diverse Learners Credit: 1

Students will spend a minimum of 90 hours in an urban school classroom. Students will have the opportunity to apply learning and lessons designed in the semester's pedagogical courses, particularly Best Practices for Teaching Math, Science, and strategies for working with diverse learners. Students will work with their seminar leader, having the opportunity to be observed and conference about their teaching.

Prerequisites: Admission into the Institute for Urban Education.

Co-requisites: TCH-ED 465.

TCH-ED 470 Philosophy and History of Science and Technology Credits: 3

This course uses an historical survey to introduce the main philosophical interpretations of the nature and structure of both science and technology. Core concepts such as prediction, explanation, progress, truth, and utility will be examined in light of various philosophical perspectives. Following this, case study methodology will be used to examine interactions among science, technology, and society. Although the major focus will be upon modern Western culture, some attention will be paid to earlier and non-Western cultures. Case studies to be examined include: Perception and Estimation, nuclear power and pesticides; the impact of high technology upon medicine; and the estimated cost/benefit of computer-mediated communications, for example, the Internet.

TCH-ED 475 Working with Families and Communities Credits: 3

This course provides an in-depth examination of research and theory relative to children, family and community which have implications for and application to learning and instruction. Emphasis will be placed on the exploration and critical examination of and insights into the significance of school-family relationships and their relevance to teaching and learning.

TCH-ED 478 Seminar - Elementary Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

TCH-ED 479 Practicum III – Elementary Credit: 1

This field experience is part of Block 3—the third field experience within a four-block sequence. The overarching goal for this field experience is for teacher candidates to apply conceptual and theoretical knowledge to practice in identifying appropriate instructional strategies, planning instruction, and assessing learning. The emphasis is on understanding the relationship among instructional practices, learner characteristics, and learning outcomes.

Prerequisites: TCH-ED 398.

TCH-ED 480 Practicum I Early Childhood Credit: 1

The overarching goal for this introductory field experience is to help teacher candidates shift their perspectives from that of a student to that of a classroom teacher. Emphasis is on observing the relationship among students' experiences within and outside of school, and planning specific learning experiences for academic and social growth and development. Additionally, teacher candidates attend to the individual student's responses to learning experiences, as well as the social dynamic among students as they work together in a classroom.

TCH-ED 481 Practicum II Early Childhood Credit: 1

This field experience is part of Block 2—the second field experience within a four-block sequence. The overarching goal is for teacher candidates to observe the implementation of the school curriculum in specific disciplines. Topics include the structure of the discipline, interrelatedness among basic concepts, discipline specific practices, and the design of instruction to facilitate deep learning.

TCH-ED 482 Seminar in Teaching and Evaluating Writing Credits: 3

This course is designed to provide future teachers with a framework for success in the teaching of writing within the English Language Arts curriculum. The goal is to help students turn sound theory provided by the National Writing Project, the National Council of Teachers of English, and other experts in the field of rhetoric and composition into effective practice in the classroom.

TCH-ED 483 Early Childhood Literacy I Credits: 4

This course emphasizes learning theories and methods for early literacy instruction and assessment. It will primarily focus on the components of a culturally responsive literacy curriculum for early childhood students in diverse, urban preprimary and kindergarten contexts. This course includes a field experience with multiple opportunities for observing, teaching, and assessing the literacy development of young children throughout the teaching cycle including engagement with their families and communities.

TCH-ED 484 Early Childhood Literacy II Credits: 4

This course emphasizes learning theories and methods for early literacy instruction and assessment. The course will primarily focus on the components of a culturally responsive curriculum for early childhood students in diverse, urban kindergarten through 3rd grade contexts. This course includes a supervised field experience with multiple opportunities for observing, teaching, and assessing the literacy development of young children throughout the teaching cycle including engaging with their families and communities.

TCH-ED 485 Language Arts in the Early Childhood Classroom Credits: 3

This course provides instruction in planning, implementing, and assessing early childhood (birth through third-grade) language arts activities. Critical analysis in classroom settings is emphasized. Other issues discussed include: literature-based instruction, multicultural perspectives, special needs students and professional behaviors.

TCH-ED 486 Seminar - Early Childhood Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

Co-requisites: TCH-ED 456.

TCH-ED 487 Practicum III - Early Childhood Credit: 1

This field experience is part of Block 3, the third field experience within a four-block sequence. The overarching goal for this field experience is for teacher candidates to apply conceptual and theoretical knowledge to practice in identifying appropriate instructional strategies, planning instruction, and assessing learning. The emphasis is on understanding the relationships among instructional practices, learner characteristics, and learning outcomes.

TCH-ED 491 Seminar - Art Education Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

TCH-ED 492 Integrated Instruction: Language Arts and Social Studies Credits: 6

This course will focus on teaching Language Arts and Social Studies in the Urban Elementary School. Methods, techniques, tools and materials for the effective teaching will be observed and practiced. Students will work closely with in-service teachers and their university instructor. There will be emphasis on balanced literacy, readers' and writers' workshops, literacy development, assessment techniques and the integration of social studies and language arts. Curriculum mapping and unit planning will be introduced and practiced in this course. This course will focus on school and classroom organization and management, detailed lesson planning, use of instructional materials and media in the teaching of language arts and social studies.

Prerequisites: Admission into the Institute of Urban Education.

TCH-ED 493 Seminar - Mathematics Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

Co-Requisites: TCH-ED 437 or TCH-ED 461.

TCH-ED 494 Seminar - English/Language Arts Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

Co-requisites: TCH-ED 437 or TCH-ED 461.

TCH-ED 495 Seminar - Science Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

Co-requisites: TCH-ED 437 or TCH-ED 461.

TCH-ED 496 Seminar - Social Science Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

Co-requisites: TCH-ED 437 or TCH-ED 461.

TCH-ED 497 Teaching Internship Credits: 3-8

Teacher candidates will work 3 to 5 days at the school site in which the candidate will complete the year-long teaching internship.

Prerequisites: TCH-ED 398.

TCH-ED 498 Urban Education Seminar VII Credit: 1

This seminar meets weekly for 2 hours and is led by a clinical professor who serves as a mentor for the students throughout their program. Students will work closely with mentor teachers in the application and integration of social justice and the elementary school curriculum. A critical analysis of current practices, teaching methods, materials and how social justice manifests in curriculum and instruction. Emphasis is on understanding cultural diversity and cultural influences on learning. Concepts of a classroom community, parental relations and democratic classroom processes will be addressed. Students will have opportunities to apply their learning to urban classrooms.

Prerequisites: Admission into the Institute for Urban Education.

TCH-ED 499 Capstone Credits: 2

This seminar is designed to complement the student teaching experience through the discussion and analysis of school-based issues. It is intended to help further develop a reflective, critical and analytical approach to pedagogical decision making through supportive collaboration.

Theatre (THEATRE)

Courses

THEATRE 101 Introduction To Acting Credits: 3

An introductory course to acquaint the freshman theatre major and non-major student with the process of acting through relaxation and improvisational exercise.

THEATRE 101 - MOTR PERF 100: Acting I

**THEATRE 102 Acting for the Opera Credit: 1**

Students receive basic foundation of acting technique. Students will demonstrate the ability to apply their tools in practice and articulate their process throughout the semester. The course is designed for the coordination of music and acting with particular emphasis on training the singing actor.

Prerequisites: Bachelor of Music: Music Performance-Voice Option major.

THEATRE 110 Acting I Credits: 3

Basic principles of dramatic performance: training in voice, movement and language as an organic developmental whole.

THEATRE 113 Introduction To Technical Production Credits: 3

An introduction to the technical production process with emphasis on production organization, planning and scenic construction techniques. Required laboratory work.

THEATRE 113C Introduction to Technical Production: Light/Sound Credits: 3

An introduction to the basic principles and techniques of lighting design and technology and sound design and technology.

Co-requisites: THEATRE 180.

THEATRE 121 Oral Interpretation Of Literature Credits: 3

Principles of interpretation, analysis and oral reading of prose and poetry. Emphasis upon platform performance: body language, vocal control and performance techniques.

THEATRE 130 Foundations Of Fine Arts Theatre Credits: 3

An introduction to theatre arts and a general orientation to the creative and technical aspects of live performance. Includes historical overview, analysis of the components of a play, and observation of and critical reaction to theatrical productions. Frequent guest speakers.

THEATRE 180 Theatre Practicum Credit: 1

The course requires involvement with productions in the Conservatory. Students will learn the responsibilities and processes of preparing and executing a live theatrical production. Depending on specialty, students will work backstage, in one of the studios, or in some other capacity as defined and agreed upon by the area coordinator.

THEATRE 200 Script Analysis Credits: 3

The class focuses on reading a script theatrically with a view to mounting a coherent production. Through careful, intensive reading of a variety of plays students study form, structure, genre, character, language, theme, and action as components of a text that provide the theatre artist with the tools for the creation a theatrical production.

THEATRE 210 Introduction To Design For The Theater Credits: 3

An introduction to aesthetics and design for the theater in the areas of scenery, costume, lighting and sound. The emphasis is upon the theory, vocabulary, form, style, historical influences and process in each area. Attendance at theater productions is required. Course is taught by design faculty from each area.

THEATRE 295 Speech For The Theatre I Credits: 3

Training in voice and articulation and the techniques of adaptation to the needs of the artist-performer in the theatre: exercises to free the voice, develop effective breathing, tone production, articulation, flexibility of vocal production, and projection.

THEATRE 295A Speech For The Theater I Credits: 3**THEATRE 295B Speech For The Theater I Credits: 3****THEATRE 298 Movement For Actors Credits: 3**

Basic movement training including relaxation and alignment techniques, exercises to increase physical facility and skills to enhance rhythmic coordination and physical characterization.

THEATRE 298A Movement For Actors Credits: 3**THEATRE 298B Movement For Actors Credits: 3****THEATRE 315 Acting II Credits: 3**

Textual analysis, characterization and building a role.

Prerequisites: THEATRE 300.

THEATRE 317 Scene Design Credits: 3

Introduces the mechanics of layout: perspective, basic drafting techniques, front elevation and floorplan execution. Second half of the semester emphasizes scenic design as an art form. Recommended Preparation: THEATRE 113 and THEATRE 311.

THEATRE 325 Acting III Credits: 3

Study and practice of period and contemporary styles of acting.

Prerequisites: THEATRE 315.

THEATRE 329 Master Class In Acting Credits: 2

(A,B,C,D) Class in advanced studies in acting. May be repeated for credit up to eight hours and guest artist change.

THEATRE 329A Master Class In Acting Credits: 2**THEATRE 329B Master Class In Acting Credits: 2****THEATRE 329C Master Class In Acting Credits: 2****THEATRE 329D Master Class In Acting Credits: 2****THEATRE 333 History of Costuming I Credits: 3**

The study of the history of European costume, with emphasis on the social and economic ramifications of costuming through the ages.

THEATRE 340 Stage Makeup Credit: 1

Lecture and laboratory work in the fundamentals of makeup for the stage.

THEATRE 350 Theatre History I Credits: 3

Development of theatre art, including the physical stage, technical production elements, dramatic literature, and audience behavior from primitive origins to the 18th century.

THEATRE 351WI Theatre History II Credits: 3

Development of Theatre art, including the physical stage, technical production elements, dramatic literature, and audience behavior from the 18th century to the present.

THEATRE 352 History of Costuming II Credits: 3

The study of the history of Non-European costume, with emphasis on the social and economic ramifications of costuming through the ages.

THEATRE 371 Stage Lighting Credits: 3

Stage Lighting is the study of light as a design element. Students will learn the foundation of lighting design theory, technical methods, and general theatrical procedure through lectures, laboratory and crew work. Theatrical genres will vary by semester.

THEATRE 372 Stage Lighting Technology Credits: 2

This course is a comprehensive study of contemporary technical equipment and its usage to actualize lighting design. Areas of emphasis include photometric, color and color theory, lighting control systems, lighting control operations, cueing techniques, data control of intelligent lighting equipment, lighting fixtures, dimming system, hand drafted light plot standards, CAD light plot drafting, lighting specific software programs, video and image projections, and optical special effects. Theatrical genres will vary by semester.

THEATRE 374 Professional Projection Design Credits: 3

This course in projection design for the performing arts will give students an overview of the discipline and introduce students to ideas and technologies used in this field. Through the three weekend sessions, students will learn the practical applications of projection design and the techniques of projection controls. Recommended preparation: basic, fundamental knowledge of computers and basic, fundamental knowledge of theatre designs.

Prerequisites: THEATRE 210.

THEATRE 378 Stage Management I Credits: 3

A functional analysis of the duties and responsibilities of the stage manager, with particular reference to the organization and conducting of rehearsals and performances, professional practices and union requirements. Requires student to be an assistant to a stage manager on a University or an KC Rep production. The first of a two-semester requirement in stage management for theater majors.

THEATRE 400 Special Problems In Theatre Credits: 1-6

(A-M) Research and/or production projects for advanced upperclass students. No more than three hours with any one instructor. (A) Acting; (B) Children's Theatre; (C) Costumes; (D) Scenic Design; (E) Directing; (F) History; (G) Lighting; (H) Playwriting; (I) Sound; (J) Stage Management; (K) Technical Production (L) Theatre Management; (M) Theory and Criticism.

THEATRE 400A Special Problems In Theatre: Acting Credits: 1-6

THEATRE 400B Special Problems In Theatre: Design Credits: 1-6

THEATRE 400C Special Problems In Theatre: Costumes Credits: 1-6

THEATRE 400D Special Problems In Theatre: Scenic Design Credits: 1-6

THEATRE 400E Special Problems In Theatre: Directing Credits: 1-6

THEATRE 400F Special Problems In Theatre: History Credits: 1-6

THEATRE 400G Special Problems In Theatre: Lighting Credits: 1-6

THEATRE 400H Special Problems In Theatre: Playwriting Credits: 1-6

THEATRE 400I Special Problems In Theater: Sound Credits: 1-6

THEATRE 400J Special Problems In Theatre: Stage Management Credits: 1-6

THEATRE 400L Special Problems In Theatre: Theatre Management Credits: 1-6

THEATRE 400M Special Problems In Theatre: Theory And Criticism Credits: 1-6

THEATRE 400N Special Problems In Theatre: Dramaturgy Credits: 1-6

THEATRE 400R Special Problems In Theatre Credits: 1-6

THEATRE 400S Special Topics In Theatre Credits: 1-6

THEATRE 400T Special Problems In Theatre Credits: 1-6

THEATRE 400V Special Problems in Theater Credits: 1-6

THEATRE 400X Special Problems In Theatre Credits: 1-6

THEATRE 403 Theatre Company & Production Credit: 1

This course serves (1) as a weekly company meeting for Theatre majors, (2) an organizing point for production assignments and duties for the semester, and (3) a study of a special topic which will change each semester. Course is repeatable. Required of Majors for every semester they are enrolled.

Prerequisites: Theatre Majors and Minors.

THEATRE 415 Beginning Directing Credits: 3

Theory and process of play production, including interpretation, composition, picturization, movement, rhythm, and character interpretation.

THEATRE 431 Rendering Techniques For The Theatre Designer I Credits: 3

Introduces the mechanics of handling black and white media to develop three-dimensional technique with an emphasis on observational training and object drawing.

THEATRE 432 Costume Design Credits: 3

The practice of the theatrical costume design, leading to the preparation of designs for production, and the execution of designs in actual costuming for the stage.

THEATRE 432A Costume Design Credits: 3

THEATRE 432B Costume Design Credits: 3

THEATRE 432C Costume Design Credits: 3

THEATRE 432D Costume Design Credits: 3

THEATRE 437 Playwriting I Credits: 3

Theory and practice of writing for the theatre with emphasis on the basic techniques.

THEATRE 438 Playwriting II Credits: 3

Theory and practice of writing for the theatre with emphasis on advanced techniques.

THEATRE 451 World Theatre Credits: 3

A study of non-Western theatre, its origins, styles and continuing influences on society and western theatre.

Prerequisites: THEATRE 110.

THEATRE 476 Theatre Sound And Electronics Credits: 3

Study of electronic principles used in audio and control devices. Concentrates on applying knowledge to using the equipment employed in the theatre such as sound-effect systems, inter-communication equipment, and includes a special section on the creation of sound and music for theatre productions.

THEATRE 478 Stage Management II Credits: 2

Practicum course in stage management. Requires stage management of a University production and/or assistant stage management of an KC Rep production and/or assistant stage management of a main stage University production.

Prerequisites: THEATRE 378.

THEATRE 497 Repertory Theatre Credits: 3-6

Apprentice-level responsibilities for Theatre 497 are as follows: apprentices will be used in as many production areas as possible: (1) as actors in small roles and/or extras or supers; (2) as understudies if possible; (3) as needed in the following departments: (a) properties; (b) carpentry and the shop; (c) lighting; (d) costumes; (e) house management; (f) stage management; (g) running crews.

Prerequisites: Departmental consent.

THEATRE 499 Theatre Capstone Credit: 1

Each student plans and executes one significant project in the area of interest which demonstrates significant proficiency in one or more theatrical elements. Supervised by a member of the theatre faculty, the project incorporates research, documentation and a public exhibition.

Prerequisites: Senior Standing.

THEATRE H101 Introduction To Acting Credits: 3

An introductory course to acquaint the freshman theater major and non-major student with the process of acting through relaxation and improvisational exercise.

THEATRE H113 Introduction To Technical Production Credits: 3

An introduction to the technical production process with emphasis on production organization, planning and scenic construction techniques. Required laboratory work.

THEATRE H210 Introduction To Design For The Theater Credits: 3

An introduction to aesthetics and design for the theater in the areas of scenery, costume, lighting and sound. The emphasis is upon the theory, vocabulary, form, style, historical influences and process in each area. Attendance at theater productions is required. Course is taught by design faculty from each area.

THEATRE H315 Acting II Credits: 3

Textual analysis, characterization and building a role.

Prerequisites: THEATRE 300.

THEATRE H350 Theater History I-Honors Credits: 3**THEATRE H351WI Theater History II Credits: 3**

Development of Theater art, including the physical stage, technical production elements, dramatic literature, and audience behavior from the 18th century to the present.

Trombone (TROMB)

Courses

TROMB 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

TROMB 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

TROMB 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

TROMB 101 Freshman Trombone I Credits: 2-4

TROMB 101J Freshman Trombone I (Jazz) Credits: 2-4

TROMB 102 Freshman Trombone II Credits: 2-4

TROMB 102J Freshman Trombone II (Jazz) Credits: 2-4

TROMB 201 Sophomore Trombone I Credits: 2-4

TROMB 201J Sophomore Trombone I (Jazz) Credits: 2-4

TROMB 202 Sophomore Trombone II Credits: 2-4

TROMB 202J Sophomore Trombone II (Jazz) Credits: 2-4

TROMB 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

TROMB 301 Junior Trombone I Credits: 2-4

TROMB 301J Junior Trombone I (Jazz) Credits: 4

TROMB 302 Junior Trombone II Credits: 2-4

TROMB 302J Junior Trombone II (Jazz) Credits: 4

TROMB 401 Senior Trombone I Credits: 2-4

TROMB 401J Senior Trombone I (Jazz) Credits: 4

TROMB 402 Senior Trombone II Credits: 2-4

TROMB 402J Senior Trombone II (Jazz) Credits: 4

Trumpet (TRUMPET)

Courses

TRUMPET 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

TRUMPET 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

TRUMPET 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

TRUMPET 101 Freshman Trumpet I Credits: 2-4

TRUMPET 101J Freshman Trumpet I (Jazz) Credits: 2-4

TRUMPET 102 Freshman Trumpet II Credits: 2-4

TRUMPET 102J Freshman Trumpet II (Jazz) Credits: 2-4

TRUMPET 201 Sophomore Trumpet I Credits: 2-4

TRUMPET 201J Sophomore Trumpet I (Jazz) Credits: 2-4

TRUMPET 202 Sophomore Trumpet II Credits: 2-4

TRUMPET 202J Sophomore Trumpet II (Jazz) Credits: 2-4

TRUMPET 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

TRUMPET 301 Junior Trumpet I Credits: 2-4

TRUMPET 301J Junior Trumpet I (Jazz) Credits: 4

TRUMPET 302 Junior Trumpet II Credits: 2-4

TRUMPET 302J Junior Trumpet II (Jazz) Credits: 4

TRUMPET 368 Orchestral Literature for Trumpet Credit: 1

Intended to introduce students to the standard repertoire for orchestral trumpet; class meets once weekly for an hour. Students will be expected to prepare and play approximately a dozen works per semester, rotating parts in a full trumpet section.

TRUMPET 401 Senior Trumpet I Credits: 2-4

TRUMPET 401J Senior Trumpet I (Jazz) Credits: 4

TRUMPET 402 Senior Trumpet II Credits: 2-4

TRUMPET 402J Senior Trumpet II (Jazz) Credits: 4

Tuba (TUBA)

Courses

TUBA 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

TUBA 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

TUBA 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

TUBA 101 Freshman Tuba I Credits: 2-4

TUBA 102 Freshman Tuba II Credits: 2-4

TUBA 201 Sophomore Tuba I Credits: 2-4

TUBA 202 Sophomore Tuba II Credits: 2-4

TUBA 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

TUBA 301 Junior Tuba I Credits: 2-4

TUBA 302 Junior Tuba II Credits: 2-4

TUBA 401 Senior Tuba I Credits: 2-4

TUBA 402 Senior Tuba II Credits: 2-4

University College (UNIV)

Courses

UNIV 100 Academic Development Credit: 1

This course is designed to help students further develop needed critical thinking and academic skills. Students will have the opportunity to analyze individual learning behavior, and to learn, adopt, and apply critical thinking methods and academic skills that promote success in college.

Prerequisites: University College Student.

UNIV 102 Career and Major Planning Credits: 2

The goal of this course is to provide assistance career/major exploration in order for students who have not declared their majors to make purposeful decisions about academic plans and career goals while fostering academic success. UNIV 102 is required for new transfer or transitioning UMKC students and for students having completed First Semester Experience in the previous term.

Prerequisites: University College Student.

UNIV 202 Next Steps in Career & Major Exploration Credit: 1

Designed to actively engage students in their educational and career-planning process by exploring factors that influence personal decision-making. While the course is practical and applied, it also addresses the broader view of work in our lives. The course will include discussion of factors that impact major and career decision-making in order to empower students to make an appropriate decision.

Prerequisites: UNIV 102.

UNIV 300 Peer Leadership Credit: 1

Designed for the study and practical application of leadership skills that will benefit Peer Leaders working with courses/laboratory instructors and students. Open to Peer Leaders only. May be repeated for a total of 3 hours. Course to be utilized by multiple academic units to support training efforts.

Urban Planning and Design (UPD)

Courses

UPD 203 GIS For Urban Planning Credits: 3

This introductory level GIS course is designed to expose planning students to Geographical Information Systems (GIS). Students will learn basic concepts and theories of GIS and applications of GIS software with hands-on experience. Students will also learn how to search for demographic, socio-economic, land use, transportation, and geospatial data, and how to use such data for their academic research and professional planning work with GIS. Students will apply GIS to the multiple scales of planning work.

UPD 260 History Of Planning And Urban Design Credits: 3

An overview of planning history with an emphasis on the 19th and 20th centuries. The historic framework will include urban history, the rise and development of urban planning, urban design, and social theory and how these areas have affected the shape of our cities.

UPD 280 Land Use Planning Credits: 3

This course explores the basic principles of plan making, land use development and regulation. Students are introduced to contemporary planning and policy issues. Including land use conflicts and alternative models for sustainable planning, design and management. Students will learn how to develop a land use plan using Geographic Information Systems (GIS) and other design tools. An introductory GIS course (UPD 203) is highly recommended.

UPD 300 Quantitative Planning Methods And Techniques Credits: 3

Statistical analysis and other analytic techniques of data gathering. Data and problems framed from complex, real world situations. Competence in firsthand research; survey design; case study method; data gathering methods such as observation, open-ended interviewing and questionnaires.

Prerequisites: MATH 110 or higher; or ALEKS score of 61 or higher; or ACT MATH sub-score of 28 or higher, or SAT MATH sub-score of 660 or higher.

UPD 310 Planning And Design Studio I Credits: 4

This Urban Planning + Design studio course will introduce methods for analyzing urban spaces at the site and neighborhood level. Students will actively solve problems related to the physical planning of cities and communities while continuing to develop abilities in methods of written, oral and graphic presentation.

Prerequisites: ENV-DSN 202 or equivalent.

UPD 312 Planning And Design Studio II Credits: 4

Studio instruction in urban planning and design focusing on the synthesis of land use analyses, regulatory reviews, urban design issues, and public participation facilitation. Continued instruction in techniques for visually presenting planning and design ideas.

Prerequisites: UPD 310.

UPD 320 Planning Theory And Practice Credits: 3

This course examines contemporary urban planning and design practice. Theories about planning practice and related case studies will be the basis of this course. Topics covered will include the definition of urban planning, the idea of the "public realm," planning/design expertise and the rational model, the role of diversity, public participation, communicative planning, advocacy and equity planning, ethics comprehensiveness and the limits of planning. The course will include assignments that will build student's ability to write quick and analytical assessments, often required in planning practice. Students will be required to attend public planning forums in and around the region.

UPD 332CZ Environmental Sustainability Credits: 3

This course will introduce the concept of sustainability and review how sustainability might work at the individual, neighborhood, state, nation and global scales. Students will participate in some form of community engagement on sustainability as well as reflect upon how their own practices impact the environment. Counts toward AS Interdisciplinary "Cluster course." Key course in sustainability minor.

UPD 340 Neighborhood And Community Development Credits: 3

Course provides a comprehensive introduction to the field of community development and neighborhood planning. The development of theoretical models that explain neighborhood change and history in the U.S. will serve as the basis. Issues explored include: community organizing, social movements, federal and state policies, and the role of planning organizations and community development corporations in neighborhood revitalization.

UPD 400 Advanced GIS For Urban Planning Credits: 3

This advanced level GIS course is designed to expose students to high level GIS techniques and geospatial analyses in urban planning. Students will learn advanced theories and geographic information tools with hands-on experiences. Students will have an opportunity to apply their knowledge and skills in GIS to a real world planning project in class.

Prerequisites: UPD 203 or UPD 403 or equivalent.

UPD 403 GIS for Urban Planning Credits: 3

The introductory level GIS course is designed to expose graduate students to Geographical Information Systems (GIS). Students will learn basic concepts and theories of GIS and application of GIS software with hands-on experience. Students will also learn how to search for demographic, socio-economic, land use, transportation, and geospatial data.

UPD 410 Planning and Design Studio III Credits: 4

Instruction in problem analysis and plan development for defined urban or suburban location with multiple constituencies.

Prerequisites: UPD 312.

UPD 411 Professional Practice I Credit: 1

A seminar preparing students for professional practice in urban planning + design including the preparation of a professional resume and portfolio.

UPD 412WI Planning and Design Studio IV Credits: 5

Capstone course that incorporates a topical plan or a comprehensive plan for a client comprising a development subdivision, a community or a redevelopment area.

Prerequisites: UPD 410, RooWriter.

UPD 413 Professional Practice II Credit: 1

A continuation of professional practice seminar addressing issues of professional writing in Urban Planning and Design practice.

UPD 420 Transportation Planning Credits: 3

The course provides fundamental theories, methods, and contemporary issues in transportation planning. The topics covered in this course include the transportation planning process, transportation systems, travel demand analysis, and policy issues such as the linkage between land use and transportation, urban transportation finance, social and environmental justice, transportation and environmental impacts, and traffic congestion.

UPD 430 Planning For Historic Preservation Credits: 3

The course provides a survey of major issues in the field of historic preservation and heritage studies from a planning perspective. Will focus primarily on the built environment of the United States, as well as world heritage sites and international perspectives. The course will include the urban planning techniques used for preserving historic buildings, neighborhood and districts, as well as some of the landmark legal decisions and legislation that have shaped heritage preservation practice in the U.S. Recommended Preparation: UPD 260.

UPD 432 Urban Environment Planning And Design Credits: 3

The built environment does not exist in a vacuum. Cities operate within broad ecological processes. Effective environmental planning can protect important natural resources while providing for a higher quality of life for urban residents. As a survey course in a subfield of urban planning, this course introduces students to environment planning approaches and techniques.

UPD 450 Planning Law And Practice Credits: 3

Introduction to legal procedures basic to urban planning; including legal, constitutional, legislative, and administrative concepts, controls, and land-use regulations.

UPD 472 Urban Redevelopment Credits: 3

Contemporary issues of urban redevelopment, with an emphasis on American cities, will be examined. Redevelopment processes recently completed or underway in the greater Kansas City region will be the subject of a case study and a theoretical review by each student.

UPD 475 American Housing Credits: 3

Students will explore housing in cultural, design, and historical terms and examine contemporary American housing policy.

UPD 490 Urban Planning Internship Credits: 3

Urban planning work experience off-campus with an approved professional, Government, or non-profit agency sponsor. A contract specifying the expected product of the internship is required between the student, agency, and faculty coordinator.

Prerequisites: UPD 203.

UPD 496 Directed Studies In Urban Planning Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 499 Special Topics In Urban Planning Credits: 1-3

Advanced independent research and analysis in urban planning. Topics and methods used in research, to be established by student and academic supervisor prior to enrollment.

Urban Studies (URBAN ST)

Courses

URBAN ST 346 Urban Latin America Credits: 3

Introduction, overview, and analysis of major contemporary urban issues in Latin America.

URBAN ST 495 Urban Studies Internship Credits: 1-6

Students obtain directed practical experience working with non-profits, governments, or private enterprises. Duties will vary based on contractual agreement between the student, host organization, and the professor.

URBAN ST 499WI Urban Studies Seminar Credits: 3

This is the capstone course in the Urban Studies Program and is required for majors in the junior/senior year. Students critique urban research and prepare a paper and an oral presentation on an approved topic.

Viola (VIOLA)

Courses

VIOLA 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

VIOLA 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

VIOLA 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

VIOLA 101 Freshman Viola I Credits: 2-4

VIOLA 102 Freshman Viola II Credits: 2-4

VIOLA 201 Sophomore Viola I Credits: 2-4

VIOLA 202 Sophomore Viola II Credits: 2-4

VIOLA 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

VIOLA 301 Junior Viola I Credits: 2-4

VIOLA 302 Junior Viola II Credits: 2-4

VIOLA 401 Senior Viola I Credits: 2-4

VIOLA 402 Senior Viola II Credits: 2-4

Violin (VIOLIN)

Courses

VIOLIN 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

VIOLIN 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

VIOLIN 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

VIOLIN 100D Applied Study for the Non-Music Major Credit: 1

Nine half-hour lessons. No jury required.

VIOLIN 101 Freshman Violin I Credits: 2-4

VIOLIN 102 Freshman Violin II Credits: 2-4

VIOLIN 201 Sophomore Violin I Credits: 2-4

VIOLIN 202 Sophomore Violin II Credits: 2-4

VIOLIN 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

VIOLIN 301 Junior Violin I Credits: 2-4

VIOLIN 302 Junior Violin II Credits: 2-4

VIOLIN 401 Senior Violin I Credits: 2-4

VIOLIN 402 Senior Violin II Credits: 2-4

Voice (VOICE)

Courses

VOICE 100A Preparatory Applied Study Credits: 2

One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

VOICE 100B Applied Study of a Second Instrument Credits: 2

Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

VOICE 100C Applied Study for the Non-Music Major Credits: 2

Applied study for the non-music major. One half-hour lesson weekly. No jury required.

VOICE 101 Freshman Voice I Credits: 2-4

One hour weekly participation in Vocal Performance Seminar is required.

VOICE 102 Freshman Voice II Credits: 2-4

One hour weekly participation in Vocal Performance Seminar is required.

VOICE 201 Sophomore Voice I Credits: 2-4

Applied, individual, weekly, 50-minute vocal lessons.

Prerequisites: VOICE 102.

Co-requisites: VOICE 300.

VOICE 202 Sophomore Voice II Credits: 2-4

Applied, individual, weekly, 50-minute vocal lessons.

Prerequisites: VOICE 201.

Co-requisites: VOICE 300.

VOICE 300 Studio Class Credits: 0

Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.

Co-requisites: Enrollment in lessons.

VOICE 301 Junior Voice I Credits: 2-4

Applied, individual, weekly, 50-minute vocal lessons.

Prerequisites: VOICE 202 and BM-Voice Major.

Co-requisites: VOICE 300.

VOICE 302 Junior Voice II Credits: 2-4

Applied, individual, weekly, 50-minute vocal lessons.

Prerequisites: VOICE 301.

Co-requisites: VOICE 300.

VOICE 401 Senior Voice I Credits: 2-4

Applied, individual, weekly, 50-minute vocal lessons.

Prerequisites: VOICE 302.

Co-requisites: VOICE 300; VOICE 411 (BM-Voice Performance majors).

VOICE 402 Senior Voice II Credits: 2-4

Applied, individual, weekly, 50-minute vocal lessons.

Prerequisites: VOICE 401.

Co-requisites: VOICE 300; VOICE 411 (BM-Voice Performance majors).

VOICE 411 Vocal Coaching: Voice Recital Preparation Credit: 1

The purpose of vocal coaching is to aid singers in refining their performance skills in terms of musical style, nuance, language, diction, and character. It is intended to amplify the singer's understanding of the many aspects of performance including musical shaping, dynamic contrasts, poetic/textual architecture, traditional approaches to literature of various periods and styles, and appropriate performance practices related to voice recitals and/or the operatic stage. In addition, singers will develop additional skills in working with a collaborative pianist and explore appropriate expectations when working with conductors/stage directors.

Women's, Gender and Sexuality Studies (WGS)

Courses

WGS 1EC Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1ED Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1EE Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1EF Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1EG Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1EH Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1EI Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1EJ Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 201 Introduction To Women's, Gender, and Sexuality Studies Credits: 3

This class provides an introduction to the interdisciplinary field of women's, gender, and sexuality studies. The focus of this course will be the many ways gender is integral to our understanding of our world and the communities in which we live.

WGS 301 Introduction to Feminist Theory Credits: 3

This course covers a wide variety of feminist theories and theoretical perspectives, primarily since the 1960s, and is devoted to understanding and evaluating this body of work and the insights and possibilities for change that it suggests.

WGS 3EA UL Women Gender Studies Elect Credits: 99
Transfer Credit

WGS 3EB UL Women Gender Studies Elect Credits: 99
Transfer Credit

WGS 3EC UL Women Gender Studies Elect Credits: 99
Transfer Credit

WGS 3ED UL Women Gender Studies Elect Credits: 99
Transfer Credit

WGS 405 Special Topics In Women's, Gender, and Sexuality Studies Credits: 1-3

Each time this course is offered a different area of Women's and Gender Studies will be covered. This course may be repeated for credit when the topic changes.

WGS 408 Gender, Health, and Development in Senegal Credits: 3

This course examines women's economic empowerment, health education initiatives, philanthropy, and social entrepreneurship in West Africa and Senegal in particular. In the main city of Dakar we will visit indigenous and global nonprofits to study their policies and processes. The culture, both urban and rural, will be experienced in order to provide a unique perspective on the Senegalese and their culture.

WGS 484 Women's, Gender, and Sexuality Studies Internship Credits: 1-4

The Women's, Gender, and Sexuality Studies Internship Program is an opportunity for undergraduate students to gain on-site experience. Students will receive 1-4 hours of academic credit while learning and working in off- or on-campus placements. Students will engage in the ongoing feminist effort to integrate research with social activism as they apply academic knowledge to their work experience and consider how practical experience informs or alters theory. Internship experiences may take place on or off-campus, such as at the UMKC Women's Center or a local battered women's shelter. The Women's Center Director serves as coordinator for all internship experiences.

Prerequisites: WGS 201.

WGS 499 Women's, Gender, and Sexuality Studies: Senior Seminar Credits: 3

This capstone course focuses on research leading to a term paper on a Women's, Gender, and Sexuality Studies Topic.

GRADUATE ACADEMIC REGULATIONS AND INFORMATION

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 School of Graduate Studies
 5115 Oak Street, 300F
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Dean:

Jennifer Lundgren

Mission and Administrative Organization of Graduate Education

School of Graduate Studies Mission

The School of Graduate Studies (SGS) provides a support network that promotes excellence in graduate education, and supports current and prospective graduate students in achieving their full potential. We do this by:

- Advocating for graduate education
- Recruiting and retaining students
- Assuring quality control in graduate programs
- Managing and distributing financial support
- Providing support services for graduate students
- Partnering with others to promote graduate education

School of Graduate Studies Vision

The vision of the School of Graduate Studies (SGS) is to be a leader in urban graduate education through the support of a diverse student body who advances knowledge and positively impacts our regional, state, national, global, and disciplinary communities.

School of Graduate Studies Composition and Organization

UMKC currently offers more than 50 graduate degrees at the master's, educational specialist and doctoral levels, in addition to more than 20 graduate certificate programs. Graduate students represent about 33 percent of the total campus enrollment. The graduate student population is diverse in ethnicity, gender and racial background. As an urban university, our programs strive to accommodate adult working students. Nearly two-thirds of all graduate students are enrolled part time and the average age is 35.

The Graduate Council, representing a cross section of campus graduate faculty, sets policy, establishes minimum graduate education standards, and monitors the quality of graduate education at UMKC. The graduate faculty in the various graduate degree programs may set standards more stringent than the minimums outlined in this catalog section, and in such cases, the program standards take precedence over the campuswide minimum regulations. The School of Graduate Studies is responsible for monitoring compliance to the campuswide minimum graduate academic regulations; providing leadership and coordination of all graduate programs; and serves as the academic home for students admitted to the Interdisciplinary Ph.D. program. Information on the Interdisciplinary Ph.D. program may be found in the School of Graduate Studies section of this catalog.

Graduate Admission Policies and Procedures

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Graduate Post-Baccalaureate, Non-Graduate Student Classification (p. 457)

Graduate Admissions Policy

Graduate admission committees in each academic unit review applications and make recommendations for admission to the Dean of the School of Graduate Studies for final approval. Applicants must satisfy both the general campus requirements and the program-specific admission criteria for graduate study.

The general campus requirements for admission to graduate study in all UMKC graduate programs include:

1. A bachelor's or first-level professional degree from a regionally accredited institution. If the degree is from a non-U.S. college or university, the institution must be recognized and approved by the Ministry of Education or Commission responsible for higher education in the country where the degree is earned. The degree must at least be equivalent to a four-year U.S. bachelor's degree or first-level professional degree. The Registrar will vet and make a recommendation to Dean of School of Graduate Studies for approval.
2. A satisfactory academic record.

For program-specific requirements, applicants should consult the pertinent degree program listing in the UMKC catalog.

Many UMKC graduate degree programs require satisfactory scores from national examinations (e.g., Graduate Record Exam).

Graduate degree programs at UMKC have varying schedules for receiving, reviewing and acting on applications for admission. Applicants are directed to the program listings elsewhere in this catalog. This institution reserves the right to consider applicants for the most appropriate term.

Additional International Student Admission Policies

Proof of English Proficiency

International student applicants are required to establish proof of adequate English proficiency as part of the UMKC graduate admissions process. Applicants from countries in which English might be one of the official languages, but is not necessarily the first language of the majority of the population, must attain a minimum composite score on one of the following tests to be considered for admission:

- 213 (CBT) or 79 (iBT) on the Test of English as a Foreign Language (TOEFL),
- 6.0 on the International English Language Testing System (IELTS), with score of 5.5 in all bands
- 105 on the Duolingo English Test (DET)
- 1205 (paper) or 1200 (CBT) on the Global Test of English Communication (GTEC)
- 53 on the Pearson Test of English (PTE)

The results of the examination must be received by the UMKC International Student Affairs Office before the application deadline.

Required Academic Records for International Applicants

Applicants must provide complete and official certificates of all degrees, diplomas, mark sheets, grade reports and examination records. If documents are in another language, applicants must also provide a literal English translation.

International Applicants and Student Financial Statement

International students must present evidence of sufficient finances to cover their university and personal expenses while they are attending UMKC. A prescribed financial statement must be submitted with the other application materials. UMKC will not assume any financial responsibility for international students. Students seeking admission to the graduate level after an undergraduate program must submit a new financial support statement.

Graduate Study Application Procedure

In general, applications for admission to graduate study should be submitted online (<https://www.umkc.edu/apply/>). Prior to submitting application materials, applicants are strongly encouraged to review the campus minimum requirements, program-specific requirements, consult an advisor or program director from the program(s) of interest, and review requirements for graduate level tests, when applicable.

Admission to a degree program is subject to the recommendations of the graduate faculty in the degree program area and the dean of the academic unit in which the program is offered. Graduate admission decisions by the Dean of the School of Graduate Studies or designated representative are final.

Applicants must submit an official transcript from the school where their bachelor's degree(s) were obtained. Unless the transcript of the degree-granting institution includes the complete record of undergraduate work taken at all other schools, an official transcript from each of the other institutions also must be supplied. In addition, applicants must submit an official transcript from each school where other coursework has been taken or degrees have been obtained after the bachelor's degree. All credentials submitted in support of the application for admission become UMKC property and will not be returned to students, nor will UMKC release copies of such credentials to a third party.

The graduate degree programs at UMKC have varying schedules for receiving, reviewing, and acting on applications for admission. Before applying, applicants should contact the principal graduate advisor or program director for the chosen degree to determine program-specific deadlines. Lists of the names of the current principal graduate advisors and program directors are available, on request, from the School of Graduate Studies.

Graduate Admissions Categories - Degree-Seeking Students

The following six admissions categories are used for degree-seeking graduate students at UMKC:

1. **Regular Master's Degree Seeking - (Full Admit)** Degree-seeking graduate students admitted to a master's degree program without reservation.
2. **Conditional Master's Degree Seeking - (Provisional Graduate).** Degree-seeking graduate students admitted to a master's-level degree program who have not yet fulfilled all admissions requirements specified by the academic unit responsible for the degree program.
3. **Regular Educational-Specialist Degree Seeking - (Full Admit).** Degree-seeking graduate students admitted to an Educational-Specialist degree program in the School of Education without reservation.
4. **Conditional Educational-Specialist Degree Seeking - (Provisional Graduate).** Degree-seeking graduate students admitted to an Educational-Specialist degree program who have not yet fulfilled all admissions requirements specified by the School of Education.
5. **Regular Doctoral Degree Seeking - (Full Admit).** Degree-seeking graduate students admitted to a doctoral degree program (Ph.D. or D.M.A.) without reservation.
6. **Conditional Doctoral Degree Seeking - (Provisional Graduate).** Degree-seeking graduate students admitted to a Ph.D. or D.M.A. program who have not yet fulfilled all admission requirements specified by the academic unit responsible for the degree program.

Full admission of provisional graduate students to a degree program and appropriate reclassification are subject to students' removal of deficiencies and approval of satisfactory performance.

Admission to graduate study and to a particular degree program is no guarantee that students will be advanced to candidacy or granted a higher degree. All candidates are expected to perform at a consistently high level and to satisfy all the requirements for the degree. The final determination, as to whether or not students will be recommended for a graduate degree, is made by the graduate faculty in the fields concerned. The graduate faculty reserves the right to deal with exceptional cases on individual merit.

Degree-seeking graduate students who plan to change their field of study must reapply for admission and be regularly admitted to the desired graduate program in the new department or school.

Students admitted to any of the graduate classifications will be enrolled automatically for graduate credit in courses numbered 300 to 499 unless they indicate on their enrollment forms that they do not want graduate credit for the course or the instructor specifies the course may only be taken for undergraduate credit. Courses numbered 299 and below may not be taken for graduate credit, are not calculated in a student's graduate grade-point average and cannot be included as credit courses on a graduate student's program of study.

Graduate Admissions Categories - Non-degree Seeking Students

The following three admission categories are used for non-degree-seeking graduate students:

1. **Non-Regular Graduate - Continuing Education, Non-Degree-Seeking Student (Continuing Education):** Student taking courses for graduate credit through the Continuing Education. Admission to this category does not constitute regular admission to a graduate program at UMKC. However, on the recommendation of the advisor and approval by the graduate officer, a limited number of graduate credit courses (normally no more than six credit hours) may be applied to individual degree programs after students have been regularly admitted to do graduate study.
2. **Visiting Graduate Student - (Visiting):** Students who have been properly certified as graduate students at an accredited institution other than UMKC, and have permission to enroll in specific courses (including 5000-level courses) at UMKC. Note: Students who have previously been enrolled in a UMKC graduate program must have been in good academic standing at the end of their last UMKC graduate enrollment to take graduate courses as a visiting graduate student.
3. **Graduate Special Non-Degree Seeking - (Non-Degree Graduate Special):** This classification is used for three categories of students: (1) Community access, non-degree-seeking students wanting access to graduate level courses not available through continuing education; (2) Potential graduate applicants, not meeting requirements for conditional admission and wanting to take graduate-level courses in order to qualify for admission; and (3) Community access students applying to graduate certificate programs. The following restrictions apply to Non-Degree Graduate Special Classification graduate students: Students apply to the academic unit, if declared. If undeclared, students are admitted as undeclared non-degree seeking graduate students in the School of Graduate Studies.

All graduate admissions and academic regulation policies apply.

International students may not be issued I-20 forms for admission under a Non-Degree Graduate Special classification.

At the discretion of a department or area, the graduate-level courses completed within the past 7 years with a grade of B (3.0) or better while classified as a Non-Degree Graduate Special student may be applied toward a graduate degree in that department or area. Of the courses listed on a degree, no more than 12 semester credit hours may have been completed while enrolled as a Non-Degree Graduate Special student.

All non-degree-seeking graduate students (Continuing Education, Visiting, and Non-Degree Graduate Special) wishing to enter a degree program as a degree seeking student must apply for and be regularly admitted to the department or school from which they want to receive an advanced degree.

Students admitted to any of the graduate classifications (whether degree seeking or non-degree seeking) will be enrolled automatically for graduate credit in courses numbered 300 to 499 unless they indicate on their enrollment forms that they do not want graduate credit for the course or the instructor specifies the course may only be taken for undergraduate credit. Courses numbered 299 and below may not be taken for graduate credit, are not calculated in a student's graduate grade-point average and cannot be included as credit courses on a graduate student's program of study.

Graduate post-Bacclaureate, Non-Graduate Student Classification

Students who have earned a baccalaureate degree and who are seeking only additional undergraduate courses may be admitted under a post-baccalaureate (code 4-E) classification. Students in this classification are restricted to enrollment in courses numbered 499 and below and may not take any courses for graduate credit. Courses taken while classified as a code 4-E student may not be included for credit on a graduate degree program at a later date. Code 4-E students wanting to reclassify as graduate students for a future term must reapply and be regularly admitted to the graduate programs in which they want to seek advanced degrees.

General Graduate Academic Regulations

The minimum academic regulations and degree requirements for graduate study at UMKC, as outlined in the subsections that follow, have been determined by the UMKC graduate faculty through representation on the Graduate Council and the Committee of Graduate Officers, and apply to all graduate programs. Individual schools and departments may adopt additional and more stringent requirements for admission, retention and degrees that take priority over these minimum regulations. These additional requirements are detailed under the various fields of study in this catalog.

Academic Load Policies

Full-Time Academic Load Definition for Graduate Students

Graduate students enrolled in nine or more credits during a regular semester or five credits during a summer session are considered full-time students. All students registered for fewer than those specified totals are classified as part-time students, unless they hold an assistantship position at UMKC.

Full-time enrollment for students holding at least a .50 FTE graduate assistantship appointment is six hours in a regular semester or three hours in a summer session. GTAs/GRAs are expected to make normal progress toward their degrees and should enroll in a minimum of six hours per semester (three credits in the summer session). However, GTA/GRA appointees who have completed all required coursework for the degree and who are working full time on research need only enroll for one credit hour.

These designations of full time are for academic purposes only and do not apply to assessment of fees or degree program residency requirements. Note that this policy in no way alters the residency requirements and criteria for doctoral degrees. Further, international students holding GTA/GRA appointments also must abide by requirements of the U.S. Immigration Service and should consult the international student advisor before reducing their course loads.

Special Cases: Requests for GTA/GRA Appointments Greater than Half Time and Requests for Exemption from Social Security Withholding for GTAs/GRAs

GTA/GRA appointments are normally restricted to no more than 20 hours per week (.5 full-time employee). Requests for GTA/GRA appointments greater than .5 FTE must be submitted to the School of Graduate Studies prior to the beginning of the appointment and must be accompanied by a statement from the student's major advisor that the additional work load will neither place the student at risk academically nor impede the student's academic progress.

Graduate students holding GTA/GRA appointments are automatically exempt from Social Security withholding tax as long as they are enrolled in at least six credit hours. If the student's enrollment falls below six credit hours, the student's academic unit may certify his or her eligibility for continued exemption for one of the following two reasons:

- The GRA is a doctoral student working in a research laboratory as a component of the educational requirement and is enrolled in the minimum number of research hours required for doctoral students who have passed comprehensive examinations.

- The GTA or GRA is a graduate student enrolled in fewer than six credit hours because it is the student's exit semester.

Certification forms are available in the School of Graduate Studies office. The form requires signatures from the student's major advisor and the principal graduate advisor of the student's academic unit. After these individuals have signed the form, it must be sent to the School of Graduate Studies for recommendation. The School of Graduate Studies forwards the completed request to the Payroll Office for final action on the request.

Restricted Academic Loads

Limitation on the size of the academic load for which graduate students can register might be imposed by the dean or faculty advisor. Generally, students on probation are required to restrict the academic program to a minimum full-time load until they have returned to good standing.

Interpretation of Full-Time and Half-Time Status of Graduate Students for Purposes of Certification to Lending/Funding Agencies

To be eligible for certification of full-time status as a graduate student, a student must meet at least one of the following conditions:

- Enrollment in nine credit hours.
- Ph.D., D.M.A., D.N.P. and Ed.D. candidates who have passed their doctoral comprehensive examinations and are enrolled in at least one credit hour (not to exceed 10 semesters of certification under this category).

To be eligible for certification of half-time status as a graduate student, a student must be enrolled in at least five credit hours.

Special Cases and Limitations on Registrar's Certification to Lending/Funding Agencies:

- Ph.D. D.M.A., D.N.P. or Ed.D. students who have not taken and passed their doctoral comprehensive examinations and who do not meet one of the other enrollment qualifications for certification (e.g., student has completed most/all coursework, is completing pre-dissertation work, but has not yet taken and passed comprehensive exams) may petition the principal graduate advisor in their academic unit for special consideration. If, based on a review of the student's petition, the principal graduate advisor believes the student for full-time or half-time status, the principal graduate advisor may submit a request to the Registrar's Office.
- Work to satisfy an incomplete grade or grades from a previous term or terms does not count toward certification. Therefore, a class may be used only in status calculation for one term. Since the hours are used in status calculation during the original term of enrollment, that is the only term that the hours may be counted.
- Status may not be calculated nor certified for future terms.

Graduate Enrollment Policies

Graduate Course Addition Policy (p. 458)

Graduate Course Withdrawal Policy (p. 458)

Graduate Late/Retroactive Withdrawal Policy (p. 458)

Graduate Withdrawal for Financial Delinquency (p. 458)

Graduate Course Audit Policy (p. 459)

Graduate Continuous Enrollment Policy (p. 459)

Graduate Course Addition Policy

Students who want to enroll in an additional course may do so during the first week of the term provided they have the approval of the faculty advisor. Course additions or late enrollments after the first week of the term generally are not allowed. All changes in enrollment by graduate students must be initiated in the office of the principal graduate advisor or graduate officer of the respective unit and completed in the Registration and Records Office.

Graduate Course Withdrawal

Graduate students may withdraw from a course at any time prior to the first day of the final examination period, provided the permission of the faculty advisor has been obtained and notification to the instructor has been made. However, after the mid-term, students will be academically assessed. If failing at the time of withdrawal, students will be graded "WF" (withdrawn failing). *[Note: Individual academic units may have earlier deadlines for withdrawal.]*

Graduate Late/Retroactive Withdrawal

See Campus Late/Retroactive Withdrawal Policy (p. 494)

Graduate Withdrawal for Financial Delinquency

If students fail to fulfill financial obligations with the University after adequate notice, withdrawal from all courses during that term will result.

Graduate Course Audit

A student must be admitted to the university and obtain the consent of the instructor in order to audit a graduate course. Courses that ordinarily may not be audited are studio courses, performance courses, continuing education courses, laboratory courses in the sciences, internships, and practica. Students do not receive credit when auditing a course, and audited courses do not count toward enrollment status requirements (full-time, half-time).

A student registered in a course for audit is expected to attend class and to pay full tuition and fees. No feedback will be given by the instructor to the auditor. An auditor may be administratively withdrawn from a course at any time during the semester when, in the judgement of the instructor and upon approval by the dean, the attendance or participation record justifies such action.

Change from Audit to Credit

Graduate students may change status in a course from audit to credit during the first week of the term, provided they have the approval of the faculty advisor and have notified the course instructor.

Change from Credit to Audit

Graduate students may change status in a course from credit to audit any time prior to the final examination period, provided they have the consent of the course instructor and the approval of the faculty advisor. [Note: Individual academic units may have earlier deadlines and may have program-specific restrictions on retaking audited courses for credit.]

Graduate Continuous Enrollment Policy

Graduate Continuous Enrollment Requirement

After completing all courses included in the planned programs or plans of study for degrees, all degree-seeking graduate students must remain continuously enrolled in each regular semester up to and including the semester in which their degrees are awarded. This requirement applies also to the summer term for students whose degrees are being awarded at the end of a summer term. This continuous enrollment must be for a minimum of one-hour credit in research and thesis, research and dissertation, or other work designated by the department or school. Interruption of continuous registration due to failure to comply with this requirement will result in the need for readmission under requirements then in effect. Academic units may require retroactive enrollment as a condition of readmission.

Continuous Graduate Enrollment (5899)

Graduate students in good standing who have not enrolled for only one semester may re-enroll without applying for readmission. Students who attend other schools in the interim must submit transcripts of such work from each institution attended. Graduate students are considered inactive after a lapse of two or more regular semesters of enrollment. Subsequently, inactive graduate students who want to continue must follow the same admission procedures as those required for new applicants. After a lapse of three or more terms, graduate students will re-enter under requirements in effect at the time of readmission.

Graduate Course and Grading Policies

Graduate Course Designations (p. 459)

Graduate Credit for Continuing Education Courses (p. 460)

Graduate Course Restrictions for Undergraduates (p. 460)

Graduate Course Grading Policies (p. 461)

Graduate Course Designations

Course Designations

Courses numbered 5000 and above are generally open only to regularly admitted graduate students.

Courses numbered 5580 to 5589 generally are reserved for seminars, workshops, and special topics. Consult individual degree programs for possible restrictions on such offerings. The course numbers 5590 to 5598 usually are reserved for non-thesis research, directed studies, and readings. Courses numbered 5599 are restricted to research leading to a thesis. No more than 40 percent of courses numbered 5590 to 5599, or other courses which fall in the categories listed above for that course number range, may be applied to a graduate degree program of study, with the exception of the Interdisciplinary Ph.D. study.

Courses numbered 5695 to 5699 are restricted to research leading to a dissertation. Continuous Graduate Enrollment is numbered 5899.

Courses numbered 300 to 499 are upper division undergraduate courses. Graduate students who enroll in such courses have the option of designating them, at the time of enrollment, as "not for graduate credit." If the student chooses this option, the grade will not be included in the student's graduate grade-point average and the course may not be included on the graduate program/plan of study and will not count toward a graduate degree.

Courses numbered 300- or 400-level may be accepted for graduate credit, based on the following stipulations:

1. Supplementary work (e.g., additional readings, projects, papers and contact hours with the instructor) is assigned and appropriate assessment demonstrates graduate-level competency and achievement in the subject, as approved by the Graduate Council.
2. The course must be completed with a grade of B- (2.7) or better.
3. The total number of 300- to 400-level courses applied to the requirements for a graduate degree may not exceed 40 percent. For students in the PhD in Interdisciplinary Studies program, 300-400 level courses can comprise only 33 percent of the total number of courses on the approved Interdisciplinary Ph.D. plan of study.

Courses at the 100- and 200-level are not available for graduate credit and will not be applied toward the number of hours required for a graduate degree.

Graduate Credit for Continuing Education Courses

Graduate-credit courses are offered on an irregular basis at both off-campus and on-campus locations through non-credit and/or continuing education programs at UMKC, in conjunction with various instructional divisions.

Students may enroll in such courses and earn graduate credit without being regularly admitted to a graduate program. However, application of such credits toward a graduate degree can be determined only after students have been regularly admitted to graduate study. Such application depends upon the acceptance of students and the course by the School of Graduate Studies in consultation with the respective department or division offering the degree. Students must request that the School of Graduate Studies make a determination on whether these credits will satisfy the requirements of their particular educational goals and should make such determination before registering for the course.

Graduate Course Restrictions for Undergraduates

In addition to regularly admitted graduate students, seniors who meet the requirements below, and who have obtained the necessary approvals and received permission from the School of Graduate Studies may enroll in a limited number of courses numbered in the 5000 series and above, or may enroll in appropriate 300- and 400-level courses for graduate credit.

Minimum requirements

- Seniors within 12 credits of graduation who have a 3.0 GPA or better in their college work; or
- Seniors within 30 credits of graduation who have a 3.5 GPA in their college work.

To request permission to take a graduate-level course, the senior must:

1. Obtain a request to take graduate-level course form and an advising transcript from the Registrar's Office. (Forms also are available on-line at <http://sgs.umkc.edu/forms/>)
2. Fill out the request to take graduate-level course form, with all required signatures, and attach a copy of the advising transcript.
3. Submit the form to the School of Graduate Studies for final approval no later than four weeks before regular registration.

In all cases, eligible students may enroll in no more than six credits of graduate-level courses or courses for graduate credit through this procedure. In addition, first-semester seniors who enroll in graduate-level courses are limited to a total enrollment of no more than 15 hours for the semester. Graduate-level courses (5000 and above) are to be selected from those courses generally offered to first-semester or first-year graduate students. Courses such as special topics, individual studies and directed research designed for advanced graduate students are not eligible under these provisions.

Students may petition that the courses can be taken for graduate credit or undergraduate credit. Credit may be applied to requirements for a graduate or a bachelor's degree, but not both unless the course is part of an approved Bachelor's-Master's Dual Degree program or Bachelor's-Graduate Certificate program to which the student has already been admitted.

Requests by students who meet all the requirements stated above will be approved by the Dean of the School of Graduate Studies or designated representative. In exceptional cases, students who do not meet the requirements stated above may present a petition to the Dean of the School of Graduate Studies. Such petitions must be presented to the school no later than four weeks before the beginning of the term for which enrollment is sought.

Students who do not meet the above criteria but who register for a graduate-level course will be withdrawn administratively from the course. Fees paid for the course will be refunded.

Graduate Course Grading Grading System

The following is the +/- grading scale and grade-point system used at UMKC. This +/- grading scale and grade point system is used by all faculty, in all undergraduate, graduate, and professional programs.

Letter Grade	Description	Points per Semester Hour
A	The highest grade	4.0
A-		3.7
B+		3.3
B	Work of distinction	3.0
B-		2.7
C+		2.3
C	Average work	2.0
C-		1.7
D+		1.3
D	Passing, but unsatisfactory	1.0
D-		0.7
F	Failure without credit	0.0
NR	Not Reported	0.0
WF	Withdrew Failing	0.0
W	Withdrew; no academic assessment	-
I	Incomplete	-
AT	Audit	-
CR	Credit only	-
NC	No Credit	-
P	Passing	-
S	Satisfactory	-

In terms prior to and including 1985, any of the above grades may have been preceded by an R indicating a repeated course. These grades were not included in either total hours or the grade-point average. (Examples: RC, RD, RF.) Since 1985, all grades, including those in repeated courses, are included in the GPA calculation. Starting the 1993 Fall Semester, UMKC began using the plus/minus grading system for grades A, B, C and D. The grade of A+ is valid only for students in the School of Law.

Incomplete Grades

An instructor may give a grade of incomplete (I) to students who have been unable to complete the work of the course because of illness or other valid reasons beyond their control. Students who receive an incomplete must complete the required work within one calendar year to avoid an F (failure without credit). The instructor may specify a shorter completion period. A grade of incomplete is only appropriate when enough work in the course has been completed that the student can finish the remaining work without re-enrolling in the course in question, or by attending additional classes. In other instances, students should withdraw. ***Students cannot re-enroll in a course for which an incomplete remains on the record. Furthermore, graduate students cannot graduate with an incomplete on their record.***

This policy is exclusive of those courses which are considered directed individual studies, internships, special topics, practica, research and thesis, and research and dissertation courses. Because completion of such courses will quite often span several terms, incomplete grades assigned in such courses will not automatically lapse to an "F" grade after one calendar year, but will adhere to the completion period specified by the instructor.

Repeated Graduate-Credit Courses

Whenever students repeat a graduate-credit course, they must submit a course repeat form to the Office of the Registrar no later than the fourth week of the term. Students seeking graduate degrees are limited to repeating no more than 20 percent of the credits applicable toward a graduate degree. If approved by the school or department or Interdisciplinary Ph.D. supervisory committee, students may repeat a course once to improve the grade-point average or satisfy the program requirements. The second grade received will be used to calculate the grade-point average that will be used in satisfying degree requirements.

Graduate Requirements for Retention and Eligibility

Graduate Probation Policy (p. 462)

Graduate Ineligibility Policies (p. 462)

Graduate Probation Policy

Graduate students, regardless of classification, must maintain a 3.0 (B) grade-point average (GPA) in all coursework taken for graduate credit at UMKC and must meet any additional academic requirements imposed by the school, department or program. Students are responsible for keeping apprised of their academic status by referring to term grades and their permanent academic record on file in the UMKC Registration and Records Office.

Whenever the cumulative GPA for UMKC courses taken for graduate credit by a graduate student of any classification falls below 3.0, the student's status for the next term becomes: "On Probation - See principal graduate advisor." (Interdisciplinary Ph.D. students will be directed to consult their interim advisor or research advisor.) The principal graduate advisor, interim advisor or research advisor will review the student's progress and provide counsel, and the following conditions apply:

1. While on probation, a graduate student must achieve a 3.0 term GPA in order to enroll for the following term.
2. A graduate student on probation who is not restored to good academic standing by the end of two successive regular semesters following the term in which the cumulative GPA fell below 3.0 will be declared ineligible. See the Graduate Ineligibility Policy.
3. A graduate student on probation will not be restored to good standing until a cumulative graduate-credit GPA of at least 3.0 is achieved.

Graduate Ineligibility Policies

Ineligibility Following Academic Probation

In the case of ineligibility following academic probation (see Graduate Probation Policy), the graduate student may present a petition for re-enrollment to the principal graduate advisor of the student's academic program. Petitions will be reviewed by the graduate faculty member responsible for the student's degree program. That faculty member will make a written recommendation to the Dean of the School of Graduate Studies, who will approve or deny the petition. The approval or denial action may include:

- Approval for further graduate study in the student's current field of study and in the same classification but on a restricted probation basis (as defined in written remediation plan contract).
- Approval for further graduate study in the student's current field of study in a different student classification and on a restricted basis.
- Denial for further graduate study in the student's current field but approval for undergraduate study only.
- Denial for further study, either graduate or undergraduate, in the student's current field of study.

Ineligibility Due to Unsatisfactory Progress or Performance

When a department, school or program, irrespective of a student's grade-point average, considers a graduate student's performance to be unsatisfactory, that department, school, or program may recommend to the Dean of the School of Graduate Studies that the student be reclassified or declared ineligible for further study. The Dean of the School of Graduate Studies reviews the recommendation and conveys a decision to the student, respective faculty group, and academic unit Dean.

Students who have been declared ineligible due to unsatisfactory progress or performance may appeal such decisions to the Provost, as the Chief Academic Officer of the University. Such appeals must be made in writing within 14 consecutive days after receipt of the notification to the student of the decision.

The decision of the Provost, as the Chancellor's designated representative in such cases, is final and will be communicated in writing to the following:

1. The student
2. The Dean of the School of Graduate Studies
3. The graduate faculty review group(s)
4. The academic dean or director
5. The Registrar

Requirements for Graduation

Graduate Program of Study (p. 463)

Graduate Thesis / Dissertation Preparation and Approval (p. 463)

Graduate Thesis / Dissertation Embargo (p. 464)

Graduate Application for Graduation (p. 464)

Graduate Time Limit on Degree Credit for Master's and Educational Specialist Degrees (p. 464)

Graduate Program of Study

Graduate education is intended to answer the personal needs of students and the special needs of society not satisfied through undergraduate training. Graduate degrees indicate that the holders have sufficiently mastered a program in a particular field to pursue creative projects in that specialty. The degrees are awarded for completion of a coherent program – formalized as the program or plan of study – designed to assure the mastery of specified knowledge and skills. Forms for specifying individual programs or plans of study are available from the principal graduate advisor or graduate officer of the academic unit, with final approval by the Dean of the School of Graduate Studies.

Students may elect to fulfill either the degree requirements in effect at the time of their original admission (provided there has not been a lapse in attendance at UMKC of more than two consecutive terms) or the degree requirements in effect at the time of advisement into a planned graduate program of study.

No course at the 300- or 400-level taken on a credit/no credit basis; no 300- or 400-level course with a grade below B- (2.7); and no 5000-level or higher course with a grade below C (2.0), will count toward any advanced degree program. Additionally, 80 percent of the credits for the degree must be passed with a grade of B (3.0) or better.

Students admitted to the combined J.D./MBA program must receive grades of B or better in 80 percent of Bloch School courses. Because of different grading standards, the transferred law hours are not included in the 80 percent calculation.

Degree programs may have requirements which are more stringent. If so, the program requirement takes precedence over the campus minimums. Final GPA at the time the degree is conferred (graduate certificates, masters and PhD degrees) must be 3.0 or higher for courses completed on the plan of study. Exceptions to this policy require a petition signed by the student's advisor and the Dean of the School of Graduate Studies.

Doctoral Programs of Study

See Doctoral Degree Program Academic Regulations

Master's Degree Program of Study

See Master's Degree Program Academic Regulations

Thesis / Dissertation Preparation and Approval

Formatting Regulations

The School of Graduate Studies, guided by the Graduate Council, establishes the format regulations for theses and dissertations (T/Ds) at UMKC. Degree candidates must adhere to the formatting regulations outlined in the "University of Missouri-Kansas City Guide to Formatting Theses and Dissertations" which is available on the SGS website. Academic programs must have bibliographic reference format approved by, and on file with, the School of Graduate Studies. Any variances from the standards outlined in the "University of Missouri-Kansas City Guide to Formatting Theses and Dissertations" and discipline-approved bibliographic reference styles must be requested in writing and approved in advance by the Dean of the School of Graduate Studies. The Dean's approval must be included as an appendix to the T/D.

Supervisory Committee Review and Approval of T/Ds

Approval of the T/D begins with the degree candidate's supervisory committee. The candidate's supervisory committee shall ensure that the scholarly content and style of the T/D is in keeping with recognized standards of the chosen discipline(s). The T/D supervisory committee chair has the option of asking committee members to complete a Master's Pre-Oral Defense form or Doctoral Dissertation Pre-Oral Defense form to ensure the committee members feel the work is complete and ready for final defense by the candidate.

School of Graduate Studies Review and Certification of Acceptance of T/Ds

The deadline for submitting the T/D to the School of Graduate Studies for certification of acceptance is approximately six weeks before the end of the fall or spring semesters and four weeks before the end of the summer session. The dates can be found on the School of Graduate Studies (<https://sgs.umkc.edu/current-students/ready-to-graduate/>) web site. Prior to the published deadline for the term in which the degree candidates expect to graduate, they must present the following to the School of Graduate Studies office:

- Electronic copy of the T/D emailed to sgs@umkc.edu
- The signed Preliminary Approval of T/D by Supervisory Committee form, if required by the supervisory committee chair.
- MOSpace Non-Exclusive Distribution License

T/Ds normally will not be accepted for review for graduation during the current term unless they are received in the School of Graduate Studies by the published deadline.

All T/Ds must be reviewed by the SGS Thesis/Dissertation Formatting Specialist for conformity to the campus formatting standards and by the School of Graduate Studies Dean for quality of content. Candidates are required to make all necessary formatting corrections and resubmit the T/D to the School of Graduate Studies by the semester deadline.

After the T/D defense, the candidate must submit a corrected final draft electronically to sgs@umkc.edu, and the candidate's advisor should send the final evaluation forms from all committee members. The School of Graduate Studies Dean will review the thesis or dissertation for certification of acceptance. If the T/D has significant formatting problems, it will be returned to the candidate without further review or certification. The candidate will be required to make all necessary formatting corrections and resubmit the T/D to the School of Graduate Studies. If this happens, the candidate's graduation may be delayed. Enrollment in an additional term of continuous-graduate enrollment may be required.

Preliminary approval forms, Master's Thesis Preliminary and Final evaluation forms and Doctoral Dissertation Preliminary and Final evaluation forms are available from the School of Graduate Studies website.

The School of Graduate Studies will hold the certificate of acceptance until all appropriate revisions are made and rechecked by the formatting specialist. Upon final approval, SGS will provide the candidate with the certificate of acceptance and instructions for submitting the final copy to ProQuest.

Deposit of T/Ds with the Library

Upon submission to ProQuest, the T/D is transmitted to the University of Missouri system institutional repository, MOspace, where the document is made available via the world wide web. ProQuest will handle the copyrighting process for theses and dissertations, if desired by the candidate. Students will pay an archival copy fee when they upload the document, plus an additional fee if they choose to have ProQuest handle the copyright registration.

Thesis / Dissertation Embargo Policy

The School of Graduate Studies requires that all theses and dissertations be made publicly available upon degree conferral.

The School of Graduate Studies will consider requests for delay in public access to a dissertation for up to one year if:

1. The student (which may include partnerships with advisor/collaborators) is applying for a patent on research contained in the dissertation, and does not wish to make the contents public until the patent application has been filed.
2. Patentable rights in the work or other issues in which disclosure may be detrimental to the rights or interests of the author.
3. The need to prevent disclosure of any sponsor information about persons, institutions, technologies, and proprietary information that has restricted time frames.
4. The interest of an academic or commercial press in acquiring the rights to publish a dissertation or thesis as a book or composition.
5. Content that is likely to be or has already been submitted to a peer-reviewed journal.

For instances in which the full text of thesis or dissertation will be embargoed, the title and abstract will be made available after degree conferral.

Requests must be initiated by the student, and require the approval of the committee chair/co-chair, committee, and unit dean prior to review and approval by the Dean of the School of Graduate Studies. When appropriate, and with proper documentation, extensions of up to one year can be requested.

Application for Graduation

Students are required to file an application for graduation with the Registrar no later than the end of the fourth week of the semester in which the degree(s) will be completed. Students graduating at the end of the summer session must file an application for graduation no later than the end of the second week of the summer session. An approved program/plan of study must be on file with the registrar at the time the student makes the application to graduate. Filing an application for graduation initiates a degree check in the Registrar's Office. Any student found to be missing degree requirements, based on their program requirements and approved program/plan of study at the time of the degree check will be notified by the Registrar, and missing degree requirements must be completed before the student will be cleared for graduation.

The application for graduation places the student's name in the commencement program. Once the completion of degree requirements has been certified by the Registrar, the Registrar's Office will authorize the diploma order.

Commencement

Advanced degree candidates are urged to attend commencement. Students should arrange for rental or purchase of a cap and gown at the University Bookstore at least six weeks before the graduation date.

Time Limit on Degree Credit for Master's and Education Specialist Degrees

Credit over seven years old at the time of graduation, which is included on the master's or educational-specialist program of study and has not been applied to a previous degree, may not be counted toward the fulfillment of a graduate degree program unless validated to the satisfaction of the

department or school and the School of Graduate Studies. Petitions and affidavits for this purpose may be obtained from the School of Graduate Studies. A maximum of 30 percent of the student's program of study may be validated under this procedure.

In connection with an authorized leave of absence, an exception to the time limitation may be approved in advance.

International Graduate Student Academic Regulations

Graduate International Student Policies (p. 465)

Graduate International Student Instructor and Teaching Assistant Policy (p. 465)

Graduate International Student Policies

Registration with Student Advisor

Admitted international students must clear their attendance and register at the International Student Affairs Office (ISAO) prior to their first course registration at UMKC.

Health Insurance

International students are required to purchase UMKC mandatory, exclusive health insurance.

English Proficiency Requirements

Prior to their first enrollment in classes at UMKC, newly admitted international graduate students must register with the UMKC Applied Language Institute (ALI), and unless exempt by their academic unit, they must take the English Evaluation Examination.

Based on results of the English Evaluation Examination scores, students must enroll in and successfully complete the ALI courses indicated as necessary by the student's academic unit in consultation with the UMKC Applied Language Institute.

Prospective international graduate students should be aware that required coursework in English as a second language may add extra time to their individual graduate programs of study.

International graduate students exempted from this admissions policy include the following:

Native English speakers from English-speaking countries such as Canada, England, the Republic of Ireland, Australia and New Zealand.

Non-native English speakers who hold degrees or diplomas from post-secondary institutions in English-speaking countries (such as the United States, Canada, England, the Republic of Ireland, Australia and New Zealand), provided that they have spent a minimum of two years of successful full-time study and English was the medium of instruction.

Graduate International Student Instructor and Teaching Assistant Policy

Policy on Award of Teaching Assistantships

In 1986, the Missouri State Legislature and the University of Missouri Board of Curators adopted a policy which seeks to guarantee effective, high quality instruction for undergraduates. The state has mandated, and the Board of Curators fully supports the ruling, that graduate students who did not receive both their primary and secondary education in a nation or territory in which English is the primary language **may not** hold a teaching appointment during their first term of enrollment at any public institution of higher education in the state of Missouri. In addition, all such students shall be tested for their ability to communicate orally in English in a classroom setting and, those students who have not previously lived in the United States shall be given a cultural orientation to prepare them for teaching prior to receiving an appointment.

The first two requirements are dictated by the Missouri Revised Statutes, Section 170.012, (<http://www.moga.mo.gov/mostatutes/stathtml/17000000121.html>) and do not represent a change to the UMKC certification requirements:

- Students in the above category may not hold a GTA appointment during their first term of enrollment at UMKC.
- If students in this category have not previously lived in the United States, they must participate in a cultural orientation to prepare them for their teaching appointment.

Additional UMKC Certification Requirements

In addition to the requirements dictated by Missouri law, a graduate student from a nation or territory other than the U.S. must have satisfied each of the following standards in order to be certified to accept a GTA or GI appointment at UMKC. The only exceptions are for students who have earned a degree (undergraduate for which the last two years of education were completed in the U.S. or graduate) from a U.S. institution. Admission to UMKC does not guarantee a GTA or GI appointment; consistent with Missouri law, students must fulfill separate certification requirements in order to be eligible for GTA or GI positions. The UMKC certification requirements include:

1. Attain a qualifying TOEFL or equivalent* score:

- 24+ is eligible for certification assessment (generally an oral examination in the form of a mock lecture presented to a panel presentation).
- 22-23 requires a departmental petition in order to participate in the certification assessment.
- <22 requires an Applied Language Institute oral interview in order to determine eligibility for the certification assessment.

*** GRE TOEFL Speaking Equivalency:**

TOEFL	24	22-23	<22
GTEC (paper)	433-438	412-432	<412
GTEC (CBT)	306-310	281-305	<281
IELTS Speaking Band	7.5	7	<7
PTE	72	64-71	<64

Note. The Duolingo English Test does not have a TOEFL Speaking Equivalency score and cannot be used to satisfy the GTA certification testing requirement.

2. Attend the SGS GTA/GI Cultural Orientation.

3. Certification Assessment: Obtain a passing score on an oral examination of language comprehension, fluency, vocabulary, pronunciation, and grammar. This is generally a mock lecture presented to a panel of faculty and students.

Information about the UMKC certification requirements, including the dates for the cultural orientation and procedures for the certification assessment can be found on the SGS website: <https://sgs.umkc.edu/>.

Master's Degree Academic Regulations

The following general campus regulations pertain specifically to the master's degree. Master's students also should refer to Graduate Academic Regulations (p. 454) earlier in this catalog section for regulations common to all graduate degrees at UMKC and to specific degree program requirements in other sections of this catalog.

Master's Degree Advisor-Supervisory Committee (p. 466)

Master's Degree Qualifying Examination (p. 467)

Master's Degree Program of Study (p. 466)

Master's Degree Transfer Credit Policy (p. 467)

Master's Degree Final Master's Competency Examination (p. 466)

Master's Thesis Policies (p. 467)

Final Master's Competency Examination

The final master's competency examination, if required, will be written, oral, or both at the discretion of the program or academic unit, and will be passed no later than three weeks prior to the anticipated date of graduation. The student's supervisory committee chair will report the results of the final competency examination in writing to the candidate, the School of Graduate Studies, and file a copy with Registrar.

Master's Degree Advisory / Supervisory Committee

Upon admission to a master's program, the program or academic unit will assign the student an advisor who is a member of the graduate faculty. When research and a thesis are degree requirements or the student has selected a thesis option, the program or academic unit will appoint two additional faculty members to serve on the graduate student's supervisory committee. The chair and a majority of the members of a master's student supervisory committee must be full members of the graduate faculty.

Master's Degree Program of Study

In consultation with the advisor or the supervisory committee, the master's student plans a program of study in accordance with the minimum requirements outlined in the SGS Academic Regulations and the specific degree program requirements. Upon approval from the advisor and/or supervisory committee and unit graduate officer, programs of study should be approved by the Dean of the School of Graduate Studies and filed with the Registrar prior to the completion of 50% of applicable degree coursework.

Master's degree programs of study must include a minimum of 30 graduate credits. No more than 40 percent of the credits on the program may be 300- and 400-level courses. At least 60 percent of the credits must be at the 5000 level or higher. Further, up to six credits may be allowed for Research and Thesis (5599). Other demonstrations of skills considered by the department or school as comparable to the thesis may be accepted. No more than 40 percent of the courses applied toward a master's degree program of study may be in the categories of non-thesis research, directed studies, readings or research and thesis. Such courses normally fall in the 5500 to 5599 range, but the numerical designations may vary among academic units.

Plan of study forms are available from the program director or academic unit.

Program Changes

Subsequent changes in the program of study must be approved by the student's advisor and/or supervisory committee, the unit graduate officer, and Dean of the School of Graduate Studies, and be submitted to the Registrar. If cumulative changes in courses or degree requirements exceed four, a new program of study should be filed.

Master's Degree Qualifying Examination

Programs may require a qualifying examination. If required, the examination must be passed before a master's program/plan of study is filed with the Registrar. The department or school will notify students of the date, time, and format of the examination. Programs are required to maintain documentation of the student's examination results. With the approval of the advisor and the supervisory committee, if such exists, students may take the qualifying examination a second time.

Master's Degree Transfer Credit

A maximum of 20 percent of the graduate credit hours appearing on the program of study (rounded up) may be transferred from a recognized graduate school for a master's degree at UMKC. Such transfer credits must meet with approval of the student's supervisory committee and appropriate principal graduate advisor or graduate officer and be in accordance with all of the following criteria:

1. The coursework must be:

- Offered by a regionally accredited school.
- Applied toward a graduate degree at the host institution and taken for graduate credit.
- Approved by the appropriate graduate faculty.

2. A grade of B (3.0) or higher for 300- and 400-level courses and C (2.0) or higher for 5000-level courses or other courses restricted to graduate students only must have been earned. (CR or P will be accepted on receipt of a statement from the institution where credit was received of letter grade equivalent meeting grade standards as stated above).

Transfer credit may be allowed for correspondence courses, provided the credits meet the criteria outlined in 1 and 2 above. Transfer credit will not be accepted for research and thesis/dissertation hours (defined by UMKC), travel experience or work/life experience. Foreign university transfer credit must meet the above criteria as attested by the registrar.

A majority of the coursework applicable to any graduate degree at UMKC must be completed at UMKC. UM traveling scholar credits are not considered transfer credits. However, the sum total of credits from other UM campuses, and other transfer credits (not more than 20 percent of the total credits) cannot exceed 14 credits on a 30-credit master's degree program, or a proportional equivalent (approximately 46 percent) on programs exceeding 30 credits; and must be within the limits stated above.

A student who has been awarded a master's degree at UMKC or another regionally accredited graduate school may petition the faculty to apply up to six hours of graduate credit earned on the first degree toward meeting the requirements of a second master's degree. Credit, so approved, not from UMKC will be subject to all preceding transfer credit criteria.

After approval of the program of study, graduate credit may be earned at another institution only with prior approval of the Dean of the School of Graduate Studies. Forms to request such approval are available from the Registration and Records Office. A current catalog of the institution where the course is to be taken or an official catalog description of each course must be attached to the request form. The official transcript for such work must be forwarded to the Registration Office upon completion of the course.

Master's Thesis Policies

Thesis Definition

A thesis is a process that results in an original composition that involves quality work and creativity. This may include definition of goals or research questions, a review of the existing literature or background information, collection of data or information to present as results, and/or a discussion of results and findings, and citations. The research and final document should be of appropriate scholarly quality, as judged by the thesis committee.

Thesis Preparation and Approval

Please see the Graduate Thesis/Dissertation Preparation and Approval Process Policy. (p. 463)

Final Thesis Examination and Supervisory Committee Approval

The format and procedures of the final examination in defense of the thesis are determined by the supervisory committee and its chair. The defense of the thesis is approved when a majority of the supervisory committee members recommend approval and sign the Report of the Result of Final Master's Thesis Examination form.

Within 48 hours of the defense, the supervisory committee chair shall report the results of the final thesis examination in writing to the candidate.

Programs are required to submit the Final Thesis Evaluation Forms to the School of Graduate Studies. Forms are available from the School of Graduate Studies web site (<https://sgs.umkc.edu/current-students/ready-to-graduate/>). The School of Graduate Studies reports final approval of the thesis to the Registrar.

Deposit of Approved Thesis with Libraries

Please see the Graduate Thesis/Dissertation Preparation and Approval Process Policy.

Doctoral Degree Programs (Ed.D., Ph.D., D.M.A.)

Doctoral Advisor / Supervisory Committee (p. 468)

Doctoral Qualifying Examinations (p. 470)

Doctoral Programs of Study (p. 469)

Doctoral Transfer Credit Policy (p. 470)

Doctoral Residency Requirements (p. 470)

Doctoral Comprehensive Examination (p. 468)

Doctoral Program Time constraints (p. 470)

Doctoral Dissertation Policies (p. 469)

Doctoral Advisor / Supervisory Committee

Upon admission to a doctoral program, all students will be assigned a doctoral advisor who functions as a mentor and guides the student in the completion of degree requirements and scholarly work. A temporary advisor (e.g., program director) can be assigned initially in programs that assign doctoral (research) advisors after the completion of rotations or other developmental experiences. Normally, the doctoral advisor will serve as the dissertation committee chair, once the student reaches doctoral candidacy. The dissertation committee must be chaired by a member of the UMKC doctoral faculty. In some cases, following the procedures of the specific program, the doctoral advisor need not be the dissertation committee chair but must be, at a minimum, either a graduate faculty or adjunct graduate faculty member.

Ph.D., Ed.D., and D.M.A. student dissertation committees must have at least four members. The majority of the members must be doctoral faculty or regular graduate faculty members.

See the Interdisciplinary Ph.D. academic regulations (<https://catalog.umkc.edu/colleges-schools/graduate-studies/minimum-interdisciplinary-phd-academic-regulations-degree-requirements/>) for additional specifications for Interdisciplinary Ph.D. supervisory committees.

Doctoral Comprehensive Examinations

To advance to degree candidacy, doctoral students are required to pass a comprehensive examination. D.M.A. students may satisfy the comprehensive examination requirement during their final semester. For all other doctoral students, the comprehensive examination must be successfully completed at least seven months before the date of graduation:

- For graduation in May: Nov. 1.
- For graduation in July: Dec. 1.
- For graduation in December: May 1.

The following requirements must have been met before students can take the comprehensive examination(s):

1. Assignment of a supervisory committee, if required.
2. Successful completion of the qualifying examination, if required.
3. Filing and approval of the program of study and completion of the majority of coursework required for the degree.

4. If required by the academic unit, satisfactory demonstration of foreign language proficiency through accepted coursework or other evidence specified by the student's supervisory committee.
5. Completion of residency.

The comprehensive examination may be written, oral, or both. In consultation with the Dean of the School of Graduate Studies, programs determine if the exam is scheduled on demand or is set on a calendar basis. In most cases the examination committee is also the dissertation/supervisory committee; in other cases the dissertation committee is formed after successful completion of the comprehensive examination. If an oral examination is required as part of the comprehensive examination, all members of the examining committee are required to attend the entire exam. Synchronous modes of communication or committee substitutes are allowed if approved by the unit graduate officer, in consultation with the chair of the student's examining committee, when physical presence conflicts with a major commitment.

The examination will be arranged and supervised by the advisor or other department official. It will generally terminate within one month after it starts, but longer or shorter periods may be required in specific disciplines. Upon satisfactory completion of the examination, the student's advisor sends a report of the results of the examination, with the signatures of all members of the examining committee, to the School of Graduate Studies and the Registrar.

Programs are required to use objective scoring criteria (e.g., rubric) and establish criteria for passing/failing the exam provided to the students in advance. Program criteria should be on file with the School of Graduate Studies. If failure is reported, the examining committee will either recommend termination of status as a doctoral student or suggest additional work or other remedial measures. Furthermore, a student who has failed may not take a second examination for at least 12 weeks. Failure of a second comprehensive examination shall automatically preclude candidacy at this institution.

Doctoral Dissertation Policies

Dissertation Definition

A dissertation is a written coherent treatise culminating from original in-depth research, that is of publishable quality for a peer-refereed journal, and is a requirement of the highest academic degree, a Doctor of Philosophy. The work should move the field forward by making significant contributions to the existing body of knowledge. It may include statement of goals, an in-depth review and critical analysis of the existing literature and background information, a plan of research or methodology, collection and analysis of data to present as results, a discussion of the findings, and citations.

Doctoral Dissertation Requirement

All UMKC Ph.D. degrees and the Ed.D. degree require a dissertation as the final component of the program. The dissertation is also a requirement in some D.M.A. programs and an option in others. The doctoral faculty view the dissertation as one of the most important aspects of the student's experience because:

- It is a work of original research or scholarship that makes a contribution to existing knowledge.
- It is an educational experience that demonstrates the candidate's mastery of research methods and tools of the specialized fields.

It demonstrates the candidate's ability to address a major intellectual problem. For regulations pertaining to formatting the dissertation and the process for approval, the reader is directed to Thesis and Dissertation Preparation and Approval Policy.

Final Dissertation Examination

Final examinations in defense of the dissertation are generally open to all members of the public. The format and procedures of the defense are determined by the program and communicated to the student prior to the defense. The date, time, and location must be announced and published at least two weeks before each final examination takes place. This examination may be conducted only after the dissertation has been approved by the Dean of the School of Graduate Studies. The student and all members of the dissertation committee, or substitutes approved in consultation with the chair of the committee by graduate officers in the academic units where the degree or primary discipline resides, are required to attend the entire examination. Synchronous electronic modes of communication are allowed for both the student and committee members when physical presence conflicts with a major commitment upon approval of the unit graduate officer.

The defense of the dissertation is approved when a majority of the supervisory committee recommends approval and signs the Report of the Result of Final Doctoral Examination form. Within 48 hours of the defense, the supervisory committee chair will report the results of the final dissertation examination in writing to the candidate and the School of Graduate Studies.

Students are required to submit the Report of Results of Final Dissertation Examination for PhD Candidates to the School of Graduate Studies with the final dissertation document. Forms are available from the School of Graduate Studies website (<https://sgs.umkc.edu/current-students/ready-to-graduate/>). The School of Graduate Studies reports final approval of the dissertation to the Registrar.

Doctoral Program of Study

Students should plan their programs of study in consultation with their advisors and supervisory committees (if applicable). Upon approval from the advisor and/or supervisory committee and unit graduate officer, programs of study should be approved by the Dean of the School of Graduate Studies.

and filed with the Registrar prior to the completion of 50% of applicable degree coursework. (Interdisciplinary Ph.D. students must file their proposed plans of study and form their supervisory committees within 24 months of being admitted).

No more than 40 percent of the program may be 300- and 400-level courses.

Subsequent changes in the program of study must be approved by the student's advisor and/or supervisory committee, the unit graduate officer, and Dean of the School of Graduate Studies, and be submitted to the Registrar. If cumulative changes in courses or degree requirements exceed four, a new program of study should be filed.

Forms for specifying individual programs of study are available from the principal graduate advisor or graduate officer of each academic unit.

Doctoral Program Time Constraints

The doctoral student must take and pass the doctoral comprehensive examination and advance to candidacy within five years from the beginning of doctoral coursework. After the establishment of degree candidacy, a maximum of five years will be allowed for completion of degree requirements. Failure to complete the work within the five years will necessitate re-evaluation of the entire program and may result in a notice of termination. In compelling circumstances and on the written recommendation of the student's program, the Dean of the School of Graduate Studies may grant a one-year extension. Some academic units may impose more stringent time requirements.

Doctoral Qualifying Examinations

The qualifying examination, if required, will be given before the doctoral program of study is filed with the Registrar. At the discretion of the program or unit, a master's degree from UMKC in the area of intended specialization may be considered as a substitute for the qualifying examination. The results of the qualifying examination will be reported to the School of Graduate Studies and the Registrar. With approval of the advisor, students may take the qualifying examination a second time.

Doctoral Residency Requirements

Interdisciplinary Ph.D. Students

Interdisciplinary Ph.D. students must satisfy the doctoral residency requirement by satisfactory completion of at least 18 credits in no more than 24 consecutive months following the approved Plan of Study. When satisfying the residency requirement, all Interdisciplinary Ph.D. students are subject to the following restrictions:

- The doctoral residency requirement must be satisfied no later than the end of the semester in which the student completes his or her comprehensive examinations.
- Students must achieve a cumulative graduate grade-point average of at least 3.0 in all courses counted toward satisfying the residency requirement.
- Dissertation research credits (5696 to 5699) may not be counted toward satisfying the doctoral residency requirement

Ph.D. and Ed.D. Students

The residency requirement for the PhD and Ed.D. student may be satisfied using the same guidelines stipulated for Interdisciplinary Ph.D. students, or in any one of the following alternate ways:

- Two consecutive semesters of 12 credits each term of resident coursework at UMKC.
- Three terms of eight credits each term of resident coursework at UMKC, to be completed within 18 months.
- Two consecutive semesters of nine credits each term of resident coursework at UMKC while employed at least half time for the University in teaching or research.

D.M.A. Students

The residency requirement for the D.M.A. may be satisfied in any one of the following ways:

- Two consecutive semesters with a minimum of nine credits each.
- One semester with a minimum of nine credits and two summer sessions with a minimum of five credits each, provided that the full-time semester is adjacent to one of the summer sessions. It is expected that the summer sessions be consecutive.
- Completion of 24 credits within 18 consecutive months.

Doctoral Transfer Credit

Graduate credit, offered by a regionally accredited school, earned before entering a UMKC doctoral program may be applied to the doctoral degree if it is of acceptable quality and appropriate to the student's program of study as determined by the student's academic unit and supervisory committee. The total amount of graduate credit earned from all other academic institutions before admission to a UMKC doctoral program and applied to the

doctoral degree cannot exceed half the number of credit hours, exclusive of dissertation research credits, required for the degree. For graduate coursework completed at UMKC prior to admission to a doctoral program, any number of credit hours required for the doctoral degree, exclusive of dissertation research, can be satisfied using previous UMKC graduate credit if approved by the student's academic unit and supervisory committee. All graduate coursework, completed prior to admission and not used to earn the master's degree or educational-specialist degree, must be no more than seven years old at the time the doctoral program of study is approved.

After admission to the doctoral program, if a student wishes to take graduate coursework at another institution and apply it to their doctoral program, the student must receive written approval from the doctoral program's graduate officer and from the student's supervisory committee chair, as appropriate, before the coursework is taken. Such coursework is not considered as transfer credit. Upon completion of the coursework, the student must have the official transcript forwarded to the UMKC registrar.

Dual Degree Programs at the Master's Level and Bachelors + Master's or Graduate Certificate Level

Dual-degree programs allow students to simultaneously pursue degrees at the master's level in two fields of study or a Bachelor's plus either a Master's or Graduate degree. For dual Masters degrees, students must complete at least 80 percent (rounded up) of the credit hours required for each degree separately. Students must satisfy admission, course and examination requirements of both degree programs.

For dual Bachelors plus Master's or Graduate Certificate programs, a maximum of 9 credit hours from the Bachelor's degree program may be applied toward the Master's degree, depending on what the department or home degree program has approved. The hours and grades earned on these credits will be applied toward the Bachelor's degree. The number of dual hours will also be credited toward the total hours needed for the Master's degree without the grades being computed into the GPA.

Graduate Foreign Language Proficiency

Upon approval of one's program, degree-seeking graduate students whose degree program requires foreign language proficiency may take the courses numbered 120, 211 or 221 (Elementary Level II, Second Year Level I or Second Year Level II) in one foreign language to fulfill the requirement. The degree program will determine what grade will be accepted to fulfill the degree requirement.

Students who already have the required level of proficiency, but no documented means of showing it, may choose to take the final exam associated with the appropriate class level to fulfill their degree program's language requirement (course number 120, 211 or 221). After taking the exam, a letter stating the student's results will be sent to the graduate advisor of the student's degree program. Exams are coordinated in the College of Arts and Sciences Department of Foreign Languages and Literatures.

Graduate Exceptions Policy

Campus-wide Exceptions

Petitions for an exception to a campus-wide graduate academic regulation must originate with the student. It must be processed through the graduate officer and dean or program director in charge of the student's graduate degree program and forwarded to the Dean of the School of Graduate Studies. Only the dean, or the designated representative, are authorized to grant an exception to the graduate academic regulations applying to all graduate students. Petitions must be in writing and include (1) the reason for requesting the exception and a detailed justification from the student; (2) recommendation for action by the appropriate graduate officer; (3) recommendation for action by the department or division chair (if applicable); and (4) recommendation for action by the appropriate dean or program director. The Dean of the School of Graduate Studies or designated representative will review the petition and related documentation and render a decision which will be communicated in writing to the academic dean or director, the graduate officer, the student and the Registrar.

Program-Specific Exceptions

Petitions for exception to a program-specific academic regulation are handled within the academic unit's degree program. A graduate student who has petitioned for an exception to a program-specific academic regulation and whose petition has been denied may appeal the decision to the Dean of the School of Graduate Studies if all other remedies open to the appellant have been exhausted at the department and college, school or program level. Appeals to the Dean of the School of Graduate Studies must be made in writing within 14 consecutive days from the date the student received the written notice of the petition decision. The dean of the School of Graduate Studies will investigate the case and take appropriate action in a timely manner. The decision of the graduate dean, as the chancellor's designated representative, is final and will be communicated in writing to the student, the graduate officer, the academic dean or director and the registrar.

Cooperative Doctoral Degrees

Through the UM cooperative doctoral program, graduate faculty members who hold membership in the doctoral faculty of the University of Missouri are eligible to serve as directors of doctoral dissertations on their resident campus, as well as on any of the other three campuses offering a doctoral degree in the doctoral-faculty member's academic field. Students who want to pursue doctoral degree programs in conjunction with one of the other three campuses of the University of Missouri may do so in accordance with the guidelines listed below. The registrars at University of Missouri-

Columbia (MU), Missouri University of Science and Technology S&T, or University of Missouri-St. Louis (UMSL) can provide information on admission procedures for the doctoral programs on their respective campuses.

In the following guidelines, the terms primary campus, graduate school or dean refer to that granting the degree.

- Students must be accepted by the department or area granting the degree and must comply with all the rules of the primary graduate school and discipline/area regulations.
- The dissertation advisor must be a member of the doctoral faculty of the University.
- Advisory/supervisory committees, comprehensive committees and oral committees, as required, will be appointed by the primary graduate dean in consultation with the graduate dean on the participating campus, drawing on faculty on both the cooperating and primary campus:
 - a. The makeup of each committee normally will be recommended by the major advisor with the approval of the appropriate director of graduate studies/department chair/divisional dean as per normal campus procedures.
 - b. In cases where students are on a cooperating campus:
 - i. The advisor/supervisory committee chair may or may not be on the same campus. If that person is on the cooperating campus, at least three of the five members of the committee will be from the primary campus.
 - ii. Students must complete the residency requirement on the primary campus. Exceptions to this ruling must be justified fully with emphasis on quality and cost considerations and must have the approval of the primary graduate dean.
- Selection of the cooperating departments and preparation of a program must be completed at the earliest possible moment and communicated via the primary graduate dean to the participants involved. Both graduate deans will maintain program files relative to students. Respective graduate deans are responsible for the quality of that portion of the cooperative program that is performed on their campus and under the jurisdiction of their faculty.
- Reporting of the degree shall be the responsibility of the primary campus. The cooperating campus shall be given credit in terms of student credit hours and/or dissertation credits for the work completed on that campus and shall provide suitable recognition of dissertation advisors and the committee members.

Federally Supported Sources of Financial Aid

Graduate students who are U.S. citizens or permanent residents and who are enrolled at least half-time, with financial need demonstrated via the FFS analysis, may be considered for aid through the College Work Study Program. They also may apply for a Perkins Loan (formerly NDSL) or a Guaranteed Student Loan. Additional information on these programs is available from the

UMKC Financial Aid and Scholarships Office

Administrative Center (<http://www.umkc.edu/virtualtour/administrative-center.asp>), Room 116

5115 Oak Street

Kansas City, MO 64110-2499

(816) 235-1154 (Kansas City Metro)

1-800-775-8652 (Outside of Metro)

finaid@umkc.edu

<http://www.umkc.edu/finaid> (<http://www.umkc.edu/finaid/>)

Staff members are available for information, inquiries and assistance with applications from 8 a.m. to 5 p.m. weekdays.

Graduate Teaching and Research Assistantships

Expectations for Graduate Research and Teaching Assistants

Graduate Research Assistants (GRAs) may receive a stipend and/or credit waiver for fulfillment of a certain number of hours assisting with research. Graduate Teaching Assistants (GTAs) may receive a stipend and/or credit waiver for fulfillment of a certain number of hours spent assisting faculty in the preparation and teaching of courses. GRAs and GTAs have different roles, as their name suggests, however sometimes these roles overlap within a department.

Both GRAs and GTAs should have a formal contract through the department that stipulates their full-time equivalent (FTE) status, and their expected weekly hours of work. An FTE of .25 indicates an expected 10 hours of work per week, while an FTE of .50 indicates an expected 20 hours of work per week.

Graduate faculty should be careful to respect the FTE appointments of their graduate students and be sensitive to the imbalance of power inherent in the advisor-advisee relationship. The employment time of GRAs and GTAs should be spent on work for the department or institution, not personal work for graduate faculty (e.g., grocery shopping, mowing lawns, babysitting).

Training

Depending on the department or the graduate student's role, various training sessions or online modules may be required. These could include training in the following areas: Family Educational Rights and Privacy Act (FERPA (<https://www.umkc.edu/registrar/records/ferpa-staff.asp>)), Institutional

Review Board (IRB ([http://ors.umkc.edu/research-compliance-\(iacuc-ibc-irb-rsc\)/institutional-review-board-\(irb\)/](http://ors.umkc.edu/research-compliance-(iacuc-ibc-irb-rsc)/institutional-review-board-(irb)/))), Discrimination Prevention and Title IX (https://www.umsystem.edu/ums/hr/ec_training/), Responsible Conduct in Research (RCR (<http://ors.umkc.edu/office-of-research-services/research-advisory-council/responsible-conduct-in-research/>)), International GTA Certification (<https://catalog.umkc.edu/general-graduate-academic-regulations-information/international-graduate-student-academic-regulations/>), and others, including discipline-specific expectations. Consult with your department and with the School of Graduate Studies to ensure these training requirements are met.

Institutionally Supported Fellowship and Award Competitions

The School of Graduate Studies administers a number of annual competitions for graduate fellowships and research grants. Fellowship stipends vary. Some include remission of portions of the graduate education fees, if applicable. Detailed information is available from the School of Graduate Studies office and website: <https://sgs.umkc.edu/current-students/grants-and-awards/>. Application deadlines, eligibility and selection criteria, and the application forms are posted on the School of Graduate Studies website.

University of Missouri (UM) System Visiting Graduate Student Program

Effective Fall 2011, the UM Visiting Graduate Student Program replaces the UM Traveling Scholars Program. The UM Visiting Graduate Student Program offers eligible graduate students a streamlined process for applying and registering for graduate courses on other UM campuses.

To participate in the UM System Visiting Graduate Student Program, a graduate student must be a degree-seeking graduate student and in good-standing on the home campus and host campus.

To apply for this program, a "UM System Visiting Graduate Student Application" should be completed and submitted to the home campus Graduate office for certification, at least two weeks before the beginning of the semester. The graduate student's home campus Graduate office will review the form; if approved, the home campus Graduate office will transmit the approved form to the host campus Graduate office. The host campus will notify the student when they are eligible to register for courses.

All course fees are paid to the host campus. Graduate students should contact their home campus Financial Aid office for more information on financial aid. International (non-U.S. citizen) students should consult the International student office on their home campus to determine eligibility for this program.

The graduate student's home campus determines transferability and the maximum number of transfer hours allowed for courses taken as a UM Visiting Graduate student. To officially transfer courses from the host campus to the home campus, students must order an official transcript from the host campus and comply with the home campus's transfer policies and processes.

For additional questions contact the School of Graduate Studies Office.

UNDERGRADUATE ACADEMIC REGULATIONS AND INFORMATION

The Registration & Records Office (Web site <http://www.umkc.edu/registrar> (<http://www.umkc.edu/registrar/>)) maintains all official academic student records. Additional responsibilities of this office include scheduling of classrooms, certifying student academic information, evaluating domestic transfer work, and reporting enrollment statistics to state and federal agencies. The Registration & Records Office, in cooperation with the academic units on campus, assumes the responsibility for monitoring and enforcing academic policies and regulations.

This section contains information on the general UMKC academic policies that apply to all undergraduate students. The departments of the academic units may have more specific rules and requirements. Students are required to learn and abide by the policies of their academic unit in addition to the general policies.

Registration & Records Office

Administrative Center (<http://www.umkc.edu/virtualtour/administrative-center.asp>), Room 115

5115 Oak Street

(816) 235-1125

Fax: (816) 235-5513

registrar@umkc.edu

<http://www.umkc.edu/registrar/>

<http://pathway.umkc.edu/> (<http://pathway.umkc.edu>)

<http://www.umkc.edu/quickguide> (<http://www.umkc.edu/quickguide/>)

Mailing Address

University of Missouri-Kansas City

Registration & Records Office

AC 115

5115 Oak Street

Kansas City, MO 64112

Registrar:

Amy Cole

Associate Registrar:

Amy Carlson

Assistant Registrar:

Amber Daugherty

Assistant Registrar:

Laura King

Academic Calendar

The University operates on the semester system with the academic year divided into fall, spring and summer semesters which are also called terms.

Fall semesters are 16 weeks long and start in August and end in December. Spring semesters are 16 weeks long and begin in January and end in May.

The 16 week semester is inclusive of the final exams week. Summer terms are 8 weeks long during the months of June and July.

Sessions are scheduled within a semester/term and may have durations other than 16 or 8 weeks. Courses are occasionally offered during the periods between semesters/terms in January, May, and August. These periods are called intersessions.

Professional and graduate programs may adhere to different academic calendars with the permission of the Provost.

Please refer to <http://www.umkc.edu/registrar/acal.asp> for the most up-to-date academic calendar.

Academic Credit Hour Equivalencies Policy

These equivalencies represent minimum requirements.

One academic credit hour delivered in the traditional didactic teaching/learning approach is equivalent to three hours of student work per week (1 hour of classroom or direct faculty instruction and a minimum of two hours out of class student homework – Carnegie Unit), typically delivered over a 15 week academic semester. One academic credit hour of classroom or direct faculty instruction is equivalent to 50 minutes of clock time, over 15 weeks of instruction (excluding the final examination period), for a total of 750 minutes of direct faculty instruction over the semester. A 1 credit didactic,

lecture class must meet 750 minutes during the semester, excluding the final examination period. Therefore, a 3 credit hour didactic, lecture class must meet 2250 minutes during the 15 weeks of instruction in a typical semester, excluding the final examination period.

One academic credit hour for a laboratory class is equivalent to two scheduled hours of laboratory experience per week (total minimum of 100 minutes), typically delivered over a 15 week academic semester. One academic credit hour for a laboratory class shall consist of one thousand five hundred (1,500) minutes of learning experience in the laboratory. Where a course includes arranged hours, these generally take the place of the hours assigned to homework.

However, there are additional teaching/learning approaches that include, for example, clinical experiences, studio experiences, field studies, individual lessons, recitation/discussion that may follow a modification of the equivalencies for credit hour assignment. Those equivalency models are approved by each academic unit (school/college) dean. At least an equivalent amount of work in the traditional didactic teaching/learning approach is required for these additional types of academic learning activities.

For independent studies, practicum experiences, internships and directed readings academic credit is determined by standards and requirements established in each academic unit (school/college) that is dependent on the discipline/field of study, scope of the planned educational experience(s) and the academic experience and preparation of the student(s). Minimally, these learning experiences follow the model of requiring the student to work in the placement or devote focused study for 3 hours per week, for 15 weeks during the typical semester, to earn one academic credit hour.

This translates to an estimated 45-60 hours of experience per semester for one academic credit hour. If a consistent academic equivalency is not established by the academic unit (school/college) for these types of teaching/learning experiences, an individual written agreement must be developed for each individual student experience. This written agreement will outline the scope of the work to be achieved, learning objectives/outcomes and the academic assessment standard to be applied. This written agreement must be approved by the respective chair/program director and dean. The respective dean's office will be responsible for retaining the appropriate documentation.

Any equivalencies below these minimum equivalencies must be submitted in writing for review and approval by the Provost.

Academic Loads, Full- and Part-Time Status

Full-Time Load

The optimal full-time course load for an undergraduate student is 15 credit hours. An undergraduate student who takes 15 credit hours each semester will be on track to complete their degree in 4 years. (120 credits / 4 years = 30 credits a year). The minimum enrollment required for full-time status is 12 credit hours of coursework. For Summer sessions, six or more hours constitute full-time enrollment. The designation of full-time load is for academic purposes only and does not apply to assessment of fees.

Overloads

Undergraduate registration in more than 17 semester hours must be approved by the academic unit. For Summer sessions, approval is required for programs of 9 or more semester hours.

Restricted Loads

Limitations on the size of academic load for which students register may be imposed by the dean or faculty advisor. Students on probation generally are required to restrict their academic programs to a minimal full-time load until they have returned to good standing.

Financial Aid - Summer Term - Academic Load Requirements

Undergraduate degree seeking students who are enrolled in the summer term are required to be enrolled in a minimum of 6 hours in order to be considered half-time for loan eligibility in the Financial Aid & Scholarships Office and for loan deferment reporting to the National Student Clearinghouse.

Academic Standing

- Academic Amnesty (p. 475)
- Academic Probation and Ineligibility (p. 476)
- Deans List (p. 476)

Academic Amnesty

The University of Missouri#Kansas City has an amnesty policy to enable those students who did not perform adequately during their enrollment within the University of Missouri System (UM System) to be given a second chance to pursue their academic goals. The policy is as follows:

Students who are transferring or returning to the University of Missouri – Kansas City to pursue a degree after an extended absence from all UM System schools (University of Missouri – Kansas City, Missouri S&T, University of Missouri#Columbia, and University of Missouri – St. Louis) may request permission to remove one or more of their complete academic terms for future degree and GPA

considerations.

A student may apply for amnesty if either of the following requirements are met:

1. Has not been enrolled at UMKC or any other UM System School at any time during the past two years and has documented evidence of circumstances beyond their control that led to poor performance;
2. Has not been enrolled at UMKC or any other UM System School for at least four years.

Students must apply for amnesty at the time of the application for readmission or before the end of the first semester of readmission, if already readmitted.

Amnesty will be implemented as follows:

- Students must meet the specified conditions of successfully (2.5 GPA#UG/3.0 GPA#GRAD) completing 12 hours (6 hours for grad) within the first year of readmission before amnesty will be applied. Please note that academic units may require a higher GPA than the amnesty minimum.
- Grades for ALL courses taken in the period of time for which amnesty is requested will be removed from the grade point average if the request is approved. The student may not choose specific courses within a term or period.
- The original UM System grade will remain on the student's UMKC transcript, and will be marked by an "X" preceding the grade. For plus/minus grades, the plus or minus will be dropped and the base grade will be used. For example, grades of A, B+, B, B#...F would be changed to XA, XB, ...XF. These hours and grades will remain on the transcript, but will not count toward cumulative hours nor GPA, nor can they be used to fulfill any degree requirements, regardless of the original grade.
- UMKC Academic Amnesty actions will not alter or be recorded on the student's academic record or impact GPA calculations of the originating UM System School since this is a campus#based policy and varies by UM System School. However, UMKC's Academic Amnesty policy may be applied to terms completed at any UM System school contributing to the UMKC calculation of system#wide cumulative GPA.
- A statement "Grades granted amnesty by faculty committee action" (or similar) will follow the last course on terms granted amnesty.
- Students can receive amnesty at UMKC only one time (for one or multiple terms recorded by any UM System School) in their lifetime.

Academic Probation and Ineligibility

Undergraduate degree-seeking students' academic status is assessed at the end of every term, whether the student is full-time or part-time for that term. A summer session is considered the same as a semester for the purpose of the following regulations:

1. In general, students will be placed on academic probation whenever their official UM grade-point average falls below 2.0 (C average). Some academic units may have a higher grade-point average requirement. First time college freshman admitted to UMKC on the basis of high school records, who have grade-point averages between 1.50 and 1.99 at the end of the first semester of either full- or part-time study will be placed on academic warning. Students on academic warning must achieve an overall 2.0 average by the end of their second semester or be placed on regular probation. After that, they would be subject to the regular probation requirements.
2. Students on academic probation will be restored to good standing whenever the UM grade-point average reaches 2.0 or the GPA level established by their academic units.
3. Students on academic probation must maintain the grade-point average required by their academic units during each subsequent semester or summer session while they are on probation. Otherwise they are ineligible to re-enroll without the approval of the academic units.
4. Students on academic probation must remove themselves from probation within three successive semesters (including the semester in which they originally were placed on probation). Otherwise they are ineligible to re-enroll without the approval of the academic units.
5. Students are responsible for knowing their academic status by referring to Pathway and their permanent transcript.

Deans List

The Dean's List is a unit-based student-centric recognition of excellent academic performance. Students must complete a minimum full-time program of 12 graded hours to qualify for the dean's list. The credit/no credit option may not be used as part of the 12 graded hours. The permanent academic records for qualifying students are annotated to reflect this distinction. Official semester grades indicate students who are candidates for the Dean's List.

Criteria for determining the GPA required for a student to be included on their unit Dean's List will be determined by the unit Dean. The specific criteria will be published in the unit undergraduate catalog.

Dean's List criteria will be reviewed annually by each academic unit (College/School) and changes in requirements will be submitted in writing to the Registrar by February 1 each year for inclusion in the next academic catalog.

ALEKS Math Placement

In order to qualify to take MATH 110, MATH 120, MATH 125, MATH 206, MATH 210, MATH 216, or STAT 235 at the University of Missouri-Kansas City, students must have one of the following:

- a minimum ALEKS Math Placement (<http://www.umkc.edu/mathplacement/prerequisite.cfm>) score (see <http://www.umkc.edu/mathplacement/prerequisite.cfm>)
- credit for the prerequisite course taken at UMKC, or credit for a course transferred to UMKC as equivalent to the prerequisite course; in either case, a sufficiently high grade must have been obtained in the prerequisite (see the catalog descriptions for each course for specific prerequisite requirements).
- AP/IB credit for a prerequisite course

Note: Courses offered outside the Department of Mathematics and Statistics do not fall under the above guidelines. Check with the appropriate department for prerequisite requirements for those courses.

About ALEKS:

ALEKS is an artificial-intelligence based assessment tool that measures strengths and weaknesses of a student's mathematical knowledge, reports its findings to the student, and if necessary provides the student with a learning environment to help bring this knowledge up to an appropriate level for course placement.

The University of Missouri-Kansas City requires an ALEKS mathematics placement assessment to determine readiness for various courses. The ALEKS Placement Assessment covers material from Basic Math through Precalculus and will take approximately 90 minutes to complete. You will login to take the assessment online through the following link: <http://www.umkc.edu/mathplacement/takeALEKS.cfm>. There is a \$22.50 fee that will be charged to your account upon taking the assessment.

You will be given up to **5 attempts to take the ALEKS assessment**, and will also be provided with a Prep and Learning Module that will allow you to review and practice your math skills upon completing the assessment. If you require access to the ALEKS assessment after your initial subscription has expired, you will have to purchase additional access.

For more information about ALEKS, please visit the following website: <http://www.umkc.edu/mathplacement/default.cfm>

Attendance Policy

- Students are expected to attend and participate in classes.
- In order to comply with federal regulations associated with eligibility rules for federal financial aid, students not attending a course during the first three weeks of the term will be administratively dropped from the specific course.
- Advance notice of attendance policies of academic units and individual instructors should be given, and such notice should be in writing.
- Students should notify instructors of excused absences in advance, where possible.
- Students who have an excused absence are expected to make arrangements with instructors for alternative or make-up work. Such arrangements should be made in advance of the absence, where possible.
- Instructors should accommodate excused absences to the extent that an accommodation can be made that does not unreasonably interfere with the learning objectives of the course or unduly burden the instructor.
- Attendance policies shall be applied in a non-discriminatory manner.
- Enrollment as a student is required to attend any class unless otherwise pre-approved by the instructor.
- Instructors are responsible for verifying the class roster in Pathway throughout the term.

Each academic unit and instructor may adopt an attendance policy appropriate to that unit, a particular field of study, or for a specific course. Such policy or policies must be consistent with the general principles, and must give students advance notice in writing. In the case of an academic unit, notice may be given in the appropriate section of the General Catalog, or in other materials provided to students for the purpose of informing them of the rules and regulations of the academic unit. In the case of an individual instructor, notice of an attendance policy should be given in the course syllabus.

If neither the academic unit nor the instructor has adopted an attendance policy, or if proper advance notice of the attendance policy was not given, the UMKC general attendance policy will govern. The general attendance policy is that students shall not be penalized for excused absences. "Excused absences" include absences due to illness of the student, illness of an immediate family member for whom the student must care, death of an immediate family member, religious observance (where the nature of the observance prevents the student from being present during class), representation of UMKC in an official capacity, and other compelling circumstances beyond the student's control. Students seeking an excused absence must provide documentation upon request to substantiate the excuse. Students with excused absences shall undertake appropriate make-up or alternative work to be provided by instructors of the courses in which excused absences were incurred.

Complaints concerning the application of an attendance policy or an instructor's attendance policy should be raised with the Department Chair of the instructor or with the Dean if there is no Department Chair or the instructor is the Department Chair. If the student or instructor is not satisfied with the resolution of the complaint, the matter may be appealed to the Dean and to the Division of Academic Affairs. Complaints concerning the adoption or modification of an attendance policy by an academic unit should be raised with the Division of Academic Affairs. Complaints are to be promptly addressed at each level of review.

This policy was approved July, 2002 and effective Fall, 2002; Revised Fall 2012; Revised Fall 2016

Catalog Year Policy

Graduation requirements and regulations for every academic program are provided in the UMKC catalog. Degree requirements and course descriptions are subject to change. In most cases, students will complete requirements outlined in the catalog of the year they enter as a degree-seeking student.

Transfer students from community colleges and other universities are permitted to complete degree requirements in effect at the time of their enrollment as freshmen at a community college or university, so long as their enrollment was continuous from year to year (summer semesters excluded) and programs have not been discontinued.

Changes or additions of plans of study (majors or minors) do not change a student's catalog year unless:

- A student is readmitted to the university. In this case, the student's catalog year will automatically be updated to term in which they are readmitted.
- A student is admitted into one of the following selective programs:

1. Nursing Pre-Licensure program
2. Professional Teacher Education
3. Conservatory

In this case, the student's catalog year will automatically be updated to term in which the student is fully admitted to the selective program. Students will be notified of the potential for professional program requirement changes at full-admission in this catalog. For example:

Candidates admitted to the Professional Teacher Education Program must uphold all academic and social regulations and policies established by the School of Education. ***Candidates are subject to any Missouri legislative action or State Board of Education policy that may become effective during the lifetime of this catalog.*** The responsibility of the School of Education is to recommend qualified candidates for licensure to the state and to ensure candidates meet, or exceed, these requirements. While the degree programs outlined in the catalog are aligned with state requirements, certification is dependent on both the degree requirements and successful completion of all state assessments required by the Missouri State Department of Elementary and Secondary Education.

- A student requests a change of catalog year after their first term of degree seeking status. In this case, the student must meet ALL requirements of the requested catalog year. For example, all plans of study (Majors and Minors) and Assessments, and updates to University Policy.
1. Once a student moves to a future catalog year, they cannot revert to their originally admitted catalog nor subsequently pick an older term.
 2. All multi-major/minors elected must be on the same catalog year.

Classification of Students/Student Levels

Undergraduate students are classified by the number of semester hours completed at the beginning of each semester. A student with:

- Fewer than 30 credit hours completed is classified as a freshman.
- Fewer than 60 but at least 30 credit hours completed is classified as a sophomore.
- Fewer than 90 but at least 60 credit hours completed is classified as a junior.
- At least 90 credit hours completed is classified as a senior.

A student who has completed a bachelor's degree and enrolls only for undergraduate credit will be classified as a senior.

Course Numbering and Reuse Policy

Courses are numbered according to the following plan:

Course Numbering

000#099 Remedial Courses (No college credit)

100#299 Lower Level Undergraduate Courses

300#499 Upper Level Undergraduate Courses (Some upper level courses may be taken for graduate credit)

500#2999 Currently Not Used

3000#4999 Dental Hygiene Undergraduate Courses

5000#5999 Graduate Level Courses

6000#6999 School of Dentistry Courses

7000#7999 School of Pharmacy Courses

8000#8999 School of Law Courses

9000#9999 School of Medicine Courses

Reuse of Course Numbers for New Courses:

Currently, a course number that has been used previously for a course in a specific discipline and subject cannot be

reused. With the growing numbers of Academic Units running out of numbers in select subjects, it has been proposed that course numbers can be reused if these course meet the following criteria:

1. The Subject and Course Number have been inactive and not printed in the catalog for a minimum of 20 years
2. There is no duplication of the course listed under a different subject and class number

Electronic Grade Change Policy

Electronic grade changes can be completed by the instructor of record or by the Chair of the Department or the Dean of the Academic Unit via the online student information system. The deadline to initiate an electronic grade change must occur within one calendar year after a term has ended.

The following dates are applicable to all calendar year semester grade changes:

- May 31 for the previous **Spring Semester**
- July 31 for the previous **Summer Semester**
- December 31 for the previous **Fall Semester**

Approved reason codes must be used for all electronic grade changes.

Electronic grade changes cannot be submitted for the following types of changes. These require the use of a hard copy Grade or Course Change form for Past Terms.

- Changing the credits associated with a course
- Changing the grading basis associated with a course
- Student has graduated
- Retroactively adding, deleting, or swapping a course

Electronic grade change reports will be available to run on demand by each Academic Unit to notify Deans and Department Chairs when grades have been changed on a student's record. The Registrar will send a grade change report at the end of every semester to capture all grade changes that have been submitted online.

Grade changes requested after one year will require a written appeal by the instructor and a signature from the Dean. The Registrar will review the grade change request and work with the Provost's office to determine the acceptance of the instructor grade appeal.

Final Exam Policy

It is expected that every faculty member meet their classes during the scheduled final exam period in the scheduled room(s) for the final examination or other approved instructional activity.

Whenever circumstances make necessary a deviation from the announced final exam schedule, approval for such deviation must be obtained by the appropriate department chair and unit academic dean as well as the Registrar.

Faculty should remain available to students throughout the entire semester (including finals week). If circumstances necessitate faculty unavailability at any time during the semester, students should be notified, in writing, with alternate contact information (i.e., department head).

The Provost reserves the right to alter the final exam schedule due to extenuating circumstances.

Students having more than three final exams scheduled on one day may submit a written request to their Academic Dean's Office to reschedule an exam. The Dean's Office will coordinate with faculty to reschedule the exam.

General Education Requirements

General Education

UMKC Essentials (p. 479)

Missouri Transfer Core 42 (p. 480)

Transfer students entering UMKC will elect from the UMKC Essentials General Education Program or the Missouri Core 42 General Education Curriculum. Academic advisors will meet with incoming transfer students to determine which option best serves the student's education needs. Program requirements are outlined in the tabs above.

UMKC Essentials

UMKC Essentials includes the following coursework:

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication: ¹		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

¹ Written communication (3 hrs) may also include previously approved courses not currently taught at UMKC (MOTRENGL 110, Technical Writing).

Missouri Transfer Core 42

General Education Requirements for Transfer Students

Per a requirement passed into Missouri law in 2016, a state-wide general education curriculum specific to transfer students was created to facilitate transfer among Missouri's public colleges and universities. This new state-wide curriculum requires 42 hours of coursework spread among five knowledge areas:

- Mathematical sciences – three (3) credit hours
- Natural sciences – seven (7) credit hours, including a course with a lab
- Humanities and fine arts – nine (9) credit hours from at least two disciplines
- Social and behavioral sciences – nine (9) credit hours, including a civics course
- Written and oral communications – nine (9) credit hours (six in written communications and three in oral communications)
- Additional hours – five (5) additional credit hours distributed among the above five knowledge areas.

All transfer students to UMKC from an accredited regional institution shall be treated the same as those transferring from a public Missouri institution of higher education. Starting Fall 2018, new incoming transfer students may be eligible to complete either the UMKC Core or Core 42 general education curriculum. Students may opt-in to the Core 42 via the following link: <https://cf3.umkc.edu/registrar/motrcore42>. (<https://cf3.umkc.edu/registrar/motrcore42/>)

For more details on Core 42, please visit - <https://dhe.mo.gov/core42.php>.

Transfer Students with a Completed Core 42, an Associate of Arts degree or a Bachelor's degree

- Students who complete the CORE 42 curriculum at a participating Missouri institution, an Associate of Arts degree from any regionally accredited institution, or a Bachelor's degree from a regionally accredited institution before transferring will have met all UMKC general education requirements.

Transfer Students with General Education Coursework in Progress

- Students transferring to UMKC with at least twelve (12) post-high school college credit hours but without the completed Core 42 or Associate of Arts degree may have the option to complete either the UMKC Core or Core 42.

- Transfer guides are built based on the optimal general education curriculum to create your shortest path to graduation from UMKC.
- Your advisor will review your transfer credits with you prior to the end of your first semester at UMKC to help you determine which general education curriculum best suits your degree plan and moves you closest to graduation.
- General education requirements for some degrees – including education, engineering and nursing – differ due to professional licensing and other requirements. For these programs it is not to the student's advantage to complete the Core 42 curriculum because Core 42 likely adds hours to the student's individual plan of study to complete their UMKC degree. To avoid adding time and cost to the student's UMKC experience, transfer students are encouraged to complete the UMKC Core for the following majors:
 - Dance, Bachelor of Fine Arts
 - Early Childhood Education, Bachelor of Arts
 - Elementary Education, Bachelor of Arts
 - Jazz Studies, Bachelor of Music
 - Music Education, Bachelor of Music Education
 - Nursing, Bachelor of Science in Nursing (Pre-Licensure program)
 - Performance, Bachelor of Music (all instruments)

Transfer Credit Appeal Policy

Transfer students and/or post-secondary institutions who are not satisfied with a decision regarding the awarding of transfer credit may appeal the articulation of their coursework by completing a Transfer Articulation Appeal form. Students have 10 business days following notification of the transfer articulation decision to file an appeal. Submission of this form shall initiate a two-level review process facilitated by the university's Transfer & Articulation Officer (TAO).

Policy

UMKC Essentials General Education Curriculum Policy & Guidelines

The policy and guidelines developed for UMKC Essentials are designed to align with the following values:

- Preference the student experience provided by the UMKC Essentials program (and the work of the Gen Ed 2.0 Program Development and Implementation Task Forces, as university-wide and interdisciplinary groups) as foundational to and overarching the individual programs of each academic unit.
- Ensure the foundational curriculum that students experience in the UMKC Essentials program is preparatory to further academic success by providing transparency in the development of cognitive skills and ways of thinking.
- Minimize barriers to student academic progress by determining student learning outcomes met through academic credit earned prior to entering UMKC.
- Recognize the unique challenges of transfer students without trying to control academic programs outside of UMKC.
- Recognize the unique challenges of academic programs that have highly scripted curricular requirements from external accrediting agencies, to reconcile these expectations with UMKC Essentials.
- Provide a sound mechanism for program assessment and quality improvement.

1. Optimizing Degree Completion for Both Native and Transfer Students

1.1 Program/degree requirements, where possible, should limit requirements (credit hours) to allow students electing the Missouri Department of Higher Education & Workforce Development (MDHEWD) Core 42 or UMKC Essentials to complete program within 120 hours.

1.2 All academic programs should consider, where possible, limiting program specific requirements to 78 hours of the minimum 120 to ensure full access to transfer students utilizing the Core 42 General Education program.

1.3 Some programs will be unable to comply with this expectation due to external accreditation requirements. UMKC Transfer Guides will clearly articulate optimal pathways to degree completion, especially when completion of the Core 42 or Associates Degree increases total hours to degree completion.

2. Building a robust UMKC Essentials Curriculum with Campus-wide Contributions

All academic units are encouraged to create a UMKC Essentials course for approval as a means to:

- Promote a "way of knowing" that provides value to all majors/interests areas;
- Increase the use of high impact practices early in our students' academic careers (increasing engagement and persistence);
- Assist students' early exploration of academic interests, therefore recruitment of potential majors.

3. Designating Approved UMKC Essentials Courses for Degree-Specific/Program requirements

3.1 The use of UMKC Essentials General Education courses to fulfill individual degree/program requirements (“vertical double counting”) is allowed, at the discretion of the school/College curriculum committee. Since each academic unit has the authority to establish requirements for its degree programs, each academic unit must decide whether it will permit vertical double counting, and if so, to what extent, and in which degree programs.

3.2 Course approval for UMKC Essential General Education credit by the UMKC Essential Executive Committee must occur prior to a program modification proposal approval.

3.3 As with all undergraduate curricular changes, approval for program changes will be submitted to the Undergraduate Curriculum Committee (UCC) and recommended to the Provost for final action.

4. Using a Course to Fulfill More Than One UMKC Essentials Requirement

4.1 Using a course to fulfill more than one UMKC Essentials requirement (horizontal double counting) may not occur.

4.2 An approved course to complete the Missouri Constitution requirement may not be used to also satisfy a UMKC Essentials requirement.

5. Determining Alternative Curriculum Options to UMKC Essentials Requirements

5.1 Academic programs under external accreditation standards in which current minimum hours exceed 120 and general electives are not available may petition for alternative requirement completion:

5.1.a With prior approval of the Provost;

5.1.b Must obtain UMKC Essentials Executive Committee approval of any majors-only course signature assignment to ensure that the alternative addresses student learning outcomes in the Essential Questions area relative to the program's field of study;

5.1.c Must meet HLC expectations for faculty credentialing necessary for instruction of designated student learning outcomes; and

5.1.d Must agree to archive/submit signature assignments in ePortfolio for annual review by the UMKC Assessment Team

5.2 Satisfaction of a UMKC Essentials Requirement by completing an approved alternative course will remain even in the event that the student elects to change major or academic program.

6. Optimizing the Educational Experience for Students Entering UMKC with Academic Credit earned prior to their first term of degree-seeking status at UMKC (Credit by Exam, Transfer or Dual High School)

6.1 Credit by Exam, Transfer or Dual High School academic credit will apply to the UMKC Essentials program in a way that optimizes the student's prior educational experience. To this end, the following policy has been adopted:

6.1.a Credit related to Core Skills development (English Composition I, II, and Technical Writing; Mathematics, Oral Communication) will be based on a course-to-course equivalency evaluation and/or Core 42 MOTR course designation. UMKC Essentials Core Skills requirements will include all Core 42 approved courses, but may include additionally designated/approved UMKC courses.

6.1.b Credit for approved Core 42 courses (6 hours or more) within designated disciplines related to an Essential Questions (EQ) in Natural & Physical Sciences, the Social & Behavioral Sciences, or the Arts & Humanities will indicate that the student has met the Learning Outcomes of the EQ area and the requirement will be considered satisfied.

6.1.b.1 Six hours of coursework may be from the same academic area.

6.1.b.2 Laboratory courses approved per Core 42 will contribute to the six (6) hours to satisfy the Natural and Physical Sciences UMKC Essentials requirement.

6.1.b.3 A course satisfying the Missouri Constitution requirement may not also contribute to the minimum six (6) hours to satisfy the Social & Behavioral Sciences UMKC Essentials requirement.

6.1.b.4 A maximum of three (3) hours of MOTR PERF (approved performance based Core 42 hours) may apply to the six (6) hours to satisfy the Arts and Humanities UMKC Essentials requirement.

6.1.c Limited prior credit (less than 6 hours) within a designated discipline related to an Essential Questions in Natural & Physical Sciences, the Social & Behavioral Sciences, or the Arts & Humanities will indicate that the student would benefit from the UMKC Essential curriculum. Therefore the student must complete a UMKC Essentials approved course.

6.2 Transfer students will have the option to elect either the UMKC Essentials General Education Program or the Core 42 curriculum to meet general education requirements.

7. Students demonstrating minimum UMKC Essentials Core Skills proficiency:

7.1 Math and Quantitative Reasoning - Students may satisfy this requirement by:

7.1.a Completing one of the following UMKC or equivalent Math Pathway courses: MATH 110, MATH 116, MATH 120, or STAT 115 (completing supporting corequisite courses do not fulfill the requirement)

7.1.b Completing one of the following UMKC or equivalent calculus or statistics courses: MATH 210, MATH 266, MATH 220, MATH 268, MATH 216, STAT 235

7.1.c Completing a mathematics or statistics course from a previous institution evaluated as not specifically equivalent to a UMKC course but designated at the 200 level or above

7.1.d Possessing the minimum ACT or SAT Math subscores (below), thereby providing an exemption.

Code	Title	Credits
Test Date After 3/1/2016; ACT Math Subscore 28 or higher; SAT Math Subscore 660 or higher		
Test Date 8/1/2009-3/1/2016; ACT Math Subscore 28 or higher; SAT Math Subscore 640 or higher		
Test Date Before 8/1/2009; ACT Math Subscore 28 or higher; SAT Math Subscore 600 or higher		

Academic units may require completion of a specific Math Pathways course for degree and/or major requirements.

7.2 Written Communication - Students may satisfy this requirement by:

7.2.a Completing 6 hours of UMKC or equivalent courses: ENGLISH 110, ENGLISH 225, MOTRENGL 110

7.2.b Possessing the minimum ACT (30) or SAT (690) English subscore, and 3 hours of ENGLISH 225

7.2.c Completing a transfer course equivalent to the UMKC ENGLISH 225 course and recorded on an official transcript

8. Optimizing the Educational Experience for Students transferring from UMKC with Completed UMKC Essentials or MDHEWD Core 42 General Education Program UMKC will transcript the completion of a student's general education program once completed:

8.1 For the Core 42 following MDHEWD policy guidelines:

- Satisfactory completion of all Core 42 Program Requirements
- Satisfactory completion of a minimum of Core 42 designated credit hours

8.2 For the UMKC Essentials program under the following:

- Satisfactory completion of all UMKC Essentials Program Requirements
- Satisfactory completion of the Missouri Constitution Requirement (state-mandated)
- Satisfactory completion of a minimum of 42 credit hours of acceptable college work

Grading Options and Auditing Courses

Auditing a Course

A student must be admitted to the university and obtain the consent of the instructor in order to audit a course. Courses that ordinarily may not be audited are studio courses in art, performance courses in the Department of Communication Studies, continuing education courses, and laboratory courses in the sciences. Students do not receive credit when auditing a course, and audited courses do not count toward enrollment status requirements (full-time, half-time).

A student registered in a course for audit is expected to attend class and to pay full tuition and fees. Providing feedback to the auditor is at the discretion of the instructor. An auditor may be administratively withdrawn from a course at any time during the semester when, in the judgement of the instructor and upon approval by the dean, the attendance or participation record justifies such action.

Change from Audit to Credit

Students may change status in a course from audit to credit during the first week of the term provided they have approval of the faculty and academic unit. This change must be initiated in the advising office of the appropriate academic unit and must be completed in the UMKC Registration & Records Office.

Change from Credit to Audit

Students may change their status in a course from credit to audit any time prior to the end of the fourth week of any Fall or Spring semester, or prior to the end of the second week of any summer session. This change must be initiated in the advising office and must be completed in the UMKC Registration & Records Office.

Credit/No Credit Option

Sophomores, juniors and seniors in good standing may elect to take one course per semester on a credit/no credit (CR/NC) basis. The credit/no credit option may not be used for courses in the major nor the minor, nor for courses taken to fulfill the general degree requirements. Students may not elect this option when they are repeating a course.

The credit/no credit option must be elected at the time of initial registration for a term and cannot be changed subsequently. A grade of C- or better must be earned to earn credit; D and F grades receive no credit. Grades of CR or NC do not earn grade points and they do not affect the grade-point average. Courses elected on this option are subject to regular academic regulations, including course load, withdrawal, etc.

The credit/no credit option is not available for students pursuing a bachelor of liberal arts degree.

NR Grades

If a student appears on a grade roster and stops attending class within the semester following the administrative drop timeline (first three weeks of class), a grade of NR (Not Reported) will be assigned to the student in lieu of an F. NR's calculate in a student's GPA just like an F.

Grade Appeals

Students are responsible for meeting the standards of academic performance established for each course in which they are enrolled. The establishment of the criteria for grades and the evaluation of student academic performance are the responsibilities of the instructor.

This grade appeal procedure is available only for the review of allegedly capricious grading and not for review of the instructor's evaluation of the student's academic performance. Capricious grading, as that term is used here, comprises any of the following:

- The assignment of a grade to a particular student on some basis other than the performance in the course.
- The assignment of a grade to a particular student according to more exacting or demanding standards than were applied to other students in the course; (**Note:** Additional or different grading criteria may be applied to graduate students enrolled for graduate credit in 300- and 400-level courses.)
- The assignment of a grade by a substantial departure from the instructor's previously announced standards as stated in the course syllabus.

Appeal Procedures

1. The student should first discuss the course grade fully with the instructor of the course. This must be done within six weeks after the beginning of the succeeding regular academic semester.
2. If the matter cannot be resolved by consultation with the instructor, the student should use the departmental grade-appeal procedure. Every academic unit (school, College or department) must have a set of appeal procedures that are to be made available to students on request. These procedures will specify the manner in which the departmental review of the challenged grade will be conducted.
3. If the matter is not resolved at the departmental level, an appeal can be made to the academic dean, in accordance with the school's or College's appeals process. The decision of the dean will be communicated to the student, the instructor and the department.
4. If the matter is not resolved within the school or College, the student may appeal to the Provost (<https://www.umkc.edu/provost/downloads/StudentGradeAppealToProvost.pdf>). This appeal must be made within 10 consecutive calendar days after notification of the decision of the dean.
5. The Provost or designated representative shall review the full record of the case and appeal documents. At this level, the Provost may appoint an ad hoc academic appeals committee to review the record and provide advice on the matter. The decision of the Provost is final and will be communicated to the student, the instructor, the department and the dean of the school or College.

Unit Grade Appeal Policies:

College of Arts and Sciences

Bloch School of Management (<https://www.google.com/url/?client=internal-element-cse&cx=009448580219169355531:zaqt1kohfz5&q=https://bloch.umkc.edu/bloch-grade-appeal-procedure/&sa=U&ved=2ahUKewiWrNjGltzqAhVFGs0KHcZmBX8QFjACegQICRAB&usg=AOvVaw0BA51bmvehpXy-ZROCHTBk>)

Conservatory (https://www.google.com/url/?client=internal-element-cse&cx=009448580219169355531:zaqt1kohfz5&q=https://conservatory.umkc.edu/current-students/student-handbook.html&sa=U&ved=2ahUKewidjaaul9zqAhV8Ap0JHbSEC0MQFjACegQIBxAB&usg=AOvVaw2T-z7HBmVj_R8M0vEWjByY)

School of Biological and Chemical Sciences (<https://sbc.umkc.edu/current-students/SBC-Grade-Appeal-Policy.pdf>)

School of Computing and Engineering

School of Dentistry (https://umkc.account.box.com/login/?redirect_url=%2Ffiles%2F0%2F%2F11524556650%2FUMKCDept-Dentistry-Intranet%3Futm_source%3Dtrans%26utm_medium%3Demail%26utm_campaign%3Dcollab%252Bauto%2520accept%2520user&logout=true)

School of Education

School of Law (p. 1633)

School of Medicine (<https://www.google.com/url/?client=internal-element-cse&cx=009448580219169355531:zaqt1kohfz5&q=http://med.umkc.edu/docs/gradCouncil/>

Overview_grad_course_grade_appeal_flowchart.pdf&sa=U&ved=2ahUKEwiWrNjGltzqAhVFGs0KHcZmBX8QFjAJegQIBRAB&usg=AOvVaw0_f_bo7SjiLPr-0WjtEQIm

School of Nursing and Health Studies (https://www.google.com/url/?client=internal-element-cse&cx=009448580219169355531:zaqt1kohfz5&q=https://sonhs.umkc.edu/wp-content/uploads/2019/09/2019-Final-SoNHS-Policy-and-Procedure-Manual.pdf&sa=U&ved=2ahUKEwiistH1ltzqAhXTHc0KHZufCtQ4FBAWMAJ6BAGJEA&usg=AOvVaw2t6fJy-ZiaqWqGjZ_a_s__)

School of Pharmacy (https://www.google.com/url/?client=internal-element-cse&cx=009448580219169355531:zaqt1kohfz5&q=https://pharmacy.umkc.edu/docs/curriculum-policies/course_policy-grade_appeal.pdf&sa=U&ved=2ahUKEwiWrNjGltzqAhVFGs0KHcZmBX8QFjAJegQIBBAB&usg=AOvVaw1kcjux3ZTGrCwlpog9Pnxg)

Grade-Point Average

The following minimum grade-point average policy applies to all undergraduate students:

- Students must maintain a 2.0 GPA in their coursework at the University of Missouri.
- Academic units may impose additional grade-point requirements.
- In general, the UM GPA is calculated by dividing the total grade points earned in courses on any UM campus by the total number of graded semester hours attempted. If a course attempted within UM is repeated, the previous hours and grade point remain in the student's GPA. Courses taken credit/no credit, courses earning grades of S, P, I or AT, and courses transferred from non-University of Missouri institutions are not included in the UM GPA calculations.

Grading

The following is the +/- grading scale and grade#point system used at UMKC. This +/- grading scale and grade point system is used by all faculty, in all undergraduate, graduate, and professional programs.

Letter Grade	Description	Points per Semester Hour
A	The highest grade	4.0
A-		3.7
B+		3.3
B	Work of distinction	3.0
B-		2.7
C+		2.3
C	Average work	2.0
C-		1.7
D+		1.3
D	Passing, but unsatisfactory	1.0
D-		.7
F	Failure without credit	0.0
NR	Not Reported	0.0
WF	Withdrew Failing (Graduate/Professional Only)	0.0
W	Withdrew; no academic assessment	-
I	Incomplete	-
AT	Audit	-
CR	Credit only	-
NC	No Credit	-

P	Passing	-
S	Satisfactory	-

Beginning Fall 2012, a WF is not calculated in the GPA for undergraduate students.

Beginning Fall 2015, **MATH 100** letter grades are not calculated in the cumulative GPA.

In terms prior to and including 1985, any of the above grades might be preceded by an R indicating a repeated course. These grades are not included in either total hours or the grade-point average. (Examples: RC, RD, RF.) Since 1985, all grades, including those in repeated courses, are included in the GPA calculation. For the 1993 Fall Semester, UMKC began using the plus/minus grading system for grades A, B, C, and D. The grade of A+ is valid only for students in the School of Law.

Incomplete Grades

An instructor may assign the grade of I (incomplete) to students who have been unable to complete the work of the course because of illness or serious reasons beyond their control. An incomplete grade is appropriate only when enough work in the course has been completed for students to finish the remaining work without re-enrolling in the course or attending additional classes. The work must be completed within one calendar year or the incomplete grade will automatically lapse to an F. Students should not re-enroll in a class for which they earned an incomplete. Students may not earn a degree or graduate with a UMKC incomplete on their transcript.

Repeated Courses & GPA Adjustment Policy

When undergraduate students repeat courses, they can request to have only the grade for the final attempt used in calculating their GPA. The Repeated Courses & GPA Adjustment Policy will not automatically be applied to a student's GPA. After completing a retaken course, a student must submit a request for GPA Adjustment Form to his/her academic advisor. The recalculation of a student's GPA is reflected only in the calculation of that student's current cumulative GPA and will not retroactively affect calculations for dean's list, graduation and honors, eligibility for financial aid and veterans' benefits and scholarships, athletic eligibility, discounts for insurance, or any other area.

- Courses in which academic dishonesty was involved are not eligible for GPA recalculation.
- A student's GPA can only be recalculated if the original and the repeated course are taken at UMKC or another UM System school.
- The original course and the repeated course must be a direct equivalent.
- Students may repeat a single course for GPA calculation twice (for a total of three completions). Please note that financial aid may not be available on a third completion if a passing grade was earned.
- Repeated courses must be taken Fall 2007 or later.
- Repeated courses may not be taken on a CR/NC basis.
- Original grades cannot be replaced with a 'W', 'WF', 'I', or 'T'.
- No more than 15 semester hours can be dropped from the calculation of a student's GPA by repeating course work.
- Requests approved for GPA recalculation will prefix the original grade with an "R." Transcripts will note that such grades are excluded from GPA calculations.
- Courses cannot be repeated for credit towards the degree unless specifically noted.
- The course repeat option is not available when requested for a term that was a part of a previous degree award.
- Once the GPA recalculation has been recorded, the action cannot be rescinded.

Refer to the appropriate School or College section of the undergraduate catalog for information on specific rules for course repeats. Some academic units may have more stringent requirements on course repeats.

Graduation

Students who anticipate graduating must file an application for graduation before the end of the fourth week of the semester in which they intend to graduate. Commencement is optional and participating in commencement does not mean that a student has graduated. The application for graduation triggers a degree check. The degree check is conducted following the recording of grades for the semester in which the student anticipates graduation. All degree requirements must be fulfilled, including documentation of all requirements in UMKC's Registration & Records Office before the next semester after anticipated graduation begins. Diplomas may be picked up in person in the Registration & Records Office beginning 40 days following the last day of the semester. Diplomas that are not picked up in person will be mailed two weeks after they are initially made available. Replacement and duplicate diplomas can be ordered for a small fee from UMKC Registration & Records Office.

Application for Graduation

Written application for graduation is required and should be filed before enrolling in the final 30 credit hours of coursework. Students should turn the graduation application form into their home School or College (Academic Unit). The academic unit will send the graduation application to the

Registration & Records Office. The application must be submitted no later than the deadline date published each semester in the on-line UMKC Academic Calendar in order to graduate for that semester.

Awarding Posthumous Degrees

The University may grant undergraduate, graduate and professional degrees posthumously. If an Academic Unit determines that a deceased student was academically eligible at the time and had completed sufficient coursework to earn a degree the Unit may recommend the awarding of a posthumous degree.

Students who completed all Degree Requirements

The diploma for the degree that the student was pursuing will be prepared in the same manner as if the student had graduated. This diploma may be presented to the family of the deceased in a special ceremony, at Commencement or in whatever manner is deemed appropriate.¹

Student Did Not Yet Complete Degree Requirements

If the student had not completed degree requirements but was making satisfactory progress at the time of death, a dean's certificate honoring the student may be provided by the appropriate academic unit(s). These certificates may be designed and presented in a manner that is fitting to the circumstances.¹

¹ In some instances, presentation of the degree or certificate to family members may be made at a remembrance ceremony.

Changes in Degree Requirements

The University of Missouri reserves the right at all times to discontinue, modify or otherwise change its degree programs when it determines it is in the best interest of the University. Students have the following options:

- Students who enter as first-time freshmen or transfer students may fulfill the degree requirements in effect at the time of their original admission to their degree program, provided there has not been a lapse in attendance at UMKC of more than one consecutive calendar year plus one term.
- Students accepted into any two-plus-two program (between UMKC and a community college) may fulfill the degree requirements in effect at the time of their original admission to the community college, provided no more than two years have elapsed since that original admission and enrollment has been continuous.
- Students may fulfill degree requirements in effect at the start of their senior year, provided that they have not had a lapse in attendance during the senior year at UMKC of more than one consecutive calendar year plus one term.

Civics Exam Requirement

Any student entering UMKC for the first time after July 2019 who is pursuing bachelor's degree shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from UMKC. The examination shall be known as the "Missouri Higher Education Civics Achievement Examination".

If a student is a currently enrolled student at UMKC prior to Fall 2019 and maintains continuous enrollment (Fall and Spring Terms), then the student is exempt from taking the Civics exam.

To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Constitution Requirement

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Declaration of Major

Students may declare a plan of study (major and/or minor) and degree(s) at the time of admission. See the specific academic unit guidelines for admission requirements regarding declaration. If continuing students wish to change their plan of study or add additional plans, students must complete the Declaration of Major form from the UMKC's Registration & Records Office and obtain signatures from the Academic Advising unit of the school or college.

Students admitted as Exploratory (undeclared) students or admitted with only a Pre-Professional designation (i.e. Pre-medicine, Pre-law) have not declared a specific major and/or degree at the time of admissions and therefore must declare a major by the hours specifically designated by the academic unit housing the degree(s).

Exit Examinations

Exit Examinations

Policy

The University of Missouri Board of Curators, the Missouri Department of Higher Education, Missouri statute 173.030.1(9)(e) RSMo, and the Higher Learning Commission require the university to assess the effectiveness of the general education program and all academic programs. With the exceptions noted below, all undergraduate, degree-seeking students must take a test of general education achievement prior to being granted a baccalaureate degree.

There are three exceptions: 1) students who have previously earned a bachelor's degree from a regionally accredited college or university; 2) students who are seeking a bachelor of arts in education degree and teacher certification or who are seeking a bachelor of music education and teacher certification and have achieved a passing score on the general education assessment required by the State of Missouri; and 3) students in the RN to BSN program and the dental hygiene completion program who first entered the program prior to Fall 2019.

Aggregate results are analyzed and reported by the Office of Assessment. Scores are reported to the University of Missouri System by the Office of Institutional Research.

Heighten Participants:

You will receive an email notification when you become eligible to take the Heighten Exit Exam (at completion of 90 credit hours). The exam is administered remotely; please contact testingservices@umkc.edu (%20testingservices@umkc.edu) from your UMKC student email account for instructions and access code for the exam.

If you receive the email notification to take the Heighten Exit Exam and you have fulfilled one of the exceptions, contact testingservices@umkc.edu (%20testingservices@umkc.edu) from your UMKC student email account and we will input the exemption on your record.

ALL EMAIL COMMUNICATIONS REGARDING EXIT EXAMS ARE SENT TO YOUR UMKC STUDENT EMAIL ACCOUNT ONLY.

Exit exams are a degree requirement - **failure to take your required exit exam before the end of the semester in which you plan to graduate will delay your graduation and you will need to reapply for a later term.**

Graduation with Latin Honors

Students are eligible to be awarded their degrees with Latin honors (Summa Cum Laude, Magna Cum Laude, Cum Laude) as determined by each of the academic units (College/School) using fixed overall GPA requirements. These fixed GPA requirements will be reviewed annually by each academic unit (College/School) and changes in requirements will be submitted in writing to the Registrar by February 1 each year for inclusion in the next academic catalog.

Latin Honors may be published for commencement but will be provisional until the degree is conferred.

The calculation for Latin Honors will be made using the GPA of a minimum of the last 60 hours earned at UMKC, including all credits earned in the semester when the student reaches or exceeds 60 hours.

Because Latin Honors is calculated by GPA and there is only one GPA, there will only be one Latin Honors awarded regardless of the number of degrees the student earns.

Junior-Senior Hours

Undergraduate degree-seeking students are required to earn credit in at least 36 credit hours of coursework numbered 300 and above at UMKC. In the case of transfer credit, the coursework must be numbered as junior-senior level work by the transferring institution. For additional restrictions, please also see the Residence Requirements Policy (p. 489).

Minimum Hours

The general minimum UMKC requirement in semester hours of acceptable college work for an undergraduate degree is 120 semester hours (150 for a double degree or a second degree). However, a number of undergraduate and first professional degrees have higher minimum requirements as indicated in the specific school's section of this catalog. A minimum of 30 hours must be earned at UMKC, regardless of the number and level of hours earned at another institution.

UMKC graduates returning to UMKC to complete requirements for additional majors or minors, must complete all requirements for a second degree including the accumulation of a minimum of 150 hours. UMKC does not award stand-alone majors or minors on transcripts at any time. Transcripts will reflect all attempted courses, regardless of graduation status.

Multiple Major & Double Degree Policy

A multiple (double or triple) major may be earned when a student completes two or more full majors, generally within the 120 hours required for a single degree. The specific major requirements of each major must be fulfilled. The diploma will indicate all majors. If the two or more degree programs are administered by different academic units, the major requirements of each academic program must be fulfilled. The general education requirements must be fulfilled as specified by the department or academic unit responsible for the primary major only. The double or multiple major is only available in B.A./B.A. or B.S./B.S. combinations.

A *double degree* may be earned when a student completes a minimum of 150 hours, completing the general education and major requirements for each of two majors. Students who earn a double degree will receive two diplomas simultaneously. If the two degree programs are administered by different academic units, the general degree requirements and major requirements of both academic units must be completed.

The B.A./M.D. *dual degree* program has different requirements and is subject to separate regulations. See the School of Medicine section of the catalog.

All dual degree programs must follow the established guidelines in the UMKC catalog.

Residence Requirements

Candidates seeking undergraduate degrees from UMKC must meet the following minimum residence requirements*:

1. Must be admitted and academically eligible to enroll in the College or School during the semester in which the degree is awarded.
2. Successfully complete through UMKC at least 30 credit hours of course work.
3. Successfully complete through UMKC at least 12 hours of upper division credit (300+) required by the recorded major(s) to be awarded.
4. If pursuing a minor, successfully complete through UMKC at least 6 credit hours required by the recorded minor(s) to be awarded.

*Academic units may have additional residence requirements.

Time Limit on Degree Credit

Credit over 15 years old at the time of application for graduation may not be applicable to a degree. Such credit may be subject to validation, at the discretion of the school/ department involved, before it can be used to satisfy degree requirements.

Leave of Absence Policy

UMKC's Leave of Absence Policy provides a means for students to take an approved leave of absence from a degree program without being required to go through the re-admission process upon return to the University. Students who are approved for a leave of absence will be allowed to register for classes during the "priority registration time period" for the next semester they return from their approved leave of absence period. Students who are enrolled in the Interdisciplinary Ph.D. program in the School of Graduate Studies and the Schools of Dentistry, Law, Medicine, Nursing, Pharmacy, and the Conservatory must adhere to their school's leave of absence policies and procedures as these schools may have more stringent requirements or additional procedures.

1. Students who want to take an approved leave of absence are required to fill out the "Request for Leave of Absence Form" and are required to fill out a "Return from Leave of Absence Form" in order to be allowed to enroll and return to their previous academic program.
2. The deadline for applying for a leave of absence if the student has not been attending classes and is enrolled is no later than the fourth week of the semester. Students who need to apply for a leave of absence during a semester for which they have been attending will have until the last week of classes for the current term in accordance with the academic calendar.

The deadline for applying for a return from a leave of absence is 30 days prior to the first class date of the semester in which the student plans to enroll. Students who request a leave of absence that is not planned in advance due to a medical emergency or other extenuating circumstance beyond the control of the student will be reviewed on a case-by-case basis.

Academic program and graduation requirements may change during a student's leave of absence. It is at the discretion of the college/school to define the program and graduation requirements once the student has been approved to return from a leave of absence. Some programs may approve students to return on a space available basis.

Eligibility requirements:

1. Be a degree seeking student
2. Be registered and enrolled in classes for the current term
3. Be eligible to enroll and be in academic good standing, on probation, or on continuing probation with his or her academic unit
4. Have submitted all outstanding high school or transfer transcripts if conditional admission was granted for the student to enroll for the previous semester
5. Provide a personal statement and official documentation for why a leave of absence is being requested

Please note: a student who returns from a leave of absence will continue on the same academic standing that was in place at the time that the leave of absence began.

Leave of Absence Duration

A leave of absence will be granted for a maximum of two semesters (e.g. Fall and Spring or Summer and Fall). A student can request an extension for his or her leave of absence; however, the request for an extension cannot extend more than one year beyond the original date requested. Students who do not return by the date noted on their approved leave of absence form and who are not granted an approved extension will be required to reapply through the Office of Admissions.

Leave of Absence Duration for Military Personnel

A leave of absence will be granted for all uniformed service members called to duty (whether voluntary or involuntary) for the duration of their time served. The student must fill out a Request for Leave of Absence form and provide the Registration and Records office with a copy of their written orders. Service members will be re-admitted to the university upon their return under the same re-admittance policies as all students who have been on a leave of absence from the university. Service members will not experience any added penalties from the University for fulfilling their military obligations.

Student Status During the Leave of Absence

A student granted a leave of absence retains his/her admitted student status. However, he/she is not registered and, therefore, does not have all the rights and privileges of a registered student and should be aware of the following consequences:

1. Financial Aid & Scholarships Office - A student is not eligible for any financial aid disbursements during the semesters while on leave of absence. A student on a leave of absence can be reported to lenders and loan service agencies as "non-attending" and may need to contact his/her lenders for information on possible repayment requirements, deferments and forbearances.
2. Enrollment verification requests - Enrollment verifications for other entities, such as parents' health or auto insurance companies, will also be reported as "non-attending."
3. Campus health - A student on a leave of absence for a particular semester is not registered for any credit hours and, therefore, not eligible to use the Student Health and Wellness Service Office.
4. Computing resources - A student on a leave of absence will not have access to computing resources, including computing labs. Students will be able to maintain their UMKC exchange email accounts.
5. Other student services - A student on a leave of absence will not have access to any campus or university service that is usually available only for currently enrolled students.

Leave of Absence Appeal

A student who has been denied a leave of absence or a student who has been granted a leave of absence but believes that either the period of leave awarded or the conditions specified are unreasonable, shall have a right to appeal the decision. All leave of absences that originate in the academic

units of Medicine, Law, Pharmacy, Nursing, and Dentistry must continue through that unit's administrative appeals process. The process for filing an appeal is defined below.

Process for Obtaining a Leave of Absence

1. Schedule an appointment with your college/school to meet with an academic advisor or other designated administrator to review the leave of absence application's impact on the following issues:
 - Impact on progress toward degree.
 - Catalog year and status after leave of absence.
 - Previous semester's academic standing at the time of the requested leave.
 - Transfer policies, incomplete grades, agency requirements (e.g., state licensing/certification) and other academic issues, if applicable.
 - a. Requesting a change of major at the same time the leave of absence is being requested.
 - b. Review the policy and complete the Request for Leave of Absence Request Form. Forms are available online by visiting <http://www.umkc.edu/registrar/forms.asp>. The deadline for applying for a leave of absence if the student has not been attending and is enrolled is no later than the fourth week of the semester. Students who need to apply for a leave of absence during a semester for which they have been attending will have until the last week of classes for the current term in accordance with the academic calendar.
 - c. Obtain the signature of the designated administrator in your college/school to approve the leave of absence.
 - d. Schedule a meeting with the Financial Aid & Scholarships Office to meet with a financial aid counselor if you are receiving financial aid and/or scholarships for the term in which you want to apply for a Leave of Absence.
 - e. Contact other offices, if applicable:
 - International Student Affairs Office - International students must receive mandatory advisement, including signature, from the International Student Affairs Office (ISAO) to discuss the impact of the leave of absence on their immigration status. An international student on an approved leave of absence must contact the ISAO prior to his/her return to UMKC to clear visa status and request appropriate immigration documents.
 - Financial Aid & Scholarships Office - Students who have received financial aid and/or scholarships should request information from the office about the impact a leave of absence has on current aid and future eligibility. Students should specifically request information about possible deferments for scholarships and/or loans.
 - Cashier's Office – Students who have outstanding balances on their accounts should talk with the Cashier's Office about payment arrangements to ensure there will be no delinquencies, late charge or collections associated with their accounts during their extended leave of absence period. Once a plan has been created, the Cashier's Office will provide sign-off on the leave of absence form which is returned to the next appropriate office for processing.
 - Residential Life - Students living on campus must formally petition to be released from their Residential Life License Agreement. If future housing is needed, students must reapply for housing during the return from leave of absence if applicable.
 - Campus Dining - Students with meal plans must formally apply for a release from their meal plan contract and should contact the Campus Dining sales office for further details.
 - Veterans' Services - Students with veterans' educational benefits and/or students leaving the university due to a military activation should contact Veterans' Services in the Registration & Records Office for information and assistance.
 - Parking Office - Students who purchased parking hangtags should notify the office in writing and return the decal and gate access card (if applicable) prior to leaving, so that the appropriate prorated refund can be issued.
 - Campus Health & Counseling Services - Students on leave of absence are not eligible to purchase UMKC student health insurance. NOTE: A student covered under his/her parents' insurance policy most likely has to be a full-time student (enrolled in at least 12 credit hours) to qualify for coverage and should check with the appropriate company representative for further information.
 - Residency Classification - Students with questions about maintaining his or her current status or applying for reclassification should contact the residency coordinator in the Office of Admissions.
 - Fee Refunds Schedule – Students who request a Leave of Absence are subject to the established fee refund schedule. Students who wish to petition for an exception to the refund policy will need to attach the form to their Leave of Absence Request.
2. Submit the Request for Leave of Absence Form
 - Once all required signature(s) have been obtained, the application is returned to the Registration & Records Office for review/approval. The student may return the form in person or the form may be sent through campus mail by the student's advising office.
 - The student follows the established procedures for withdrawing if registered for the current term as well as the procedures for canceling any future term registrations during the requested leave of absence. Note: Students receiving financial aid must visit the Financial Aid & Scholarships Office for information on how withdrawal impacts their financial aid.
 - The student updates his or her mailing address on the Pathway system, if necessary.

UMKC's Registration & Records Office Procedures for Processing a Leave of Absence

1. Notify the student of the result of his or her leave of absence request in writing to their UMKC email address.
2. Process the leave of absence request and note the expected return date in the Pathway system.
3. Notify the Academic Unit of the student's approved leave of absence and the semester the student is expected to return.

Leave of Absence Appeal Process

1. All leave of absence appeals not originating from the Interdisciplinary Ph.D. program in the School of Graduate Studies, Schools of Medicine, Law, Pharmacy, Nursing, and Dentistry must be presented in writing to the Assistant Vice Chancellor of Student Affairs and Enrollment Management (AVCSAEM) within five (5) working days of receipt of the leave of absence denial and contain the following information:
 - The reason(s) for the appeal including any hardships the leave of absence denial poses to the student's future continued academic status.
 - Any additional evidence deemed necessary to reverse the original decision.
2. On receipt of a formal appeal, the AVCSAEM or designee will:
 - Acknowledge the receipt of the appeal within five (5) working days on receipt of the written leave of absence appeal.
 - Investigate the claims outlined in the appeal.
 - Notify the student, in writing, of the decision within five (5) working days of acknowledgement of the written appeal.
3. The decision of the AVCSAEM or designee is final.
4. If a student considers that they have been unfairly or improperly treated in the appeals process, they have the right to file a grievance with the appropriate officer as outlined in the University of Missouri Student Grievance policy, http://www.umsystem.edu/ums/rules/collected_rules/grievance/ch390/grievance_390.010.

Steps for Returning from a Leave of Absence

1. A student should be physically, mentally and emotionally ready to return to school.
2. At the time of return, a student must complete a Return from Leave of Absence Form and must be eligible to register for the term in which they want to register (e.g. no financial holds, no academic holds, no disciplinary holds, etc.).
3. A student returning from a leave of absence that is earlier than the date originally agreed upon should provide notice to all applicable offices as soon as possible as noted on the Return from Leave of Absence Form.
4. A student must meet all financial aid requirements as outlined by the Financial Aid & Scholarships Office for the upcoming academic year or term for which the student is returning from their leave of absence.
5. The Student Affairs Office in conjunction with the other offices that require signatures from a return from leave of absence will assist in identifying any outstanding issues associated with advising, registration, etc.
6. The Registration & Records Office will send notification to the student's UMKC email address that their Leave of Absence has been processed.

The Leave of Absence policy is effective as of Summer 2010 and applies to all students, regardless of the catalog year the student entered the University.

Minor Policy

A minor is an academic program of at least 18 credits (9 at the junior/senior level) that supplements a major degree program. Students cannot be awarded a minor in the same academic discipline as their major or emphasis area.

Major discipline faculty determine and indicate on the degree audit system any minors that cannot be awarded due to both major and minor drawing from the same discipline content.

Completion of an approved minor is recorded on a student's transcript. Minors are included in program requirements, the degree audit system, and the UMKC Catalog.

Privacy Rights

UMKC complies with the Family Educational Rights and Privacy Act (FERPA), which governs the release of student academic records. Student academic records are considered confidential between the student and the University, and will not be released to a third party without the written consent of the student except as provided within FERPA and UMKC policy.

Certain information about students is considered directory information and directory information may be released to anyone without a student's signed written consent unless the student submits a written request to restrict release of directory information. All students will be listed by name with address, e-mail and telephone number in a student directory which may be in electronic format. If release of information is restricted, a student's name and related information will be excluded from the student directory. Directory information restrictions may take up to 15 working days to process after the request is submitted by the student. All students' names will be printed in the commencement program regardless of the directory information restriction.

Registration

Eligible students may register during the registration period that is announced in Pathway and via UMKC e-mail. Students who are not registered will not receive academic credit and cannot attend classes. All registration and changes in registration must be processed by the UMKC Registration and Records Office either in person or using an approved electronic format such as Pathway.

A class schedule is published prior to each semester in Pathway and lists courses offered, meeting times and locations. The University reserves the right to cancel without notice any course listed in the schedule for any semester, or to withdraw any course that does not have adequate enrollment at the close of the registration period.

Additions

Eligible students may register during the registration period that is announced in Pathway and via UMKC e-mail.

Students who are not registered will not receive academic credit and cannot attend classes.

All registration and changes in registration must be processed by the UMKC Registration and Records Office either in person or by using an approved electronic format such as Pathway.

A class schedule is published in Pathway prior to each semester and lists courses offered, meeting times and locations. The University reserves the right to cancel any course listed in the schedule without notice.

Adding a Class

Students may add a class to their official records through the first week of classes for a regular session.

Students who are not enrolled at the time a semester begins are subject to an additional fee.

Additions of courses after the first week of classes are deemed unusual and therefore require the approval and signatures of advisors and the instructor of record.

Administrative Drop Policy

In order to comply with federal regulations associated with eligibility rules for federal financial aid, UMKC instructors will utilize an Administrative Attendance Survey to confirm attendance for all students during the first three weeks of the term and administratively drop students who are not attending specific courses. For the purposes of this survey a student is considered to have begun attendance or participated in the course if they have demonstrated one of the following acceptable academically related activities:

- Physically attending a class with direct interaction;
- Submitting an academic assignment;
- Taking an exam, interactive tutorial, or computer-based instruction;
- Attending a school-assigned study group;
- Participating in online discussion about academic matters;
- Initiating contact with a faculty member to ask about subject studied.

Students will have 48 hours to respond to the notification and request to re-enroll in the course with instructor permission. Instructors may evaluate the student's request in the same manner as other late enrollment requests.

All refunds will be based upon the date of the drop in accordance with the UMKC Academic Calendar.

Cancellation of Enrollment for Financial Delinquency

Students who fail to make a minimum payment and/or accept anticipated aid may be subject to administrative withdrawal for nonpayment during the Fall and Spring semesters. However, classes are not automatically canceled. It is the responsibility of all students to withdraw from classes if they will not be attending the semester. If a student withdraws from classes, he or she may still owe the University full or partial fees in accordance with the UMKC fee refund policy. A minimum payment is required by the first payment deadline regardless of when a student registers in courses for a given semester. Pending financial aid and scholarships do not constitute a minimum payment of fees if an outstanding balance remains. If anticipated financial aid is not received or is not sufficient to cover charges, the student remains responsible for all or remaining charges incurred for the semester.

Class Waitlist

A class waitlist provides an option for students to indicate they want to enroll in a class that has reached its authorized capacity and is closed. A student on a waitlist is not officially enrolled in that course and thus is not eligible to receive a grade in that course.

Each department determines which classes will be available for waitlist and the waitlist capacity. Each section with a waitlist may have a different maximum number of students who can be on the waitlist at the same time.

Waitlists will be available through the end of the third day of classes at the beginning of each term's open add/drop period.

A student gets on the waitlist at the time he/she attempts to enroll in a full class section by checking the "OK to Waitlist" checkbox that will be displayed when enrolling in a class. If there is no waitlist or the waitlist is full, the "OK to Waitlist" checkbox will not appear as an option when a student attempts to register for a class in Pathway's Self-Service Enrollment. A student can be moved from the waitlist to enrolled status by:

System intervention: An automated nightly process will automatically move eligible students from the waitlist to enrollment. After the last automated process is run at the end of the third day of classes, students will need to be signed in to the course on a registration form.

Students are ineligible to be automatically enrolled from the waitlist for the following reasons:

- They have a time conflict with another class;
- They are already enrolled in another section of the course;
- They would exceed their maximum term units;
- They do not meet requirements of the course (for example, reserved for majors only);
- They have a registration hold;
- The class is full.

Students who are enrolled via the waitlist are responsible for reviewing and making any other changes to their schedule. Instructors have the right to increase course capacity to allow specific students to enroll in their class. Students will only be enrolled from the waitlist provided the enrollment does not exceed the room capacity designated for the class.

Concurrent Enrollment

Students may not earn and apply degree credit from another college or university at the same time as earning degree credit at UMKC *except with the prior approval* of the UMKC academic unit involved. Notification of this exception when approved by the academic unit must be forwarded to the UMKC Registration & Records Office.

Late/Retroactive Withdrawal Policy

A student may petition for Late/Retroactive Withdrawal from a course(s) or from the university (all courses taken during that semester), if circumstances of a serious and compelling nature prevented the completion of coursework and extenuating circumstances prevented withdrawal by the deadline on the Academic Calendar. In filing a Petition for Late/Retroactive Withdrawal, withdrawal from all courses taken during the term in question is normally expected since 'extenuating circumstances' are not course-specific.

Petitions must be submitted to the University Late/Retroactive Withdrawal Committee, after consultation with student's academic advisor. A University Late/Retroactive Withdrawal Committee is designated to make decisions on all retroactive withdrawal petitions. Approved retroactive withdrawal petitions which require a change of grade will follow standard change of grade procedures. A copy of the approved petition and supporting documentation should be attached to the grade change form when it is submitted to the Registration and Records office.

Students who submit a retroactive withdrawal are not typically candidates for fee refunds.

For courses taken while enrolled in the Interdisciplinary Ph.D. program in the School of Graduate Studies and in the Schools of Dentistry, Law, Medicine, and Pharmacy, students should refer to the retroactive withdrawals policies and procedures of these schools, as they may have more stringent requirements.

Students are not a candidate for late/retroactive withdrawal if any of the following conditions are true:

- You are applying because you are not satisfied with the grade you earned.
- You are applying because you neglected to formally withdraw from the course(s) in question.
- You were not aware of the withdrawal deadlines.
- You changed your major and are now working towards a major or degree which does not require this course.
- You assumed non-academic activities which restricted your time for academic pursuit.
- You were ill or you suffered stress as the result of an accident, death, family crisis, or other crisis early enough in the semester to have withdrawn during the semester.
- You have already received a UMKC degree for which the course(s) in question were applied towards degree requirements and/or your UM GPA.

If any of the above are found to be true of your case, your request for retroactive withdrawal will be denied.

Students may be candidates for late/retroactive withdrawal if any of the following conditions are true:

- There was a documented administrative error that affected your enrollment in one or more courses.
- You have documentation of a serious illness that affected your ability to complete all of your coursework after the withdrawal date.

- You encountered documented extreme and unusual circumstances which a) were beyond your control, b) occurred after the withdrawal date, and c) could not have been addressed during the term in which the course(s) was taken.

The retroactive withdrawal policy is effective as of Summer 2010 and applies to all students, regardless of the catalog year the student entered the University.

Total Withdrawals

Official withdrawals may be done by mail when a student is unable to appear in person (for example, if you are out of town or suffering from an illness or accident) or if the Registration & Records Office is closed or Pathway is down (for example, during a power outage) and you wish to receive a refund. The postmark on the envelope is used as the refund date.

Transcript notations are determined based on the time of the semester the withdrawal occurs.

Students wishing to withdraw from all of their classes must complete an exit interview questionnaire available at <https://www.umkc.edu/stu-aff/exit/login.cfm>.

The following actions are **not** considered official notification of withdrawal.

- Assuming classes will be cancelled because of nonpayment of tuition and fees by the student.
- Failure to attend class.
- Giving notice to an instructor.
- Stopping payment on a check used to pay fees.
- Crossing out courses on a schedule.
- Returning only partial payment to the Cashier's Office.
- Verbal notice to any University office or employee.

Withdrawals

Eligible students may withdraw from their classes during the withdraw schedule period that is provided for each session of a semester/term in the Academic Calendar.

Students in a 16-week session follow the following schedule:

- After the fourth week through the twelfth week students will receive an automatic W on their transcript.
- After the twelfth week, students will need to follow the Late/Retroactive Withdrawal Policy.

Students who want to withdraw from all of their classes must follow the Total Withdraw Policy.

Students in 8-week courses follow a similar schedule. See the academic calendar for specific dates.

Tools for Planning and Fulfilling Academic Requirements

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Transcripts

Official transcripts are issued only to other educational institutions, employers, state departments of education and similar agencies. Transcripts are issued at the written request or authorization of students. Students may secure a transcript of their UMKC permanent academic records from the UMKC Registration & Records Office. Transcripts stamped "Issued to Student" are not considered official by UMKC. Partial transcripts of permanent academic records which contain only a portion of the courses completed at UMKC are not issued. No transcript may be issued to or for students who are indebted to the University until the debt has been cleared.

Transfer and External Sources of Credit

Transfer students should refer to the policies and procedures outlined in the Undergraduate Admissions (p. 498) section of the catalog when seeking admission to the University. UMKC accepts credit in transfer from regionally accredited institutions of recognized standing, both public and private. It also awards credit through examination programs as described in the Credit by Examination section of the catalog.

The Registration & Records Office applies established guidelines and precedents in determining transfer course equivalencies and applicability, as listed below. A student's academic unit is responsible for all final decisions on the applicability of transfer coursework, and must review and approve any exceptions that may be made for an individual student.

Transfer credit is evaluated and posted according to the following general guidelines:

- *All undergraduate college coursework attempted* at accredited institutions will be recorded on the UMKC transcript of students seeking an undergraduate degree, regardless of whether or not it is applicable to a UMKC degree. Credit accepted from another institution may or may not be applicable to specific degree programs. The University reserves the right to make the decision regarding applicability.
- Courses that are *remedial, preparatory or non-college-level* will not be added to the total hours or used to satisfy degree requirements. The Registrar's Office will refer to the transcript key or catalog of the sending institution in making a determination as to the level or purpose of the course in question.
- Transferred courses will be considered upper-division (junior-senior level) and count toward the total number of *upper-division hours* required if they are earned at a four-year institution and designated by that institution's course numbering system as upper division courses.
- A transferred course will retain the *original number of credit hours* for which it was taken at the previous institution, even if the equivalent UMKC course is worth a different number of hours.
- Courses transferred from institutions which award *quarter hours* will be converted into semester hours at the rate of 1 quarter hour = 2/3 semester hour.
- In general, courses with a grade of *D or higher* will receive full credit in transfer. For some degree programs, a course with a grade of D may not be used to satisfy specific requirements. A transfer student would be required to repeat a specified course on the same basis as a "native" UMKC student who earned a D in the equivalent course.
- Coursework of *any age* will be accepted in transfer to satisfy general education requirements and electives. If transfer credit is more than 15 years old, or of a specific technical or scientific nature, students may be required to repeat courses that are part of a major or field concentration. Individual UMKC academic units may impose more restrictive coursework age requirements.
- Non-University of Missouri System *grades and grade points* do not transfer, although the grades earned in transfer courses are printed on the transcript. An admission grade-point average that considers all attempted coursework is computed at the time of application, and an overall GPA will be computed at any time a student applies for admission to a more selective program within the University. The UMKC transcript reflects the total number of accepted hours earned from all sources, but only calculates the UMKC/UM grade-point average. Students transferring into UMKC with a certified core should see the appropriate School or College section of this catalog for requirements beyond the core to complete a specific baccalaureate degree.

Credit for Military Training

Students who have served in the armed forces may be eligible to receive college credit for courses completed through the military or occupational specialty training. The American Council of Education recommendations in *A Guide to the Evaluation of Educational Experiences in the Armed Services* generally serve as a basis for granting such credit. To count toward a degree, the credit recommended must be appropriate to the student's curriculum. UMKC does not grant credit for military science or for courses that are strictly military/vocational in content.

Credit for Prior Learning Policy

UMKC allows a maximum of 30 credit hours* for prior learning toward the completion of an undergraduate bachelor's degree. Prior learning must be documented, evaluated, and appropriate to the level of degree awarded. Students may earn prior learning credit at UMKC through the following options:

Advanced Placement (AP) examinations may count for UMKC degree credit if the exams and scores are acceptable. (Note: UMKC awards credit for specific scores on certain Advanced Placement exams that are administered by the College Board, not simply for enrollment in advanced placement

courses at the high school level. In order to receive AP credit, students must have official AP score reports sent to UMKC directly from the College Board. Credit cannot be determined from high school or previous college transcripts.)

International Baccalaureate (IB) examinations are tests taken as the culmination of a special high school study program. Several of the Higher Level exams count for credit if the score earned is a 5 or higher.

College Level Examination Program (CLEP) exams are acceptable for credit in certain areas of study. UMKC accepts only the CLEP Subject Exams. Not all subjects are accepted. Credit is not given for any CLEP General examination. No CLEP Subject Exam may be taken in the final 30 hours of coursework leading to a degree.

Credit by Departmental Examination may be earned if a student has previous knowledge or proficiency in an area of study and arranges to take a departmentally administered examination. If a department chooses to offer credit by examination, the department must provide a test that measures the same level of proficiency as is required to earn credit for enrollment in the course. Frequently this is the final exam for the course. Before taking a departmental examination, students must register in the Registration and Records office and obtain a Credit by Departmental Examination form:

(http://www.umkc.edu/registrar/forms/credit_by_exam.pdf).

The charge for attempting credit by departmental exam is equal to one credit hour.

Eligibility for credit by departmental examination requires:

1. Enrollment at UMKC in the semester in which the examination is administered
2. No enrollment in the course that is subject of the examination during the last three terms.
3. Achieve a grade of C or above on the examination in order to receive credit.

*This does not apply to courses transferred from other institutions.

Missouri Higher Education Articulation Agreement

General Education Requirements for Transfer students:

All UMKC undergraduate students complete general education requirements. The UMKC General Education Core (UMKC Core) curriculum is designed to provide knowledge and skills that are important for all students, no matter their major or field of study. For full details, see [umkc.edu/core](http://www.umkc.edu/core) (<https://www.umkc.edu/core/>).

Per a requirement passed into Missouri law in 2016, a state-wide general education curriculum specific to transfer students was created to facilitate transfer among Missouri's public colleges and universities. This new state-wide curriculum requires 42 hours of coursework spread amongst five knowledge areas:

- Mathematical sciences – three (3) credit hours
- Natural sciences – seven (7) credit hours, including a course with a lab
- Humanities and fine arts – nine (9) credit hours from at least two disciplines
- Social and behavioral sciences – nine (9) credit hours, including a civics course
- Written and oral communications – nine (9) credit hours (six in written communications and three in oral communications)
- Additional hours – five (5) additional credit hours distributed among the above five knowledge areas.

All transfer students to UMKC from an accredited regional institution shall be treated the same as those transferring from a public Missouri institution of higher education. Starting Fall 2018, new incoming transfer students may be eligible to complete either the UMKC Core or Core 42 general education curriculum. For more details on Core 42, please visit - <https://dhe.mo.gov/core42.php>.

Transfer Students with a Completed Core 42, an Associate of Arts degree or a Bachelor's degree

- Students who complete the CORE 42 curriculum at a participating Missouri institution, an Associate of Arts degree from any regionally accredited institution, or a Bachelor's degree from a regionally accredited institution before transferring will have met all UMKC general education requirements.

Transfer Students with General Education Coursework in Progress

- Students transferring to UMKC with at least twelve (12) post-high school college credit hours but without the completed Core 42 or Associate of Arts degree may have the option to complete either the UMKC Core or Core 42.
- Transfer guides are built based on the optimal general education curriculum to create your shortest path to graduation from UMKC.
- Your advisor will review your transfer credits with you prior to the end of your first semester at UMKC to help you determine which general education curriculum best suits your degree plan and moves you closest to graduation.

Below are the UMKC courses students must take if they wish to complete the 42-credit core prior to transferring to another Missouri institution:

1. DISC 100
2. DISC 200
3. DISC 300
4. Anchor I
5. Anchor II
6. Anchor III
7. Focus A
8. Focus B
9. Focus C
10. Focus Elective
11. Additional credit hours to total 42

Transferring Within the University of Missouri System

University of Missouri Policy states that *"Any course that leads to an undergraduate degree on any campus of the University of Missouri shall be accepted in transfer toward the same degree on each campus of the University offering said degree."* Students transferring within the UM system are still required to satisfy the course and residency requirements of the campus from which they wish to graduate. Grades, including D and F grades, and grade points earned will also transfer and be included in the cumulative UM grade-point average.

For more information contact the following offices –

University of Missouri – Columbia Office of Admissions, 800-225-6075, mu4u@missouri.edu

University of Missouri – Kansas City – Registration & Records Office, 816-235-1125, registrar@umkc.edu

Missouri University of Science and Technology – Registrar's Office, 573-341-4181, registrar@mst.edu

University of Missouri – St. Louis - Office of the Registrar, 314-516-5545, registration@umsl.edu

Undergraduate Admission Policy & Procedures

University of Missouri-Kansas City

Office of Admissions

5000 Holmes

Atterbury Student Success Center, Welcome Center

Kansas City, MO 64110

816-235-UMKC (8652)

admissions@umkc.edu

- Director of Admissions: Alice Arredondo
- Associate Director of Admissions: Doretta Kidd
- Associate Director of Recruitment: Elora Thomas
- Associate Director of CRM Operations: Elsa Evans
- Assistant Director of Recruitment: Janey Stephens
- Assistant Director of Special Events: Annie McKenzie
- Assistant Director of CRM Operations (Undergraduate): Tara McGuffin
- Assistant Director of CRM Operations (Graduate): Amanda Shreves
- Coordinator of Campus Visits: Josie Pennington
- Communications Coordinator: Jazzmon Lane

Application for Admission

Qualified Students Seeking Admission

1. Complete the application for admission online at <https://www.umkc.edu/admissions/apply/freshman-application-process.html> or through the Common Application. Students applying to the six-year medical program cannot submit the Common Application. Domestic students include Permanent Residents and students who have been granted refugee or assylee status. International students should contact the International Student Affairs Office for more information on applying as an international student.
2. A nonrefundable application fee is required. The application fee is \$45 for domestic students and \$75 for international students.
3. High school transcript with class rank (if available).

4. ACT or SAT score (unless applying under test optional admissions process).
5. Official transcript from each previous institution where college credit was attempted.

Appeal of Admission Decisions

Students who are denied admission as a freshmen or transfer student may submit a statement of appeal to the Office of Admissions by emailing admissions@umkc.edu. Include the reason for appeal, a letter of recommendation from a counselor or teacher, and any other information relevant to the appeal.

Students who are denied readmission must direct their appeal to the appropriate dean's office of the academic unit to which they were denied readmission.

Former Student Readmission

Requirements to re-enroll:

Readmitted (returning) students must meet ALL of the following requirements.

- You have not attended another school since leaving UMKC.
- You were not academically dismissed by your academic unit at UMKC.
- You are a graduate student and have not been out of your program for more than two consecutive semesters (not including summer).
- OR -
You are an undergraduate student and have not been out of your program for more than three consecutive semesters (not including summer).
- You wish to re-enroll in the same academic unit and the same degree program in which you were previously enrolled. Note: You cannot be readmitted to a program in which you have already earned a degree. If you wish to enroll in a different degree program, you will need to fill out a new application.
- You were not a Visiting/Community Student or enrolled through the Office of Continuing Education in the preceding semester.
- You are not a student in Dentistry, Law, Medicine, Pharmacy, Conservatory, Counselor Education, Graduate Biological Sciences Programs, Graduate Nursing Programs or Graduate Theatre Programs.

Application options:

- If you meet the requirements, complete and submit the request to enroll form (<https://futureroo.umkc.edu/register/readmit-request/>). You will not need to resubmit the general UMKC application fee.
- If you do not meet the requirements, please submit a new application (<https://futureroo.umkc.edu/apply/>). You will not need to resubmit the general UMKC application fee if you were ever enrolled at UMKC as a degree seeking student.

Freshman Admission

Students interested in applying to UMKC have several options:

- Automatic admission
- Test-optional admission
- Competitive admission
- Provisional/Trial Admission
- Mature Adult Admission

Regardless of the process under which you may be admitted, you should complete the high school 17 core requirements, submit high school transcripts, and, if necessary, submit an ACT or SAT score.

The 17 core requirements include the following courses (each unit equals one year in class):

- Four units of English, one of which may be in speech or debate (two units emphasizing composition or writing skills are required).
- Four units of mathematics (Algebra I or higher). This requirement may be satisfied by the completion of courses in middle school, junior high or senior high.
- Three units of science (not including General Science). The three units of science must include a laboratory course and must include units from at least two of the following areas: physical science, biology, physics, chemistry and earth sciences. This requirement may be satisfied by the completion of courses in middle school, junior high or senior high.
- Three units of social studies.
- One unit of fine arts, to be taken in visual arts, music (e.g., band, orchestra, music appreciation, music theory), dance or theater.

- Two units of a single foreign language or American sign language. This requirement may be satisfied by completion of courses in middle school, junior high or senior high.

Automatic Admission

The following chart outlines the minimum requirements for automatic admission within those academic units who allow automatic admission. Applicants who self-report completion of the 17 core requirements, and who self-report a GPA and test score within the parameters outlined below, may be offered automatic admission. Students admitted under automatic admission must submit official, final high school transcripts before matriculating to UMKC.

Students interested in the following programs should look at the information under competitive admission: Architecture, Urban Planning, and Design; Conservatory, School of Dentistry; School of Medicine; School of Nursing; School of Pharmacy; and School of Law.

UMKC reserves the right to rescind an offer of admission if any misrepresentations on the application or in the supporting documentation are found.

Test-Optional Admission

Under the UMKC test-optional admission process, applicants with a 2.75 or University of Missouri System (UM) core GPA may be admitted to UMKC without submitting an ACT or SAT score. Depending on UM core GPA and completion of the required high school core curriculum (outlined above), students may be fully admitted to UMKC or conditionally admitted to one of the academic support programs below.

*Does not include Architecture.

**Only includes the Bachelor of Health Studies and the Bachelor of Public Health.

Students interested in the following academic programs are not eligible to be considered under the test-optional process and must submit an ACT or SAT score:

- Architectural Studies
- Conservatory
- School of Computing and Engineering
- School of Dentistry
- School of Medicine
- School of Nursing and Health Studies
- Honors College

The following types of students must also submit an ACT or SAT score:

- Students interested in automatic scholarships
- Students who are home-schooled
- Student-athletes

Students who apply test optional but do not meet certain core curriculum requirements may be admitted to UMKC conditionally, pending completion of an academic support program. These free support programs are designed to help the student transition successfully to UMKC.

- **Peer Academic Leadership (PAL) Program** connects incoming students with a dedicated Peer Academic Leader as they begin their studies at UMKC. We strive to empower each student to achieve personal, academic and financial success by connecting students to resources and partners in their educational journey.
- **Summer Bridge Scholars Program** is an academically rigorous, eight-week summer experience to prepare first-time college students for success at UMKC. In addition to earning college credit and improving their academic skills, Summer Bridge Scholars develop a sense of connectedness to the UMKC campus and the larger Kansas City community. Learn more about Summer Bridge (<https://www.umkc.edu/asm/summer/>).

Competitive Admission

Applicants interested in the following programs have special admission processes and must submit transcripts, test scores, and additional application materials (if required) in order to be considered for admission.

- Architectural Studies
- Conservatory
- School of Dentistry and Dental Hygiene
- School of Medicine Six-Year B.A./M.D. Program
- School of Nursing and Health Studies
- School of Pharmacy Early Assurance Program
- Six-Year Law Scholars Program

- Institute for Urban Education in the School of Education
- Honors College

Please go to <https://www.umkc.edu/admissions/apply/freshman-application-process.html> for more information on specific competitive admission requirements.

Provisional/Trial Admission

Applicants who do not qualify for admission under the automatic admission, test-optional admission or competitive admission processes may still be considered for provisional or trial admission. The Office of Admissions will conduct a holistic review of high school GPA, test score, and other relevant information in the application to determine if the applicant will be offered admission. (Additional documentation may be requested before a final admission decision can be made.) If offered admission, students may be required to participate in an academic support program.

Provisional or trial admission are not options for students interested in the following programs: Six-Year Medicine, Conservatory, Architectural Studies, School of Computing and Engineering.

Mature Adult Admission

Students who graduate from high school more than five years from the time of application and have fewer than 24 transferable college credit hours may be considered for admission as a mature adult. Students who qualify must submit high school transcripts, GED or HSET, college transcripts for any college coursework attempted, and ACT/SAT scores or a test waiver.

Heartland Rate

Heartland Rate

With the Heartland Rate (<https://www.umkc.edu/heartland-rate/>), undergraduate students from these states pay 150% of in-state tuition, which represents a \$10,000 value:

- Arkansas
- Illinois
- Indiana
- Iowa
- Kentucky
- Michigan
- Minnesota
- Nebraska
- North Dakota
- Ohio
- Oklahoma
- South Dakota
- Tennessee
- Texas
- Wisconsin

Rates are effective beginning in Fall 2018 for undergraduate students.* Residency rules apply. Rates will be applied automatically for students in the Heartland Rate states, including those who have already been admitted.

To learn more about the Heartland Rate, contact our Admissions team (admit@umkc.edu?subject=Heartland%20Rate%20inquiry%20from%20website) today.

* Savings amount of \$10,000 is based on cost of tuition for full-time non-resident undergraduate students taking 30 credit hours annually. Graduate and professional medical, dental, pharmacy and law students are not eligible. If you are an undergraduate student currently receiving a discount through the Midwest Student Exchange Program (MSEP), you will now receive the Heartland discount. Some graduate and professional students are still eligible for the MSEP rate. Find out more (<http://msep.mhec.org/institution/university-missouri-kansas-city/>) about whether your program is included.

Kansas Rate

Kansas Rate

Why offer the Kansas Rate (<https://www.umkc.edu/kansas-rate/>)? Because we know the cost of college isn't just about tuition. By using the Kansas Rate, you'll save nearly \$14,000 each academic year – money you can use on textbooks, technology, housing or just the cost of life.

Rates are effective beginning in Fall 2018 for undergraduate students.* Residency rules apply. Rates will be applied automatically for Kansas residents, including students who have already been admitted.

To learn more about the Kansas Rate, contact our Admissions team (admit@umkc.edu?subject=Kansas%20Rate%20inquiry%20from%20website) today.

Graduate students in the following Kansas counties are still eligible for the in-state rate:**

- Atchison
- Douglas
- Franklin
- Jackson
- Jefferson
- Johnson
- Leavenworth
- Miami
- Osage
- Shawnee
- Wyandotte

* Savings amount of \$14,000 is based on cost of tuition for full-time non-resident undergraduate students taking 30 credit hours annually.

** In-state rates are not in effect for graduate students pursuing professional degrees in medicine, dentistry, pharmacy and law.

Policies on Admission of International Students

Students Served by the International Student Affairs Office (ISAO)

ISAO is responsible for processing the admission of any student who does not hold US citizenship including those awaiting approval of permanent residency or asylum, and those currently holding Temporary Protected Status (TPS).

The UMKC Admissions Office processes all applicants in the below categories.

- US Permanent Residents
- DACA recipients
- Undocumented
- U visa holders
- Refugee and Asylum status holders
- Citizens of Micronesia, Palau, or the Marshall Islands

Application for Academic Admission

All international students must submit an application to be considered for admission. The UMKC general application can be found at <https://futureroo.umkc.edu/apply/>

All new applicants are required to

- Pay the non-refundable \$75.00 application fee
 - Application fee waivers are not available to international applicants.
- Submit exact line-by-line English translations of all academic records issued in other languages
- Provide proof of English language proficiency. (Please refer to section below entitled English Proficiency Requirement for more information.)

- Provide documentation of all previous academic work as is outlined below INCLUDING any English language study completed in the United States.
- See below for specific requirements by application type.

First Time College/Freshman Application

Students who plan to attend UMKC after graduating high school should submit the following along with their application:

1. Academic transcripts and proof of graduation from secondary school
2. Statement of Purpose
3. Any other documentation required by the academic program

Transfer Students

Students who plan to transfer from another recognized higher education institution in order to complete a degree at UMKC should submit the following along with their application:

1. Academic transcript from all previous higher education institutions.
2. Academic transcripts and proof of graduation from secondary school (required for transfer students who have completed fewer than 24 credit hours)
3. Statement of Purpose
4. Any other documentation required by the academic program.

Exceptions to Admissions Policies for International Students

Exceptions to admission policies must be approved by the appropriate authority in the college or school to which the applicant is applying. International Student Affairs should be contacted regarding all forms and procedures.

Visa Services and Document Requirements

New Initial F-1/J-1

Students who plan to apply for an initial F-1 or J-1 visa to study at UMKC must submit the following once they have been academically accepted to the university.

- Copy of valid passport
- Financial statement- This must contain proof of the ability to afford at least one academic year of study.

SEVIS Transfer F-1/J-1

Current F-1 or J-1 students who plan to transfer their SEVIS records to study at UMKC must submit the following once they have been academically accepted to the university.

- Copy of valid passport
- Financial statement- This must contain proof of the ability to afford at least one academic year of study.
- Copy of current visa
- Copy of most recent I-94
- Copy of pages 1 & 2 of current/most recent I-20 or DS-2019
- Transfer-In Form (to be completed with assistance from a DSO at the previous institution.)

Other Visa Types

Students currently in the United States holding any other visa status determined to be reviewed by the International Student Affairs Office must submit the following once they have been academically accepted to the university.

- Proof of current status in the US. This may include
 - Copy of passport
 - Copy of current visa
 - Copy of most recent I-94

Financial Statement Guidelines

Per regulations outlined by the US Federal government, F-1 and J-1 international student applicants must prove the ability to afford at least one year of study in order to be issued a Form I-20 or Form DS-2019.

Financial statements in the name of a family member, friend, or non-governmental sponsor must be accompanied by a completed Financial Statement and Affidavit of Support (<https://info.umkc.edu/ISAO/wp-content/uploads/2018/08/Affidavit-of-Support.pdf>) form signed by the account holder. Any family members accompanying F-1/J-1 students as dependents must be disclosed on this form and proof of additional funds for each dependent must be provided.

UMKC ISAO reserves the right to verify financial documentation with the issuing bank or financial institution.

Application Deadlines

Applicants should refer to the deadlines set by the academic program they are applying to. If no deadline exists, applications are accepted on a rolling basis. ISAO processing staff will inform the applicant if his or her application should be deferred to a later semester. ISAO recommends students applying from outside of the United States to apply at least 3 to 4 months before the beginning of the semester they plan to attend.

UMKC reserves the right to consider applicants for the most appropriate semester.

Requirements for Submission of Academic Records

Unless otherwise specified by an academic department, international students may submit PDF copies of their transcripts for admission review. If admitted before final, official/original transcripts and degree certificates/diplomas are received, the student is considered to be **provisionally admitted**. Official academic records can be mailed directly to

International Student Affairs Office
University of Missouri – Kansas City
5000 Holmes Street, ASSC G-04
Kansas City, Missouri 64110

Enrolled students are required to submit OFFICIAL or ORIGINAL academic records to ISAO before enrolling in their second semester of coursework. Original academic documents will be photocopied and returned to the student. Students will be informed at the point of admission which records they must arrange to provide. Students are responsible for arranging to provide UMKC ISAO with the requested documents.

UMKC reserves the right to verify submitted academic records with the issuing institution for authenticity and accuracy.

Third Party Credential Evaluation Reports

ISAO evaluates all foreign credentials. It is not necessary for admission to submit an international credential evaluation report from a third party service. However, ISAO will accept the grade point average conversion of any AICE (<https://owa.missouri.edu/owa/auth/logon.aspx?replaceCurrent=1&url=https%3a%2f%2fowa.missouri.edu%2fowa%2f%23authRedirect%3dtruehttp://aice-eval.org/members/>) or NACES (<https://www.naces.org/members.php>) accredited international credential evaluation service. ISAO will not accept degree equivalency recommendations given by these services if they do not align with already existing UMKC practices and policies. All 3rd party credential evaluations must be sent directly from the evaluator service to ISAO/ Admissions to be considered. These documents will not be accepted for evaluation purposes if sent directly by the student.

English Proficiency Requirements

International students are required to establish proof of adequate English proficiency as part of the admission process. Applicants from countries in which English is not the native language (or if it is one of the official languages but is not necessarily the first language of the majority of the population) are required to provide proof of English proficiency. Applicants may do so through the following methods:

- Provide UMKC with official test scores from:
 - TOEFL (Test of English as a Foreign Language) with a minimum score of 61
 - IELTS (International English Language Testing System) with a score minimum of 5.5 with 5.5 in each band
 - PTE (Pearson Test of English) with a minimum score of 44
 - DET (Duolingo English Test) with a minimum score of 90
 - SAT (Scholastic Aptitude Test) with a minimum score of 460 in the Evidence-Based Reading and Writing section
- Completion of 24 credit hours at a US, Canadian, UK, New Zealand or Australian institution
- Completion of Composition I and II with grades of C or better at a US institution
- Successful completion of ELS Language Centers Level 112

Conditional Admission

Students with **no proof of English proficiency** or **low English proficiency test scores** may be considered for admission to certain academic programs. Contact International Student Affairs for more information.

English Proficiency Evaluation

All international students subject to the proof of English proficiency requirement with low or no test scores must be evaluated by the Applied Language Institute (<https://info.umkc.edu/ali/>) staff at UMKC regarding the level of their English proficiency. If any weakness in that level of proficiency is revealed, appropriate coursework will be required to assure that the student's success is not jeopardized.

Other Policies

Residency

International applicants on H, L, or A visa records will be considered for the residency using the same guidelines imposed on domestic applicants. International students on F, J, or M visa records are not eligible for reduced tuition rates based on residency status. Students holding any visa type not listed above are eligible to submit a residency petition to be considered by the Residency Committee.

See here for more information. (<https://umkc.edu/residency/>)

Credit by Examination/Transfer Credit

ISAO reviews all new undergraduate students with previous university coursework completed for possible transfer credit upon receipt of official, final transcripts. Students with previous university work completed at an international university are strongly encouraged to submit course descriptions for each successfully completed course as well as direct English translations of the descriptions if necessary.

Students who have completed more than 12 years of study by the end of their secondary education may be eligible for college credit upon review and approval by appropriate UMKC staff and faculty.

Admission Deferral

An offer of admission, granted on a regular basis for a given term, may be deferred for up to one calendar year from the term first granted. However, if the applicant attends another college or university after the original offer of admission, a new application must be submitted and official transcripts of the additional work must be furnished.

Applicants must request a deferral for a specific term by contacting International Student Affairs. This request can be submitted through ISAO's website here. (<https://info.umkc.edu/ISAO/admitted-students/deferred-admission/>) Individual financial support documentation must be renewed annually.

Arrival in the US

International students should plan to arrive no earlier than one month before the program start date indicated on their Form I-20. They should plan to arrive no later than 7 days prior to the program start date indicated on their Form I-20.

Registration with International Student Advisor

Admitted international students must report to the International Student Affairs Office for a Check-In Session (<https://info.umkc.edu/ISAO/admitted-students/>) prior to their first registration at UMKC. International students must adhere to all regulations of their given visa, including any requirements regarding full-time enrollment and work authorization. Students may work directly with an international student advisor to understand their regulatory obligations and opportunities available through their given visa.

Health Insurance

Effective fall 1998, international students on F or J visas are required to purchase exclusive, mandatory UMKC health insurance.

International Orientation

All degree-seeking international students new to UMKC are required to attend International Orientation and will be assessed a \$50 fee. International Orientation is held the Thursday before the start of classes for the Fall and Spring semesters. Students who begin their studies in the Summer will be required to attend Fall Orientation.

A make-up Orientation will be held mid-semester in the Fall and Spring. If a student misses both the Orientation for their starting term and the make-up Orientation that term, they will be assessed another \$50 fee and will be required to attend the next possible Orientation. Students will continue to be charged \$50 each semester until they have successfully completed this requirement.

More Information

International applicants to undergraduate programs who want more information and forms to apply for admission can go to <http://www.umkc.edu/isao> (<http://www.umkc.edu/isao/>) or email ISAO at isao@umkc.edu. (<http://catalog.umkc.edu/undergraduate-academic-regulations-information/undergraduate-admission-policy-procedures/policies-on-admission-of-international-students/isao@umkc.edu>)

Policies on Regular Admission - Medicine

General

The School of Medicine's Council on Selection carefully reviews applicants to the six-year combined baccalaureate/M.D. program. Academic potential, as evidenced by the quality of high school courses, rank in class and admission test scores, and personal qualities such as leadership in school or community, stamina, reliability, motivation for medicine and range of interests, are considered. Applicants who appear to be well qualified are invited to the UMKC campus for interviews. If invited, the applicants are notified in writing and required to be present at the scheduled date and time of the interviews. Residency in Missouri will be considered before all other factors in selecting students for this program. (See the School of Medicine section of the catalog for complete details.)

Admissions Test - Medical Program

The American College Testing Program, called the ACT, examination is required for all in-state applicants. The Scholastic Aptitude Test, called the SAT, is accepted for out-of-state applicants in some instances.

Deadline for Application - Medical Program

The deadline for application for Year 1 is Nov. 1 of the year preceding the one for which the student is applying. By this date, a completed application form must be received, and all other required credentials, application supplements, test scores, references and six-semester high school transcript, should be in process and sent as soon as possible. The earliest date for applying is Aug. 1 of the year preceding entry.

Special Admission Cases

Trial Admission

High school graduates who do not meet the standards for regular admission from high school may, in some cases, be admitted to the University on a conditional trial basis. If admitted, students may be required to participate in an academic support program as a condition of their admission. The student must earn a 2.0 grade-point average to be eligible to enroll the following semester.

Students can choose from several options during their senior year in high school or the summer before their freshman year to be considered for regular admission:

- Take coursework in the required area during the summer prior to the fall semester of their freshman year.
- Enroll in college-level coursework in the required area at an accredited community college or four-year institution.
- Complete the required coursework through correspondence or independent study.

Early Admission from High School

Superior high school students who have completed all of the requirements for graduation from high school but who will not receive a high school diploma until their class graduates will be considered for admission based on the criteria under Regular Admission from High School (p. 499). The applicant's high school principal or counselor must certify that graduation requirements have been met and written parental approval is required.

Dual High School-University Enrollment

High school students may be admitted in a special student category for the purpose of taking University courses concurrently with high school courses.

Students interested in enrolling in dual credit classes taken at their high school for both high school and college credit should contact the High School College Partnerships. (<http://www.umkc.edu/hscp/>)

High school students wanting to take college courses on UMKC's campus must submit a special application (<https://futureroo.umkc.edu/apply/>) that includes high school authorization.

GED High School

Any individual may apply for admission on the basis of passing the General Educational Development (GED) tests. Passing scores must be achieved in each area of the GED. The student also is required to present an ACT composite score of 24. Students not meeting this criteria may be considered for a trial admission.

Home Schooled

Graduates of home schooled programs are required to have a minimum ACT composite score of 24 and completion of the 17 units of college-preparatory curriculum. Students not meeting this criteria may be considered for a trial admission.

Mature Adults

Students who graduated high school five or more years ago and have not attempted college level course work may apply for admission without submitting ACT or SAT scores.

Timing of Applications

The Office of Admissions will begin accepting admission applications August 1 of the year preceding the Fall Semester for which the student is applying. High school seniors will be evaluated on the basis of six or more completed semesters of high school work.

Dates of Application

The preferred dates for admission application from high school are as follows:

- Fall Semester: January 15
- Spring Semester: November 1
- Summer Session: May 1

However, applicants are urged to apply well before the above dates. To be considered for scholarships, students should be admitted by **January 15th**. Some academic units have earlier deadlines. Refer to those sections of the catalog.

Six-Year Medical Program

Students interested in applying to the Six-Year Medical Program should refer to the School of Medicine section of the catalog to get information on application deadlines.

PharmD. Program

Students interested in applying to the PharmD. program should refer to the School of Pharmacy section of the catalog to get information on application deadlines.

Transfer Admission

Students who have completed 24 or more semester hours of college-level work are eligible for admission if they have attained an overall grade-point average (GPA) of at least 2.0 (on a 4.0 scale) in all college-level courses attempted at previous institutions.

Note: Academic units may have more stringent requirements. Check the section of the catalog that describes the degree program and major you are seeking.

Regular Admission

Students transferring from other colleges or universities should submit the following to the Office of Admissions:

1. Completed UMKC application form at <http://www.umkc.edu/admissions/apply> (<http://www.umkc.edu/admissions/apply/>). Domestic students, including Permanent Residents, Assylees, and Refugees, apply through the Office of Admissions; International students apply through International Student Affairs. Contact the appropriate office for paper application forms.
2. Nonrefundable application fee. The fee for a domestic online application is \$45; the fee for an international student application is \$75.
3. Official transcripts from all colleges and universities where coursework was attempted.

A transferring student who has completed fewer than 24 hours of college-level coursework must apply under the procedures for admission as a freshman and must have at least a 2.0 overall GPA in all college work attempted. These students must submit the following to the Office of Admissions:

1. High school transcript with class rank and ACT score (if less than 24 college credits).
2. Official transcript of all college courses completed and courses in which the student is currently enrolled.

Special Admission

Transfer students who do not have a 2.0 GPA are welcome to apply for admission; however, admission is not guaranteed and a student may be admitted on a probationary status.

Transfer Within the University of Missouri System

Students may transfer among campuses within the University of Missouri System. Any course that leads to an undergraduate degree on any campus of the University of Missouri System is accepted in transfer toward the same degree on each campus of the UM System offering that degree.

Students will have two cumulative grade-point averages. One is the campus GPA that will be calculated by procedures defined at the campus. The second is the University of Missouri GPA, which will include all grades and credits attempted at any University of Missouri campus, including all grades, credits and points for any courses that are repeated.

Any student attempting to transfer between University of Missouri campuses to UMKC should be aware that their cumulative University of Missouri GPA will be used to determine their admissibility.

Transfer of College Credit from Other Colleges and Universities

Refer to the Undergraduate Academic Regulations and Information section of the catalog.

Students who have completed an associates degree (AA or AS) from an accredited college or university and have a cumulative GPA of 2.0 (on a 4.0 scale) are admissible to the University, but not necessarily to specific programs. For the additional admission requirements of specific degree programs, refer to the appropriate sections of the catalog.

Transfer Credit Policy

Transfer credit is entered and reviewed on a course-by-course basis from the sending institution. If the course has been previously evaluated by an Academic Unit, the course equivalency is stored in the transfer credit database and credit is assigned based on those prior decisions. If the transcript is for a new course, new institution, or out-of-state institution, equivalencies for general education courses are determined by the Transfer Credit Coordinator in the Registration and Records Office. If the course is college level and an exact equivalency is unknown, elective credit is assigned and review of the course is completed by the Academic Unit to determine degree applicability. If the Transfer Credit Coordinator is unable to determine if a course should receive elective credit, the process for an Academic Unit evaluation is initiated by sending a course description (and syllabus, if available) to the Academic Unit for review. The transfer credit database is updated with the Academic Unit evaluation to ensure consistency in credit assignment going forward for that course.

Transfer credit evaluations may find coursework to be an exact UMKC equivalency, non-exact equivalent that are identified as elective credit, or not accepted in transfer. The sending institution determines the level (lower level/upper level) of the course. The Office of Registration and Records maintains a transfer equivalency database of all evaluated courses. This database is available to both current and prospective students within Pathway, (UMKC's course enrollment system) and Transferology (UMKC's course transfer database). Only transfer credit from a UM-system school is including in the UMKC GPA calculation.

Veteran Residency

The following individuals shall be charged the in-state rate, or otherwise considered a resident, for tuition purposes:

- A participant using educational assistance under either chapter 30 (Montgomery G.I. Bill – Active Duty Program), chapter 31 (Vocational Rehabilitation and Employment), or chapter 33 (Post-9/11 G.I. Bill), of title 38, United States Code, who lives in the State of Missouri while attending a school located in the State of Missouri (regardless of his/her formal State of residence) and enrolls in the school within three years of discharge from a period of active duty service of 90 days or more.
- Anyone using transferred Post-9/11 GI Bill benefits (38 U.S.C. § 3319) who lives in the State of Missouri while attending a school located in the State of Missouri (regardless of his/her formal State of residence) and enrolls in the school within three years of the transferor's discharge from a period of active duty service of 90 days or more.
- A spouse or child using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in the State of Missouri while attending a school located in the State of Missouri (regardless of his/her formal State of residence) and enrolls in the school within three years of the Service member's death in the line of duty following a period of active duty service of 90 days or more.
- Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three year period following discharge or death described above and must be using educational benefits under chapter 30, chapter 31, or chapter 33, of title 38, United States Code.

Visiting and Community Student Admission

Students from other institutions who wish to attend UMKC to transfer courses back to their home institutions may be admitted as Visiting Students for a term. Students are encouraged to check with officials at their home institution to guarantee that UMKC courses are transferable and fulfill their program's degree requirements.

Students who are members of the community and who do not wish to earn a degree at UMKC, but are not currently seeking a degree at another institution, may apply as Community Students.

Students may obtain a Visiting/Community Student Application form at <http://www.umkc.edu/apply/visiting.asp> or from the Office of Admissions. Not all academic programs are open to visiting/community students. Some academic units require that the non-degree seeking student be certified by the home institution as a student in good standing. Consult the application for specific program and course eligibility.

Policy on Admission Credentials

All credentials submitted in support of the application for admission become the property of UMKC.

Undergraduate Research & Creative Scholarship

Undergraduate Research & Creative Scholarship at UMKC

As Kansas City's urban research university, UMKC offers undergraduate students exciting opportunities to enrich their education by joining in the cutting-edge research, innovative scholarship, and groundbreaking artistic work of the faculty. Undergraduates can enroll in EUREKA classes (Experiences in Undergraduate Research); apply for small grants through SEARCH (Students Engaged in the Arts and Research) and SUROP (Summer Undergraduate Research Opportunity); participate in research sponsored by external funders, such as the National Science Foundation, National Institutes of Health, and National Endowment for the Humanities; and use their federal work-study awards to gain experience as Undergraduate Research Associates. Full details about Undergraduate & Creative Scholarship at UMKC are available at <https://www.umkc.edu/searchsite/>.

Students may also apply for the honorary designation "Undergraduate Research Fellow," which will appear as a milestone on their transcripts. The designation "Undergraduate Research Fellow" also appears in the Commencement Program during the semester when a student earning the honor applies for graduation.

To be considered for this honor, students will have been involved in all major phases of their research or artistic projects, including the conception and implementation of their research, scholarly, or artistic work and its circulation to an audience beyond the classroom. Applicants are also required to submit an endorsement from their faculty mentor(s).

Generally, students awarded the distinction of "UMKC Undergraduate Research Fellow" will have been engaged with their projects over multiple semesters, resulting in an original contribution to their field, and will submit their application to UMKC's Undergraduate Research Advisory Board in their final few semesters at UMKC. The Undergraduate Research Advisory Board reviews each application and presents a recommendation to UMKC's Director of Undergraduate Research, who is solely responsible for awarding the honorary designation.

Deadlines for applying for the designation of Undergraduate Research Fellow are October 1 in the Fall semester and March 1 in the Spring semester. Application guidelines can be found at <https://www.umkc.edu/searchsite/fellow/index.shtml> (<https://www.umkc.edu/searchsite/fellow/index.shtml/>).

Writing Intensive

Writing Intensive Courses

Writing Intensive courses at UMKC are undergraduate courses of at least 3 credit hours, at the junior or senior level, generally designated by WI or WL following the course number.

At the end of a Writing Intensive course at UMKC, students should be able to:

- Write in genres, participate in activities, and perform assignments that are appropriate to the respective discipline.
- Demonstrate their ability through writing to read closely and analyze critically the texts of their disciplines.
- Produce writing through the recursive process of brainstorming, research, drafting, peer review, and revising.
- Articulate and support a coherent thesis or purpose in their writing and develop it according to the conventions of a given discipline or audience.
- Use research methods and documentation that meet the standards of the discipline.
- Articulate and discuss their work with peers or the instructor.

For example, to achieve these goals Writing Intensive course design emphasizes and teaches writing as a recursive process, some class time is devoted to helping students complete writing assignments, writing assignments are distributed throughout the semester, and differ in length and purpose, the course requires 5,000-10,000 words (approximately 20-40 double-spaced pages) of revised, final-draft quality writing, and writing assignments account for at least 40 percent of the course grade. Complete guidelines and mandatory requirements for the design of and best practices for teaching a Writing Intensive course at UMKC appear on the University Writing and Reading Board (UWRB) website, <http://www.umkc.edu/uwr/>, or can be obtained by contacting the UWRB at uwr@umkc.edu.

PRE-MEDICINE/PRE-HEALTH

Among the fastest-growing career areas are the health-related professions and this trend is likely to continue in the 21st century, according to the U.S. Department of Labor. These employment opportunities require specialized training and one to four years of college-level studies in the appropriate pre-professional curricula. The pre-medicine/pre-health tracks are designed to help prepare students for future careers in the health arena and guide them through the process of applying to the various professional programs in health care.

The pre-medicine/pre-health tracks designed by the College of Arts and Sciences and the School of Biological and Chemical Sciences assist students following a traditional path toward ultimately earning a professional degree in a medical or health care field. Most students first earn a bachelor's degree, followed by training in a professional program such as a four-year medical or dental school or a master's degree program. These tracks are distinctly different from the unique six-year programs offered by UMKC in medicine and pharmacy described elsewhere in this catalog. For information about dentistry please see the UMKC Dental Program in the Graduate Catalog.

Some of the pre-professional programs in health care include:

- Pre-Dental Hygiene
- Pre-Dentistry
- Pre-Health, which includes advising for careers in:
 - Anesthesiologist Assistant
 - Chiropractic
 - Clinical Perfusion
 - Health Administration
 - Health Information Management
 - Nutrition/Dietetics
 - Occupational Therapy
 - Optometry
 - Physical Therapy
 - Physician Assistant
 - Podiatry
 - Respiratory Therapy
 - Veterinary Medicine
- Pre-Medicine (allopathic and osteopathic)
- Pre-Nursing
- Pre-Pharmacy
- Medical Technology (see section under School of Biological Sciences)

Advising

Experienced advisors in the College of Arts and Sciences and the School of Biological Sciences are knowledgeable about the professional school admission processes.

Advisors guide students in:

- Choice of majors
- Choice of courses
- Volunteer and shadowing opportunities
- Undergraduate research options
- Other health care professions
- Career alternatives

Advisors also give students invaluable help with:

- The professional school application process
- Preparation for professional school admission tests (MCAT, DAT, OAT, VCAT, etc.)
- Letters of recommendation
- Writing the personal statement
- Successful interview strategies

Choosing an Undergraduate Major

Following the pre-medicine or pre-health track means taking specific courses that professional programs require for admission, but "pre-medicine" or "pre-health" **are not actual degrees**. Students need to choose a major field of study to combine with one of these tracks. Students can choose to follow these tracks through the College of Arts and Sciences or the School of Biological Sciences, depending on the major selected. Professional schools accept individuals from a variety of educational backgrounds and majors. When choosing a major, it is wise for students to consider their personal interests and strengths as well as possible alternative career goals.

The School of Biological Sciences offers degrees in biology, including a bachelor of science in biology with an emphasis in the cellular and molecular basis of health and disease for pre-medicine students, and a pre-dentistry concentration for pre-dentistry students. Undergraduate students in the biological sciences also have the opportunity to work with faculty mentors in life sciences research.

The College of Arts and Sciences offers degree choices and medically related undergraduate research in areas spanning the sciences, social sciences and humanities. Popular majors to combine with pre-medicine and pre-health include psychology, chemistry, communication studies, physics, English, Spanish, and philosophy. Many other combinations in the 18 academic departments are possible, and advisors in the tracks will help students apply their interests to design the right combination.

College of Arts and Sciences Track

Cynthia Eick McDonald

Coordinator of Pre-Health Programs

Scofield Hall (<http://www.umkc.edu/virtualtour/scofield.asp>), Room 9

711 E. 51st Street

(816) 235-6098

mcdonaldce@umkc.edu (shafferjohnsonc@umkc.edu)

Students following the pre-medicine/pre-health track can enhance their preparation for health care careers through any major in the College of Arts and Sciences. While the relationship to majors such as chemistry or physics is clear, students may be surprised to discover how their interests in other majors within the College of Arts and Sciences (p. 554) will strengthen their abilities as future health care providers. For example:

- Students combining a major in psychology with the pre-medical/pre-health track will learn how psychology influences health and wellness, the prevention of disease and the healing process.
- Students majoring in communication studies will learn the critical importance of communication in health care, from the doctor-patient relationship to the interpersonal communication between members of a health care team to the power and politics of mass media.
- Philosophy majors will apply bioethical principles to "real world" dilemmas such as physician-assisted suicide.

Pre-medical and pre-health students can easily combine any major within the College of Arts and Sciences with the prerequisites for medical, dental or other health professions schools. First-year students in the College of Arts & Sciences pre-professional tracks who have not yet declared a major are required to enroll in the A&S Career Development sequence during their first two to three semesters. A&S 115, A&S 215 and A&S 315 are for one credit hour each and they are offered in a sequence starting in the fall semester. These courses are also highly recommended for all pre-professional freshman students with a declared major. UNIV 102, a two credit hour course, also satisfies the expectations for A&S 115 and A&S 215.

The College also offers:

- **The pre-medical/pre-dental curriculum** which may be combined with any major within the College of Arts and Sciences. This allows students the opportunity to complete the necessary prerequisite courses for admission to medical/dental schools in the United States and Canada.
- **Interdisciplinary courses that examine the complicated nature of health care.** Topics include the doctor-patient relationship, other aspects of health communication, health promotion and prevention and controversial issues in bioethics.
- **Medically related research projects** in such areas as clinical health psychology, chemistry, and physics. Current topics include disease prevention, psychological and communication barriers to adherence, and factors linking obesity, smoking, alcohol abuse, diet and exercise with cancer, cardiovascular disease and HIV/AIDS. Research partners include the Mid-America Heart Institute, Saint Luke's Hospital, UMKC Schools of Dentistry and Medicine and the Kansas City Free Health Clinic.
- **Dental-related research projects** which investigate topics such as pain management, disease prevention, psychological barriers in the healing process and the use of chemistry and physics to identify and construct new polymers for use as posterior restorations.
- **The Gerontology Certificate** allows students to explore relevant medical and social issues of the new millennium as people live longer, our population ages, and "care" becomes as important as "cure."
- **The Bioethics and Medical Humanities Minor.** Students can combine a minor in Bioethics and Medical Humanities in conjunction with any other major or as part of the BLA degree. See the Bioethics and Medical Humanities Minor (p. 911) for more information.

Pre-Medicine/Dentistry

The purpose of the pre-medicine/dentistry curriculum is to prepare the student for application to medical/dental schools. Students may complete the pre-medicine/dentistry curriculum within any major.

The courses recommended in the pre-medicine/dentistry curriculum do not constitute an academic major but are the courses required for entrance into the majority of medical/dental schools in the United States and Canada. They also provide students with the information needed to obtain top scores on the Medical College Admission Test (MCAT) and Dental Admissions Test (DAT), which are required for entrance into medical and dental schools.

In addition to gaining a strong foundation in the sciences, pre-medicine/dentistry students also will receive support services to help them best prepare for application to medical or dental school.

For students considering other health professions or seeking admission to specific programs with additional prerequisite courses, the curriculum may be tailored to meet these requirements.

Medical/Dental School Admission Requirements

1. Two semesters of general biology with corresponding laboratories:

Code	Title	Credits
BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
Total Credits		8

2. Two semesters of general chemistry with corresponding laboratories:

Code	Title	Credits
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
Total Credits		10

3. Two semesters of organic chemistry with corresponding laboratories:

Code	Title	Credits
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1
Total Credits		8

4. Two semesters of physics including laboratories:

Code	Title	Credits
PHYSICS 210	General Physics I	4
PHYSICS 220	General Physics II	4
Total Credits		8

5. Two semesters of English composition:

Code	Title	Credits
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Total Credits		6

In addition to the admission requirements listed above, most medical and dental schools recommend more advanced courses in biology, such as cell biology, genetics and biochemistry, and/or additional chemistry courses. Students should also take upper-level courses that demonstrate the requisite intellectual discipline and analytical and problem solving skills necessary to succeed in medical or dental school. Students are strongly encouraged to balance their work in the sciences with courses in communication studies, computer science, English literature, philosophy, psychology and sociology. A broad understanding of health care and medicine is also expected and work and/or volunteer experiences, including physician shadowing, in settings such as health care agencies, hospitals and physician offices is recommended.

UMKC School of Medicine MD Completion Program

While the UMKC School of Medicine is primarily a combined-degree (BA/MD) program, it annually accepts a limited number of MD-only students who have completed their pre-medical studies and baccalaureate degrees. Students completing their pre-medical studies at UMKC and applying to the School of Medicine have the advantage of taking courses with medical students, interacting with faculty who also teach at the medical school and securing recommendations from individuals familiar with the School of Medicine's curriculum and faculty. For more information about this program or to request an application, contact the Admissions Office at the School of Medicine.

UMKC School of Dentistry Reserved Admission Program

The Reserved Admission Program for the Doctor of Dental Surgery (DDS) degree at the UMKC School of Dentistry enables highly motivated, ambitious, talented students to pursue their dream of becoming a dentist. Because admission to the Reserved Admission Program is very competitive, qualified reserved admission program students will have a reserved seat in a future UMKC School of Dentistry DDS Program class of their choosing, and they will not have to compete further for admission into the UMKC dental school. Entry into the program is available to students from Missouri and Kansas.

To be eligible to apply for Reserved Admission you must have completed a minimum of but not more than four semesters of college credit while being continuously enrolled in full-time course loads (a minimum of 15-18 credit hours per semester). Your science grade point average must be at least 3.60 in a degree-seeking program including prerequisite courses.

For more information about this program or to request an application, contact the Office of Student Programs at the School of Dentistry, (816) 235-2080.

School of Biological and Chemical Sciences - PreMedicine/Pre-Health

Students interested in the scientific aspects of medicine or dentistry may find the School of Biological Sciences to be the right place for them. A major in biology incorporates courses in biology, chemistry and physics with a broad foundation in the social sciences and humanities. By meeting the degree requirements for the bachelor of science in biology with the cellular and molecular basis of health and disease emphasis, students will automatically fulfill all of the prerequisites and the upper-level biology courses which are highly recommended by most medical schools. The bachelor of science in biology with the pre-dentistry concentration allows students to complete all of the prerequisites and upper-level biology courses strongly suggested by most dental schools. More information about this can be found in the School of Biological and Chemical Sciences section of this catalog.

- **Investigate the molecular basis of disease.** Courses such as genetics, cell biology, biochemistry and molecular biology examine the essential elements of modern biological sciences. Electives like neurobiology, endocrinology, immunology and virology emphasize experimental approaches that lay the foundation for the treatment and prevention of disease.
- **Perform hands-on experiments** with cells and tissues in facilities equipped with cutting-edge technology. Laboratory courses such as microbiology and histology bring textbook topics to life and allow students to learn the basics of research.
- **Discover and create new knowledge.** In cooperation with faculty, students apply powerful techniques like automated DNA sequencing, robotic genomic analysis and electron and confocal microscopy, to current biomedical problems. Students electing to do their own research may open many doors for their future.
- **Pursue personal interests in biology.** From the study of plants to the study of insects, students can explore practical applications like drug discovery and disease control by selecting from a variety of courses. Field trips and outings allow students to observe biological principles in action.

Student Organizations

There are more than 200 active student organizations (including Greek) at UMKC that promote student leadership, volunteerism, community service and socialization. Some of the popular organizations among pre-health students include:

Alpha Eta Chapter of Alpha Phi Omega

This organization carries out service programs aimed at serving the chapter, campus, community and nation with emphasis on serving primarily the UMKC campus and the Kansas City area.

Arts and Sciences Student Council

The council aims to provide an interdisciplinary body in which Arts and Sciences students can provide input on decisions and policies of the College. The council works to enhance student-faculty interaction and communication, allocate its authorized budget and insure that Arts and Sciences students' needs, desires and attitudes are correctly represented to the administration.

Biological Sciences Student Government (BSSG)

The BSSG plans informational and social activities for students. Past activities include guest speakers from the Kansas City Police Department Forensics Unit, Children's Mercy Hospital and the Missouri Department of Natural Resources, picnics and group ice-skating. Pre-medical students can participate in the School of Biological Sciences' annual hosting of distinguished biomedical scientists, including Nobel Prize winners and National Academy of Sciences members, addressing frontier issues in biomedicine.

Institute for Leadership and Service

This university-wide organization focuses their mission on meeting community needs, improving participant's lives, strengthening communities, and building partnerships. Through ILS activities, participants hone their leadership skills and community service experiences to complement their dedication to service in the health professions. Since health professional schools value these experiences, pre-health students can benefit from being involved with the ILS program.

Pre-Dental Society

This is a university-wide student organization that provides various extracurricular opportunities for students to learn about dental-related professions and to network with other like-minded students. Previous meetings have focused on the application process for dental schools, preparation for the DAT, and volunteer opportunities in the community. Guest speakers include current dental students, practicing dentists, and dental school admission representatives.

Pre-Dental Hygiene Society

This newly formed student organizations allows pre-dental hygiene students to network together and learn about the profession of dental hygiene.

Meeting topics include tours of the UMKC School of Dentistry and how to prepare for entry into dental hygiene programs. Guest speakers include dental hygiene faculty, students, and current practitioners.

Pre-Medical Society

This is a university-wide student organization that provides various extracurricular opportunities for students to learn about the health care professions and to network with other like-minded students. Previous meetings have included discussions on Bioethics, HMOs, organ donation, complementary medicine, genetics and gene therapy, cloning, HIV/AIDS and taking patient histories. The society regularly hosts recruiters from medical schools as well as representatives from volunteer opportunities in the community.

Pre-Physician Assistant Society

The purpose of this organization is to provide UMKC students with information regarding a career as a Physician Assistant. The organization meets regularly to provide members with networking opportunities and experience hands-on activities such a suturing clinics.

PRE-PROFESSIONAL PROGRAMS

Pre-Med (p. 515)

Pre-Dentistry

Pre-Dental Hygiene

Pre-Pharm

Pre-Law

Pre-Med

Admissions and curriculum.

Major Map

Non-Degree Statement

It is the student's responsibility to ensure that all program admission requirements are met. Students are responsible for checking prerequisites to any course. While each medical school requires the completion of a four-year degree from an accredited institution, the premedical coursework requirements vary from school to school. Every medical school determines their own list of required or recommended premedical coursework, and some accept AP, online, and community college courses while others do not. Some require you to complete a specific classes while others have progressed to competency-based admissions and do not require students to complete a particular list of courses prior to applying. Each school also has unique requirements for coursework, lab experience, volunteer experience, and "shadowing" experience. In general, students will likely complete the following types of courses:

One year of Biology

One year of English

Two years of Chemistry (through Organic Chemistry)

School-specific requirements for each U.S. and Canadian medical school, see the following link: <https://apps.aamc.org/msar-ui/#/landing>

*Biochemistry and Statistics are included on the MCAT but may not be an admission requirement

First Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 108 & 108L (or BIOLOGY 109 & 109L) ^{CC}	4	BIOLOGY 109 & 109L (or BIOLOGY 108 & 108L) ^{CC}	4
CHEM 211 & 211L ^{CC}	5	CHEM 212R & CHEM 212LR ^{CC}	5
ENGLISH 110	3	ENGLISH 225	3
	12		12

Second Year

Fall Semester	Credits	Spring Semester	Credits
CHEM 321 & 321L ^{CC}	4	CHEM 320 & 320L (or CHEM 322 & CHEM 322L)	5
PHYSICS 210	4	PHYSICS 220	4
	8		9

Third Year

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
BIOLOGY 202	3	Prepare for and take MCAT		Prepare and take MCAT	
		Write Personal Statement		Complete Medical School Application	

		Discuss Letters of Evaluation		Prepare for Medical School Interviews	
				Complete Secondary Applications	
		3		0	0
Fourth Year					
Fall Semester	Credits	Spring Semester		Credits	
Medical School Interviews		Medical School Admission Decisions			
		0		0	
Fifth Year					
Fall Semester	Credits				
Begin Medical School					
		0			
Total Credits: 44					

SPECIAL NOTICES

- Academic Honesty and Student Code of Conduct
- Acceptable Use Policy (p. 547)
- Equal Opportunity and Title IX (p. 548)
- Policy on Student Records (p. 550)
- Student's Right-To-Know
- Telecommunications Services for the Speech and Hearing Impaired (p. 550)
- UMKC AIDS Policy Statement
- Veterans Benefits and Transition Act of 2018

Academic Honesty and Student Code of Conduct

The Board of Curators of the University of Missouri recognizes that academic honesty is essential for the intellectual life of the University. Faculty members have a special obligation to expect high standards of academic honesty in all student work. Students have a special obligation to adhere to such standards. Academic dishonesty, including cheating, plagiarism or sabotage, is adjudicated through the University of Missouri Student Conduct Code (http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.010_standard_of_conduct/) and Rules of Procedures in Student Conduct Matters (http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.020_rules_of_procedures_in_student_conduct_matters/).

There are also academic honor codes in the schools of pharmacy, dentistry, medicine, nursing and law.

- School of Pharmacy Honor Codes
- School of Medicine Honor Codes (p. 524)
- School of Dentistry Honor Codes (p. 517)
- School of Nursing and Health Studies Honor Codes (p. 534)
- School of Law Honor Codes (p. 518)

School of Dentistry Honor Codes

Standards of Professional Conduct

(Approved by the Faculty of the School of Dentistry: 9/12/2002, Curator approval 4/2004)

Definition: In this document, "student" shall refer to any person having once been admitted to the School of Dentistry who has not completed a course of study and who intends to or does continue a course of study in or through the School of Dentistry. For the purpose of these rules, student status continues whether or not the University's academic programs are in session.

Students at the University of Missouri at Kansas City School of Dentistry are seeking special knowledge, skills, and privileges. The confirmation of a professional degree, inferring the acquisition of knowledge and privileges, places the graduate of this institution in a unique position of assuming direct responsibility for health issues of those persons and institutions who place their trust in the University and the dental and dental hygiene professions. It is a demonstration of, and commitment to, special knowledge, protection of privileges, and assumption of responsibility and trust that, by definition, delineates a professional. Therefore, those who would aspire to receive the confirmation of a professional degree are expected to provide satisfactory evidence that exceeds knowledge and technical competence. Evidence that the well-being of patients, trust of society and respect of colleagues is a primary goal must be demonstrated. Accordingly, students must subscribe to principles of ethics and a code of professional conduct that gives testimony to their commitment and ability to deserve the privileges and trust with which society and their patients will honor them. This document serves as a guide for students.

The Standards of Professional Conduct are drawn from the Principles of Ethics and Code of Professional Conduct of the American Dental Association, and the American Dental Hygienists' Association Code of Ethics. The former recognizes that students are under the supervision of graduate dentists and dental hygienists and other faculty during interactions with patients. Students should aspire to meet the high ideals of their professions which may exceed their legal duties, but must meet the minimum standards expressed in the School of Dentistry's Code of Professional Conduct.

1. Dental and dental hygiene students must achieve and consistently demonstrate acceptable levels of personal hygiene and dress.
2. Dental and dental hygiene students must achieve and consistently demonstrate concern for patients, peers, and others. Dental and dental hygiene health care providers have a duty to ensure:
 - a. Patients are treated according to their desires and must be included in treatment decisions.
 - b. Patient confidentiality in the entire range of the provider-patient relationship which includes dental records.
 - c. That no harm or potential harm is done to the patient either through intent, ignorance, lack of preparation for the patient encounter, lack of skill, personal impairment of any kind.

- d. That no patient is “abandoned” which is defined as discontinuance of care without just cause and without giving the patient adequate notice and the opportunity to obtain the services of another provider.
 - e. That the patient’s welfare (i.e. the provision of competent and timely delivery of dental care within the bounds of clinical circumstances as presented by the patient such as needs, desires and values) is paramount and takes precedence above all else. This also includes the obligation to a) identify and report perioral signs of abuse and neglect and to consult with faculty to report suspected cases to proper authorities as required by law; and, b) report instances of faulty treatment whether intentional or not, to the appropriate faculty member.
 - f. That all people including patients, staff, faculty and all other individuals are treated fairly, respectfully, and without prejudice.
 - g. All standards and requirements of patient care established by the School of Dentistry are followed.
3. Dental and dental hygiene students’ behavior must exemplify the highest moral and ethical standards. The following represents conduct that is incompatible with these standards:
- a. Any behavior that tends to gain an unfair advantage for any student in an academic matter. This includes, but is not necessarily limited to, the following guidelines:
 - i. No student shall, during an examination have, use or solicit any unauthorized information or material (written or oral), copy from another student’s paper or discuss the examination with any other person.
 - ii. No student shall during an examination knowingly give any unauthorized aid to another student.
 - iii. No student shall acquire by any means knowledge of the contents of an examination yet to be given.
 - iv. No student shall fraudulently claim for credit any classroom, clinical, laboratory, or other procedure or assignment performed by an unauthorized person, including a fellow student.

Anyone who has reasonable cause to believe that a student has acted unethically is obligated to bring the matter to the attention of the Assistant Dean for Student Programs or his/her designee who will follow the process identified in the Preliminary Procedures section of the UMKC School of Dentistry Honor Council Due Process Procedures for Violations of the Standards of Professional Conduct, to determine whether there has been a violation and whether charges should be brought.

School of Law Honor Codes

I. Preamble

We, the students at the University of Missouri - Kansas City School of Law, recognizing that the recorded evaluation of our academic pursuits must reflect the products of intelligence guided by integrity, do hereby establish this Honor Code so that all who may inquire can be assured that our individual accomplishments were honestly achieved; and so all who achieve may welcome inquiry. Wherefore we pledge ourselves, each and all, to careers founded in integrity and to the enforcement of the standards herein defined. Each student shall have the affirmative duty of assisting in the implementation of this Code.

II. Definitions

1. **Academic Matter:**
All examinations, writing assignments, and programs or activities (such as Moot Court, Law Review or Urban Lawyer) which in any manner affect or result in a Law School grade or satisfaction of a requirement for graduation.
2. **Accused:**
Student who is the subject of a hearing on an Honor Code violation.
3. **Class:**
Group of students, based on year in Law School and academic progress. For the purposes of this code, those who are in their post third-year or are working on advanced degrees, shall be deemed third-year students.
4. **Gender:**
Any use of grammatical gender reference shall be interpreted as applying equally to males and females.
5. **Matter Relating to Academic Credentials:**
Any representation made to any person concerning academic achievements or performance in Law School sponsored programs affecting a requirement for graduation.
6. **SBA President:**
President of the Student Bar Association.
7. **Student:**
A student (as defined in 200.020.B.8. of the University’s Collected Rules and Regulations) at the University of Missouri-Kansas City School of Law.
8. **Unauthorized Sources:**
All written material and persons except as otherwise authorized by the instructor.

III. Violations

1. Jurisdiction:

Any conduct by a student that tends to gain or give an unfair advantage for any student in any academic matter or in any matter relating to academic credentials is considered unethical and a violation of the Code. It shall not be necessary for the Prosecutor to prove that any advantage was, in fact, achieved. Any conduct by a student impeding the fair operation of this Code is also a violation of this Code

2. Specific Violations:

Prohibitions of the Code include, but are not limited to, the following:

- During an examination, no student shall have, consult, give to another, receive from another, or solicit from another any information or material unless specifically authorized by the instructor.
- No student shall knowingly convey, directly or indirectly, to another student any information about the contents of an examination that the other student has yet to take.
- No student, with the intent to improve his or her grade, shall convey to
- an instructor any information that tends to identify his or her authorship of an examination yet to be graded.
- No student shall work on his or her examination other than during the time prescribed, nor in a room other than one designated for the taking of the examination.
- For any assignment that counts toward a grade or is required for graduation, no student shall consult unauthorized sources of information.
- No student shall remove or withhold library material from the library, or secrete such material in the library, or destroy or mutilate such material, or use such material in a manner calculated to gain an unfair advantage for either him or herself or another student in connection with any academic matter.
- No student shall make any false representation on a resume, transcript or other written material relating to his or her Law School credentials. Nor may any student falsely represent his or her Law School credentials in any other way to a potential employer or academic institution.
- No student shall plagiarize. Violation of the plagiarism policy adopted by the faculty of the Law School on October 11, 1990 is a violation of the Code. A statement of the offense and definition of plagiarism is incorporated in this Code by reference and linked to this Code at the following Web address: <http://law.umkc.edu/pdfs/plagiarism-policy-and-guidelines.pdf>
- No student other than the accused shall fail to report a suspected violation of this Code or fail to give information about such violation, testify, or attend hearings authorized by the Code, except for good cause shown.
- No student witness shall fail to appear at a hearing held under the Code, unless good cause exists.
- No student shall improperly induce a person not to comply with this Code.
- No student shall fail to use best efforts in the performance of his or her duty under this Code.

3. Mens Rea:

Unless otherwise specifically stated in this Code, a student is not guilty of a violation unless he or she acted knowingly or recklessly with respect to each material element of the violation.

4. Specific Exclusions:

The Code does not cover:

- Infractions of rules limiting smoking, soft drinks and coffee, etc., to certain designated examination rooms.
- Disciplinary matters not related to academic credentials or academic matters. The University of Missouri Standards of Conduct details these matters not covered by this Honor Code.

IV. Honor Court and Prosecutor

.01 Honor Court. There shall be a body known as the Honor Court composed of a Chief Justice and four Associate Justices. The Chief Justice shall be selected by a majority vote of the entire Court to serve at the pleasure of the Court.

The Honor Court shall hear all cases involving alleged violations of this Code by students, excepting those cases disposed of informally per 6.03. The proper Court to hear a charge shall be the Court sitting at the time of the hearing rather than at the time of the violation. The Court shall also make advisory opinions.

Four (4) Justices shall constitute a quorum. Each of the justices shall have one (1) vote. The Chief Justice shall be entitled to vote on all matters before the Court.

The Chief Justice, or his or her designee, shall inform new students of this Code during orientation. A copy of the Code shall be published in each edition of the Law School Student Handbook and available in the law building in the Dean's office.

.02 Student Prosecutor. There shall be a Student Prosecutor and an Assistant Student Prosecutor. The Prosecutor shall conduct investigations and present the case against the accused. The Student Prosecutor shall not make plea agreements at any time.

V. Appointments and Qualifications

.01 General. The Justices of the court shall be two third-year students, two second-year students and one first-year student. There shall be alternate justices in the same number and composition.

The Student Prosecutor shall be a third-year student. The Assistant Student Prosecutor shall be a second-year student.

.02 Appointment and Term of Office:

1. Justices. One first-year justice, one first-year alternate justice, one second-year justice, and one second-year alternate justice will be selected by the SBA President on the basis of applications submitted to him or her. The selection will be made at the first SBA meeting of the fall semester that includes the first-year representatives.
Justices will serve three one-year terms unless they re-sign, graduate, are removed for cause or become otherwise ineligible. Justices who graduate may serve until the first-year justices are appointed.
Justices seated at the time this Code becomes effective are deemed to have been appointed in accordance with this section.
2. Prosecutor. The student prosecutor shall be the person who was the assistant student prosecutor during the previous academic year, provided, however, that if that person is no longer eligible, the SBA President shall select a student prosecutor. The selection of the assistant student prosecutor shall be made by the SBA President before the end of winter semester classes. Selections shall be made on the basis of the designee's class for the following year.
The Prosecutor's term of office shall begin on the first day of the summer session, provided, however, that cases arising before or during the winter semester final examination period shall be conducted by winter semester office-holders.

.03 Forfeiture of Office for Cause. A student is ineligible to continue as a Justice, Prosecutor or an alternate if he or she is placed on academic or disciplinary probation, or if for any other reason his or her continuation in office may not be in the best interest of the School of Law as determined by the Board of Governors.

.04 Disqualified from Duty. Justices or Prosecutors shall disqualify themselves from performing their duties when they feel that they cannot impartially perform those duties. The accused can raise or suggest grounds for such disqualification of a justice. The failure of Justices to disqualify themselves may be raised on appeal as a possible abuse of discretion.

Disqualification of a Justice or Prosecutor creates a temporary vacancy and shall be filled pursuant to 5.05(b).

.05 Vacancies.

1. Permanent Vacancies. If by graduation, or for any other reason, a permanent vacancy occurs during a normal term of office, such vacancy shall be filled in a manner consistent with 5.01. If for any reason a vacancy is not filled when needed, it may be treated as a temporary vacancy and filled as prescribed. 5.05(b).
2. Temporary Vacancies. Vacancies that are created when a student is unavailable, disqualifies him or herself or the Court sustains a challenge for cause, shall be filled by the SBA President who shall ask the alternate from the same class to serve. If the alternate is not available, the SBA President shall select another member of the class who is not ineligible to serve.

IV. Violation and Investigation Reports

.01 Reports Made. Any person may report a suspected violation of the Honor Code. Reports may be made to either the SBA President or to the Associate Dean.

If reported to the SBA President, the SBA President shall notify the Associate Dean of the report of a suspected violation as soon as possible.

.02 When Made. Reports of suspected Honor Code violations must be made within 45 days of the discovery of the suspected violation.

.03 Informal Disposition or Submission of Case to Student Prosecutor. The Associate Dean shall have the authority to investigate the reported suspected violation of the Honor Code before initiating formal disciplinary procedures and give the student the opportunity to present his/her personal version of the incident or occurrence. After doing so, the Associate Dean may, for good cause shown, informally dispose of the case, and, after explaining to the student the various options available, shall fix a reasonable time within which the student suspected to have violated the Honor Code shall accept or reject a proposed informal disposition. If no informal disposition is deemed appropriate by the Associate Dean or the student rejects a proposed informal disposition, the Associate Dean shall notify the student prosecutor of the report of a suspected violation of the Honor Code. Should the Prosecutor disqualify him or herself pursuant to 5.04, the SBA President shall fill the temporary vacancy pursuant to 5.05(b). Any statements made by the student suspected of violating the Honor Code to the Associate Dean in the course of the informal disposition process shall not be communicated to the student prosecutor or be admissible against the student in subsequent Honor Court proceedings.

.04 Investigation by the Prosecutor. Upon notification by the Associate Dean of the report of a suspected violation of the Honor Code, the Prosecutor shall conduct an investigation.

Any student called upon to supply information relevant to the investigation, other than the accused, shall comply as fully as possible.

At the completion of the investigation, if the Prosecutor feels the evidence is insufficient to justify prosecution.

The Prosecutor shall so notify the SBA President and the Associate Dean, and with their concurrence the case may be dropped.

If the Prosecutor determines that probable cause exists to prosecute a person for a violation of the Honor Code, he or she shall send notice of this finding to the Associate Dean of the Law School.

.05 Submission of Case to Grand Jury.

1. Upon notice that the Prosecutor has determined that probable cause exists to prosecute a person for a violation of the Honor Code, the Associate Dean shall convene a grand jury hearing.
2. The Associate Dean shall select six names at random from the Law School student body. The Associate Dean shall summon the people selected to attend a meeting with himself and the SBA President. At this meeting the Associate Dean shall inform the students selected that the first three qualified students selected will be required to serve on a grand jury to determine whether or not probable cause exists to believe the Honor Code has been violated. The Associate Dean may excuse any grand juror for cause and replace that grand juror with an alternate. The Associate Dean shall inform the grand jury of their membership on the grand jury and all grand jury proceedings are confidential. The SBA President and the grand jurors shall select a date, time and place for the grand jury proceeding, providing that the selection of such a date will not unreasonably delay the Honor Court proceedings. The SBA President shall inform the Chief Justice and the Prosecutor of the date of the hearing.
3. The Prosecutor shall have the duty of providing the Chief Justice with a copy of the items of evidence that form the basis for his or her determination that probable cause exists to prosecute for a violation of this Honor Code. The copies provided by the Prosecutor to the Chief Justice shall have all identifying characteristics removed except as necessary to establish probable cause that a violation of this Code has been committed. The Prosecutor shall place a copy of these items of evidence and a summary of why he or she believes probable cause exists in a signed and sealed envelope. The envelope of evidence shall be delivered to the Chief Justice before the grand jury proceeding. If the suspected violation is plagiarism, the Prosecutor shall provide the Chief Justice with the original sources that the grand jury needs to adequately evaluate the evidence provided in the packet. The Chief Justice shall make arrangements to provide the grand jury with the source material. This packet shall also contain a form for the grand jury to report its findings.
The investigative power of the grand jury is strictly limited to the evidence presented by the Prosecutor. The grand jury shall not independently investigate the matter. The grand jury may submit written questions to the prosecutor through the Chief Justice.
4. The Chief Justice of the Honor Court will initiate the grand jury proceeding by informing the grand jury that the grand jury proceedings are to be confidential. The Chief Justice should elicit from the grand jurors signed statements that the grand jurors understand fully the duty of confidentiality. The Chief Justice shall advise the students that the information presented to the grand jury will be known only to the student prosecutor and themselves and that a breach of confidentiality may be an Honor Code violation.
5. After the Chief Justice has fulfilled the obligations imposed by section (d), he or she should give the grand jury the sealed envelope provided by the Prosecutor containing the evidence and remove him or herself from the grand jury proceedings.
6. After the Chief Justice has left the grand jury room, the grand jury will break the seal on the evidence envelope and examine the contents. The grand jury shall examine the evidence and determine whether probable cause exists for finding a violation of this Code. A decision shall be made within a reasonable period of time, not to exceed ten (10) days.
7. The finding of probable cause or the lack of probable cause will be determined by a majority vote of the grand jurors. This vote is binding on all members of the grand jury.
8. After the grand jury has reached a decision, it shall record that decision on the form provided for such purpose in the envelope described in 6.04(c) and sign it. The evidence shall be returned to the envelope provided by the Prosecutor, sealed, and signed. The envelope shall be delivered to the Chief Justice in a place and manner prescribed by the Chief Justice.
9. The Chief Justice shall deliver the envelope with the grand jury finding to the Associate Dean. The Associate Dean shall break the seal on the envelope in the presence of the Prosecutor who shall verify that the envelope contains all the items of evidence the Prosecutor originally placed in the envelope.
10. The Associate Dean shall reveal the finding of the grand jury only in furtherance of the procedures of this Honor Code and then only to the necessary parties.

.06 Hearing Date and Notice. A hearing shall be held as soon as possible after the grand jury has determined that there is probable cause to believe the accused has violated the Honor Code. In no case shall more than 45 days elapse between the suspected violation report and the hearing, unless a later date is agreed upon by the Prosecutor and the student charged.

The student shall be notified of a hearing in writing by the Chief Justice. The notice shall set forth the date, time and place of the alleged violation, the conduct to be inquired into, and the date, time, and place of hearing before the Honor Court. The notice shall be given at least seven (7) days in advance of the scheduled date of the hearing, unless a shorter time be fixed for good cause.

VII. Hearing Procedure

.01 Confidentiality. Honor Court hearings shall be closed to the public unless the accused requests a public hearing, in which case one shall be provided. An audio recording shall be made of the proceeding and shall become part of the record.

.02 Ex Parte Communication. Except as to procedural matters, there shall be no ex parte communication with any Justice by the Prosecutor, by defense counsel or by the accused.

.03 Pre-Trial Motions. All pre-trial motions, including motions in limine, shall be in writing and given to the Chief Justice at least four days prior to the hearing. The Court may set a time limit on hearing pre-trial motions. The Court shall hear pre-trial motions no later than the day before the trial.

.04 Evidence. A student defendant or prosecutor appearing before the Honor Court shall have the right to present any evidence by witness or affidavit relating to any charge or defense. The formal rules of evidence shall not apply and the Court may consider relevant testimony of witnesses, affidavits, written reports, and any other relevant evidence.

.05 Witnesses. At least two (2) days in advance of the scheduled date of the hearing, witnesses shall be notified by the party calling them of their obligation to appear. Witnesses shall bring with them whatever documentation is requested. Failure of a student witness to appear, without good cause, is a violation of this Code.

The Prosecutor may not call the defendant as a witness. The defendant may elect to testify or not, as he or she chooses. No unfavorable inference may be drawn should the defendant choose not to testify.

.06 The Court. The Chief Justice shall preside at the hearing. The Prosecutor shall present the case against the accused. The accused may represent him or herself or may be represented by an advisor or legal counsel.

.07 The Hearing. The Prosecutor shall make an opening statement and present the evidence against the accused. The Accused or his or her representative may elect to make an opening statement either at the conclusion of the Prosecutor's opening or after the Prosecution's evidence has been presented. At the conclusion of the Prosecution's case-in-chief, the accused may present his or her evidence.

Each party shall have the right to cross-examine the opposing party's witnesses. Either party may present further rebuttal evidence when, in the discretion of the Chief Justice such evidence is relevant and will not unduly delay the proceedings. After all evidence has been presented, the Prosecutor may make a closing argument, if so elected, the Prosecutor may present a rebuttal.

.08 Court's Decision. The Court shall promptly deliberate and make its findings and determinations in executive session. If seventy-five percent (75%) of the members of the court find by clear and convincing evidence that the accused has committed the violations charged, it shall recommend to the Dean one or more of the sanctions prescribed in 8.02, subject to the mitigating circumstances exception in 8.03.

If at all possible, the Court shall render a decision immediately following its deliberations. In no event shall its decision be announced later than three (3) days following the conclusion of the hearing. An oral presentation of the Court's findings and recommendations is permitted following the hearing, but a written report including findings of facts, conclusions and recommended disposition shall be filed within one week after conclusion of the hearing. Concurring or dissenting opinions may be filed according to the same terms.

The report of the Court, including any concurring or dissenting opinions, and the entire record of the proceedings shall be submitted to the Dean and the accused as soon as possible after issuance.

.09 Procedural Questions. Procedural questions arising during the course of proceedings that are not covered by these rules shall be resolved by the Chief Justice. All objections concerning procedure shall be made/raised in writing to the Chief Justice. The Chief Justice shall answer all objections in writing and forward both the objection and the decision to both the Prosecutor and defense counsel and to all other justices sitting on the Court for that hearing.

The decision of the Chief Justice on a procedural question may be challenged by the accused, the prosecutor, or a sitting member of the Court. The Chief Justice shall present any challenge to the sitting Court and the ruling of the majority of the Court shall be final. There shall be a form, prepared by the Chief Justice, for appealing a procedural decision. The party challenging the decision shall complete the form and forward a copy to all sitting justices. All such challenges must be made on a timely basis.

.10 Review of Record by Dean. Upon receipt of the Court's report, the Dean will, within a reasonable amount of time, review the entire record, including the Court's findings of facts, conclusions and recommendations and render a decision in the case.

The Dean may remand for further consideration of specific issues. A decision by the Dean to remand shall include a list of questions for the Court. The Court shall then respond in writing within fourteen (14) calendar days. The Dean may not reverse a finding of not guilty by the Court.

The Dean's decision shall be transmitted in writing to the accused and to the Chief Justice of the Honor Court. Where the accused has been found guilty by the Court, a copy of the Dean's decision will be placed in the student's official file.

VIII. Sanctions

.01 Report of Misconduct. Where a finding that the accused has violated the Code has been made, the misconduct may be called to the attention of the proper University authorities, Bar authorities or any other affected parties for appropriate action.

.02 Sanctions. The following sanctions may be recommended by the Court to the Dean and imposed by the Dean:

1. Expulsion. Permanent separation of the student from the School of Law.
2. Dismissal. An involuntary separation of the student from the School of Law. It does not imply or state a minimum separation time.
3. Suspension. Separation of the student from the School of Law for a definite period of time, after which the student is eligible to return. Conditions for readmission may be specified.
4. Probation. Disciplinary probation, subject to any appropriate terms or conditions.
5. Reprimand. Written or oral reprimand.

.03 Mitigating Circumstances. When considering a recommended sanction upon finding that a violation has occurred, the Court may consider mitigating circumstances such as, but not limited to, any physical, mental, financial, or emotional problems of the accused. If the severity of mitigating circumstances requires, the Court may recommend no sanction be levied on the accused, even though a violation has occurred.

If the Court considers mitigating circumstances when recommending a sanction, the written report of the Court shall include a full explanation thereof.

IX. Appeals

.01 Right to Petition for Review (other than dismissal or suspension). In all cases where the discipline imposed by the Dean is other than dismissal or suspension, the accused may petition the Chancellor in writing for a review of the decision within ten (10) consecutive calendar days after notification. A copy of the Petition for Review must also be served upon the Dean within such time. The Petition for Review shall state the grounds or reasons for review, and the Dean may answer the petition within ten (10) consecutive calendar days if he or she so desires.

The Chancellor or his or her designated representative may grant or refuse the right of review. In all cases where the Petition for Review is refused, the decision shall be final. If the Chancellor or representative reviews the decision, the action of the Chancellor shall be final unless it be to remand the matter for further proceedings.

.02 Right of Appeal (dismissal or suspension only). When a student is dismissed or suspended from the University for an Honor Code violation by the Dean, the student may appeal such decision to the Chancellor within twenty (20) consecutive days after notification of the decision of the Dean. A copy of the notice of appeal will contemporaneously be given by the student to the Dean. The student may file a written memorandum for consideration by the Chancellor with the notice of appeal, and the Chancellor may request a reply to such memorandum by the appropriate party. The Chancellor or his/her designee shall review the full record of the case and the appeal documents and may affirm, reverse, or remand the case for further proceedings and shall notify the Dean and the student in writing of the decision on the appeal. The action of the Chancellor shall be final unless it be to remand the matter for further proceedings.

.03 Status During Appeal. In the cases of suspension or dismissal where a notice of appeal is filed within the required time, a student may petition the Chancellor in writing for permission to attend classes pending final determination of appeal. The Chancellor may permit a student to continue in school under such conditions as may be designated pending completion of appellate procedures, provided such continuance will not seriously disrupt the University or constitute a danger to the health, safety or welfare of the University community. In such event, however, any final disciplinary action imposed shall be effective from the date of the action of the Dean.

X. Advisory Opinions

.01 When required to do so, the Court may render advisory opinions on matters relating to the application of the Code.

.02 A box shall be located in a public area of the Law School for the purpose of receiving written requests by students of the Law School for advisory opinions.

.03 The Honor Court shall submit its advisory opinion, in writing, to the Dean and the SBA President.

.04 The Dean, within a reasonable time, shall respond to the advisory opinion.

.05 The advisory opinion and the Dean's response shall be appropriately posted and made available to the students in the library.

.06 Conduct consistent with an advisory opinion shall be presumed not to be in violation of the Code.

XI. Amendments

.01 Amendments to the Honor Code may be proposed by petition of any ten (10) students, by the Board of Governors of the Student Bar Association on its own motion, or by petition of a majority of the Honor Court.

.02 A proposed amendment shall be adopted if at the adoption election at least two-thirds (2/3) of the students voting shall vote favoring the proposed amendment.

XII. Adoption

This Honor Code shall be in effect when approved by a two-thirds vote of the students voting, by the Dean of the School of Law, the Chancellor, and by the Board of Curators.

School of Medicine Honor Codes

Standards of Professional Conduct and Honor Council Procedures

STANDARDS OF PROFESSIONAL CONDUCT

Approved by the University of Missouri Board of Curators: December 1994, revised January 31, 2013 and updated December 2014

I. Preamble

Patient care professionals are characterized by 1) a prolonged specialized training in a body of knowledge and skills; 2) ethical principles; 3) a service orientation; and 4) judgment. These professions determine their own standards of education, training, licensure, and practice and have long subscribed to a body of ethical statements developed primarily for the benefit of the patient. As a potential future member of these professions, a student must recognize responsibility and an obligation not only to patients, but also to society, other health professionals, and self to behave in a manner compatible with the medical profession's standards of conduct.

One of the goals of a medical school is to educate a student during the transition to a professional life. The University of Missouri-Kansas City School of Medicine has an obligation to evaluate our students pursuing the M.D. and other patient care related degrees administered by the School of Medicine as thoroughly as possible for their cognitive abilities, their academic and professional knowledge and skills, their integrity, and their suitability for the practice of medicine. Accordingly, the Standards of Professional Conduct detailed in this document have been developed to guide the pre-professional behavior of students in patient care degree programs of the University of Missouri-Kansas City School of Medicine and to prepare the students to meet the ethical standards of these medical professions.

II. Standards of Professional Conduct

A. Professional Integrity

1. Honesty

A student shall deal honestly with people including, but not limited to, colleagues, instructors, representatives of the University, patients, attending physicians, and other members of the health care team. Students are expected to demonstrate honesty and integrity in all aspects of their interaction with patients and staff — particularly in assuring accuracy and completeness of their part of the medical record. The student shall be willing to admit errors and must not mislead others or promote himself/herself at the patient's expense. The student shall strive to report, by utilizing the Honor Council Procedures for Violations of the Standards of Professional Conduct, those students deficient in character or competence, or who engage in fraud or deception.

The basic principle underlying all research is *honesty*. Scientists and students who participate in research have a responsibility to provide research results of the highest quality; to gather facts meticulously; to keep impeccable records of work done; to interpret results realistically, not forcing them into preconceived molds or models; and to report new knowledge through appropriate channels. Co-authors of research reports must be sufficiently acquainted with the work of their co-workers that they can personally vouch for the integrity of the study and validity of the findings, and must have been active in the research itself.

In all cases of academic dishonesty, the instructor shall make an academic judgment about the student's grade on that work and in that course. The instructor shall report the alleged academic dishonesty to the Chair of the Honor Council.

Examples of academic dishonesty include, but are not limited to, the following:

Cheating — 1) use of any unauthorized assistance in taking quizzes, tests, or examinations; 2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or 3) acquisition or possession without permission of tests or other academic material belonging to a member of the University faculty or staff; 4) in any way giving assistance to others who are participating in any of the three preceding types of behavior; or, 5) falsifying attendance records or other official documents.

Plagiarism — 1) use by paraphrase or direct quotation of the published or unpublished work of another person without fully and properly crediting the author with footnotes, citations or bibliographical reference; 2) unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials; or 3) unacknowledged use of original work/material that has been produced through collaboration with others without release in writing from collaborators.

The detection may involve the use of commercially available software.

Sabotage — unauthorized interference with, modification of, or destruction of the work or intellectual property of another member of the University community.

Examples of dishonesty related to clinical practice include, but are not limited to, the following:

Falsification of Patient's Medical Record — writing progress notes regarding the patient's status, including, but not limited to, clinical observations or results in the patient's chart when the student has not seen or evaluated the patient, or using incorrect times of data entry.

Falsification of Patient's Medical Information — reporting medical information such as physical examination findings, lab values, test results, and any other relevant patient information to other students, residents, attending physicians, the patient, the patient's family, or other relevant medical personnel that has been fabricated by the student.

2. Responsibility

A student must acquire competencies with the appropriate concepts, knowledge, and skills which the faculty determines to be essential. These competencies shall be utilized to care for the sick and to promote the health and welfare of society. A student shall recognize a responsibility to participate in activities contributing to an improved community.

Students in the care of patients must not be harmful, dangerous, or negligent to the mental or physical health of a patient or the public. Negligent means the failure to use that degree of skill and learning ordinarily used under the same or similar circumstances by other students.

Students must pay tuition and other University fees, such as the medical equipment or disability fees, on time. Students must complete required forms of evaluation, degree forms, examination applications, etc. on time.

Students must be familiar with and follow the rules and regulations of the School of Medicine, the University, and related professional organizations.

B. Medical Professional Behavior

1. Nondiscrimination

A student shall be dedicated to providing supervised competent medical service with compassion, respect for human dignity, and without discrimination.

It is against University regulations to discriminate on the race, color, religion, sex, sexual orientation, national origin, age, disability and status as a Vietnam era veteran. The University has an AIDS policy statement consistent with state law that prohibits discrimination against persons with AIDS or who are HIV positive.

2. Representation

A student shall accurately represent himself/herself to others including, but not limited to, colleagues, instructors, representatives of the University, patients, attending physicians, and other members of the health care team.

Examples of misrepresentation include, but are not limited to, the following:

- (a) A student shall never use the title of "Doctor" or M.D., as this clearly misrepresents the student's position, knowledge, and authority.
- (b) Use of fraud, deception, lies, or bribery in securing any certificate of registration or authority, diploma, permit or license issued, or in obtaining permission to take any examinations.
- (c) Impersonation of any person holding a certificate of registration or authority, permit, license or allowing any person to use his/her certificate of registration or authority, permit, license, or diploma from any school.
- (d) Forgery, alteration, or misuse of a patient's medical records or knowingly furnishing false information to the medical team and/or professional organizations.

3. Confidentiality

A student shall respect the rights of patients, colleagues, and other health professionals, and shall safeguard patient confidences within the constraints of the law. The patient's right to confidentiality in regard to his/her medical record, which includes confidentiality of personal and social history, is a fundamental tenet to medical care.

The discussion in public of the problems of an identified patient, without the patient's permission, by professional staff (including students) violates patient confidentiality and is unethical. Under no circumstances can any medical record be removed from the institution. Photocopying of the entire record is never permitted for presentations or rounds; students are permitted to extract information, but not copy "wholesale" parts of the chart. Names of patients should be omitted from any documents used for these presentations.

4. Disclosure

While the student is a member of the medical team and under faculty supervision, a student shall continue to study, apply, and advance scientific knowledge, make relevant information available to patients, colleagues, and the public, obtain consultation, and use the talents of other health professionals when indicated.

Sharing of medical information appropriately with a patient and colleagues involved in the care of the patient is a fundamental ethical requirement. The patient must be well informed to make health care decisions and work intelligently in partnership with the medical team. Information that the patient needs for decision making shall be presented in terms the patient can understand. If, for some reason, the patient is unable to comprehend, there shall be disclosure to the patient's authorized representative.

Failure of a student to share medical information relevant to a patient with the patient and colleagues involved in the care of the patient is unethical. Providing inaccurate information with these individuals is also unacceptable.

5. Assessment of Personal Competence (Self-Evaluation)

Students shall seek consultation and supervision whenever their ability to play their role in the care for a patient is inadequate because of lack of knowledge or experience.

Students are expected to respond to constructive criticism by appropriate modification of behavior.

It is unacceptable for a student to attempt procedures or to prescribe therapies without supervision.

6. Professional Demeanor

The student is expected to be thoughtful and professional when interacting with patients and their families, attending physicians, supervising residents, and other students, and whenever his/her behavior may influence adversely the judgments of others about the professional school or University.

Students shall maintain a neat and clean appearance, and dress in attire that is generally accepted as professional by the patient populations served.

Inappropriate behavior includes, but is not limited to, the use of offensive language, gestures, or remarks. Attempting, directly or indirectly, by way of intimidation, coercion or deception, to obtain or retain a patient or discourage the use of a second opinion or consultation is not appropriate.

7. Informed Consent

Students are to understand the physician's obligation to obtain informed consent from patients, but are **not** responsible for obtaining it for a physician. Simply, it is the **physician's** responsibility to ensure that the patient or his/her surrogate be appropriately informed as to the nature of the patient's medical condition, the objectives of proposed treatments, treatment alternatives, and risks involved. The patient's or surrogate's concurrence must be obtained without coercion.

8. Conflict of Interests

If a conflict of interest arises, the moral principle is clear – the welfare of the patient must be, at all times, paramount. For example, gifts, hospitality, or subsidies offered by manufacturers and distributors of medical and pharmaceutical equipment/goods shall not be accepted if acceptance would influence the objectivity of clinical judgment.

9. Misconduct with Patients

The student will not engage in romantic, sexual, or other non-professional behaviors with a patient – even upon the apparent request of a patient – while the student is involved with the patient's care.

10. Impairment

The student will not use alcohol or drugs in ways that impair his/her ability to perform the work of the profession or results in compromised patient care. It is the responsibility of every student to strive to protect the public from an impaired colleague and to assist that colleague whose capability is impaired because of alcohol or drug use.

11. Criticism of Colleagues

Professional relations among all members of the medical community shall be marked by civility. Scholarly contributions shall be acknowledged and each person shall recognize and facilitate the contributions of others to this community; slanderous comments and acts are not acceptable. Students shall deal with professional, staff, and peer members of the health team in a considerate manner and with a spirit of cooperation.

It is unethical and harmful for a student to disparage, without sufficient evidence, the professional competence, knowledge, qualifications, or services of a colleague to anyone. It is also unethical to imply without reliable evidence – by word, gesture, or deed – that a patient has been poorly managed or mistreated by a colleague.

12. Teaching

The word “doctor” (for the Latin “docere” – to teach) implies a responsibility to share knowledge and information with colleagues and patients. It is incumbent upon those entering this profession to teach what they know of the science, art, and ethics of medicine. It includes communicating clearly and teaching patients so that they are properly prepared to participate in their own care and in the maintenance of their health.

III. The University of Missouri Student Conduct Code

In addition to the conduct detailed in the preceding sections, a student is subject to the University of Missouri Student Conduct Code, as administered by the UMKC Office of the Vice Chancellor for Student Affairs, except for provisions dealing with academic dishonesty, in Section 200.010 B.1. of the Collected Rules and Regulations of the University (http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.010_standard_of_conduct)).

As of the date of this document, such conduct falls into the following categories, and is provided for the convenience of patient care professional students at the University of Missouri School of Medicine:

1. **Academic dishonesty**, such as cheating, plagiarism, or sabotage. The Board of Curators recognizes that academic honesty is essential for the intellectual life of the University. Faculty members have a special obligation to expect high standards of academic honesty in all student work. Students have a special obligation to adhere to such standards. In all cases of academic dishonesty, the instructor shall make an academic judgment about the student's grade on that work and in that course. The instructor shall report the alleged academic dishonesty to the Primary Administrative Officer. (*see section II.A.1. Honesty above*)
2. **Forgery, alteration, or misuse of University documents, records or identification, or knowingly furnishing false information to the University.**
3. **Obstruction or disruption of teaching, research, administration, conduct proceedings, or other University activities, including its public service functions on or off campus.**
4. **Physical abuse or other conduct which threatens or endangers the health or safety of any person.**
5. **Stalking** another by following or engaging in a course of conduct with no legitimate purpose that puts another person reasonably in fear for his or her safety or would cause a reasonable person under the circumstances to be frightened, intimidated or emotionally distressed.
6. **Violation of the University's Equal Employment/Education Opportunity Policy** located at Section 320.010 of the Collected Rules and Regulations. These violations include, but are not limited to:
 - a. **Harassment.** Harassment in violation of the University's antidiscrimination policies, is unwelcome verbal or physical conduct, on the basis of actual or perceived membership in a protected class as defined in the University's anti-discrimination policies, that creates a hostile environment by being sufficiently severe or pervasive and objectively offensive that it interferes with, limits or denies the ability of an individual to participate in or benefit from educational programs or activities or employment access, benefits or opportunities.
 - b. **Sex Discrimination, Sexual Harassment and Sexual Misconduct** as further defined in Section 600.020 and/or referenced in Section 200.010B7 below.
 - c. **Bullying.** Bullying is defined as repeated and/or severe aggressive behavior likely to intimidate or intentionally hurt, control or diminish another person, physically or mentally on the basis of actual or perceived membership in a protected class.
 - d. **Retaliation.** Retaliation is any adverse action taken against a person because of that person's participation in protected activity. The University strictly prohibits retaliation against any person for making any good faith report or for filing, testifying, assisting, or participating in any investigation or proceeding involving allegations of discrimination in violation of the University's Equal Employment/Education Opportunity Policy.
 - e. **False Reporting.** False reporting is making an intentional false report or accusation as opposed to a report or accusation, which, even if erroneous, is made in good faith.
7. **Violation of the University's Sex Discrimination, Sexual Harassment and Sexual Misconduct in Education/Employment Policy in Section 600.0020 of the Collected Rules and Regulations.** These violations include:
 - a. **Sex Discrimination.** Sex discrimination occurs when a person has been treated inequitably on the basis of sex, gender identity, or gender expression. Specifically, the University of Missouri System upholds Title IX, which states in part that “[n]o person

in the United States shall on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity." Sexual harassment, sexual misconduct, sexual exploitation, stalking on the basis of sex and dating/intimate partner violence are forms of sex discrimination.

b. Sexual Harassment. Sexual harassment is defined as:

1. Unwelcome sexual advances or requests for sexual activity by a person or persons in a position of power or authority to another person, or
2. Other unwelcome verbal or physical conduct of a sexual nature by a person to another person, when:
 - a) Submission to or rejection of such conduct is used explicitly or implicitly as a condition for academic or employment decisions; or
 - b) Such conduct creates a hostile environment by being sufficiently severe or pervasive and objectively offensive that it interferes with, limits or denies the ability of an individual to participate in or benefit from educational programs or activities or employment access, benefits or opportunities.

c. Sexual Misconduct. Sexual misconduct is: 1) nonconsensual sexual intercourse; 2) nonconsensual sexual contact involving the sexual touching of the genitals, breast or anus of another person or the nonconsensual sexual touching of another with one's own genitals whether directly or through the clothing; 3) exposing one's genitals to another under circumstances in which he or she should reasonably know that his or her conduct is likely to cause affront or alarm; or 4) sexual exploitation.

d. Stalking on the Basis of Sex. Stalking on the basis of sex is following or engaging in a course of conduct on the basis of sex with no legitimate purpose that puts another person reasonably in fear for his or her safety or would cause a reasonable person under the circumstances to be frightened, intimidated or emotionally distressed.

e. Dating/Intimate Partner Violence. Violence committed by a person who is or has been in a social relationship of a romantic or intimate nature with the recipient of the violent behavior.

f. Sexual Exploitation. Sexual exploitation occurs when one person takes nonconsensual or abusive sexual advantage of another person for his/her own advantage or benefit or for the advantage or benefit of anyone other than the person being exploited and which behavior does not constitute any other form of sexual misconduct. Examples of sexual exploitation include, but are not limited to, the following activities done without the consent of all participants:

1. Invasion of sexual privacy;
2. Prostituting another person;
3. Taping or recording of sexual activity;
4. Going beyond the boundaries of consent to sexual activity (letting your friends hide to watch you engaging in sexual activity);
5. Engaging in voyeurism;
6. Knowingly transmitting and STI, STD, venereal disease or HIV to another person;
7. Inducing another to expose their genitals.

g. Retaliation. Retaliation is any adverse action taken against a person because of that person's participation in protected activity. The University strictly prohibits retaliation against any person for making a report required by Section 600.020 of the Collected Rules and Regulations, for making any good faith report to a Title IX Coordinator or for filing, testifying, assisting, or participating in any investigation or proceeding involving allegations of sex discrimination, sexual harassment or sexual misconduct.

h. False Reporting. False reporting is making an intentional false report or accusation as opposed to a report or accusation, which, even if erroneous, is made in good faith.

8. Threatening or Intimidating Behaviors, defined as written or verbal conduct that causes a reasonable expectation of injury to the health or safety of any person or damage to any property or implied threats or acts that cause a reasonable fear of harm in another.

9. Participating in attempted or actual theft of, damage to, or possession without permission of property of the University or of a member of the University community or of a campus visitor.

10. Unauthorized possession, duplication or use of keys to any University facilities or unauthorized entry to or use of University facilities.

11. **Violation of University policies, rules or regulations or of campus regulations** including, but not limited to, those governing residence in University-provided housing, or the use of University facilities, or the time, place and manner of public expression.
12. **Manufacture, use, possession, sale or distribution of alcoholic beverages or any controlled substance without proper prescription or required license or as expressly permitted by law or University regulations**, including operating a vehicle on University property, or on streets or roadways adjacent to and abutting a campus, under the influence of alcohol or a controlled substance as prohibited by law of the state of Missouri.
13. **Disruptive conduct.** Conduct that creates a substantial disruption of University operations including obstruction of teaching, research, administration, other University activities, and/or other authorized non-University activities that occur on campus.
14. **Failure to comply with directions of University officials acting in the performance of their duties.**
15. **The illegal or unauthorized possession or use of firearms, explosives, other weapons, or hazardous chemicals.**
16. **Hazing**, defined as an act that endangers the mental or physical health or safety of a student, or an act that is likely to cause physical or psychological harm to any person within the University community, or that destroys or removes public or private property, for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in a group or organization. Participation or cooperation by the person(s) being hazed does not excuse the violation. Failing to intervene to prevent (and/or) failing to discourage (and/or) failing to report those acts may also violate this policy.
17. **Misuse of computing resources in accordance with University policy**, including but not limited to:
 - a. Actual or attempted theft or other abuse.
 - b. Unauthorized entry into a file to use, read, or change the contents, or for any other purpose.
 - c. Unauthorized transfer of a file.
 - d. Unauthorized use of another individual's identification and password.
 - e. Use of computing facilities to interfere with the work of another student, faculty member, or University official.
 - f. Use of computing facilities to interfere with normal operation of the University computing system.
 - g. Knowingly causing a computer virus to become installed in a computer system or file.

Details of current policies, procedures, sanctions, and due process for violations of the University of Missouri Student Conduct Code are found in http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.010_standard_of_conduct (http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.010_standard_of_conduct/) and http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.020_rules_of_procedures_in_student_conduct_matters (http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.020_rules_of_procedures_in_student_conduct_matters/) and in the University of Missouri-Kansas City General Catalogue. Students should check and be familiar with these rules and procedures.

HONOR COUNCIL PROCEDURES FOR VIOLATIONS OF THE STANDARDS OF PROFESSIONAL CONDUCT

Approved by the University of Missouri Board of Curators: December 1994, Revised January 31, 2013

I. Jurisdiction of the Honor Council

The Honor Council shall be concerned with incidents of alleged violations by University of Missouri-Kansas City School of Medicine students enrolled in either the M.D. or graduate Professional programs involving direct patient care at the UMKC School of Medicine of the School's Standards of Professional Conduct, Sections II.A and II.B., whether such violations occur on the Volker campus or in classes or clinical experiences at affiliated hospitals and clinics through the UMKC Medical School. Violations of Section III will be referred to the Office of the Vice Chancellor for Student Affairs. The standards identify areas of conduct which are judged unacceptable for individuals either who are in or aspire to the profession of medicine. The Standards of Professional Conduct and Honor Council Procedures is a published document of the School of Medicine. It is distributed to all newly accepted students during orientation. When a student has been charged with one or more acts of misconduct according to these standards, the Honor Council shall adhere to the following procedures detailed herein. The Honor Council shall have the authority to recommend sanctions upon any student appearing before the Council. The disciplinary proceedings described are not to be construed as judicial trials. Care shall be taken, however, to comply as fully as possible with the spirit and intent of these procedural safeguards.

II. Organization of the Honor Council

A. Composition

The Honor Council voting members shall consist of the Chair representing the Dean's Office, six faculty/staff members (1 Doцент, 1 Basic Scientist, 2 Clinical Scientists, 1 Humanities/Social Sciences representative, and 1 Graduate faculty member), and two student members (1

Years 3-6 and 1 graduate student). Four members constitute a quorum. Two nonvoting Honor Council staff, the Council Coordinator and the Administrative Assistant, assist the Chair in investigations and generation of reports and may be present at the hearings to take minutes.

B. Eligibility and Appointment

The Chair, faculty/staff, and student members shall be appointed to the Honor Council by the Dean of the School of Medicine.

C. Chair

The Chair shall count as one member of the Honor Council and shall be entitled to vote on all matters before the Council.

D. Time of Appointment and Term of Office

The Chair and faculty/staff members of the Honor Council shall serve for the duration of their appointments by the Dean. The student members of the Honor Council shall serve for one year.

A student is ineligible to continue as a member of the Honor Council if he/she is placed on academic or disciplinary probation, or if for any other reason his/her continued membership on the Council may not be in the best interest of the School of Medicine as determined by the Dean.

III. Procedures for Report of Violation, Investigation, Informal Disposition, and Notice

A. Report of Violation

An alleged violation of the Standards of Professional Conduct should be reported to the Chair or his/her designee of the Honor Council as soon as possible after discovery of the incident.

B. Preliminary Procedures and Investigation

The Chair of the Honor Council or his/her designee shall investigate any reported student misconduct before initiating formal conduct procedures. The reporter will be requested to meet with the Chair or his/her designee to discuss the alleged violation.

The Chair is responsible for notifying, in writing, the accused student of the charge brought against him/her prior to the commencement of the investigation. In addition, the student charged with misconduct shall receive a copy of these Procedures for Violations of the Standards of Professional Conduct along with the written notice. The Chair shall meet with the accused student to give the student the opportunity to present a personal version of the incident or occurrence.

C. Informal Disposition

After conducting an investigation, the Chair or his/her designee shall provide a written report to the Dean, the accused student, and the Honor Council members.

The Chair shall have the authority to dismiss a charge that is determined unfounded or to impose appropriate sanctions and shall fix a reasonable time within which the student shall accept or reject a proposed informal disposition.

A failure of the student either to accept or reject within the time fixed shall be deemed to be an acceptance and, in such event, the proposed disposition shall become final upon expiration of such time.

If the student rejects informal disposition, it must be in writing and shall be forwarded to the Honor Council.

The Chair may refer cases to the Honor Council for formal investigation and hearing without first offering informal disposition.

The Dean or his/her designee may at any time temporarily suspend or deny readmission to a student from the School of Medicine pending formal procedures when the Dean or his/her designee finds and believes from available information that the presence of a student on campus would seriously disrupt the School of Medicine or constitute a danger to the health, safety, or welfare of members of the School of Medicine community. The appropriate procedure to determine the future status of the student will be initiated within seven calendar days.

D. Notice of Hearing

Upon completion of the investigation, when a student rejects informal disposition or the charge justifies a formal hearing, in the judgment of the Honor Council Chair, the Chair will schedule a formal hearing as soon as possible.

The reporter, witnesses, and accused student will be given written notice of the hearing by email or personal delivery. The notice shall set forth the date, time, and place of the alleged violation, the conduct for inquiry, the date, time, and place of the hearing before the Council, request for attendance of the parties involved, and a reference for the accused student to the Rights of the Accused Student Upon Hearing which are outlined in these Procedures.

Notice by certified mail may be addressed to the mailing address currently on record with the university. Failure by the accused student to have a current correct local address on record with the School of Medicine shall not be construed to invalidate such notice.

The notice shall be given at least seven (7) consecutive calendar days prior to the hearing, unless a shorter time is fixed by the Chair for good cause.

Any request for continuance shall be made in writing to the Chair who shall have the authority at his/her discretion to postpone the hearing if he/she determines the request is timely and made for good cause. The Chair shall notify the Honor Council members, the accused student, the reporter, the witnesses, and any other relevant individuals of the new date for the hearing.

If the accused student fails to appear at the scheduled time, the Honor Council may hear and determine the matter in the student's absence.

IV. Procedure for Honor Council Hearing

A. Rights of the Honor Council

The Honor Council shall have the right to:

1. hear together cases involving more than one student which arise out of the same act of misconduct, but in that event shall make separate findings and determinations for each student;
2. permit a stipulation of facts by the Honor Council member who performed the investigation and the student involved;
3. permit the incorporation in the record by a reference of any document, affidavit, or other material produced and desired in the record by the School of Medicine or the student charged;
4. question witnesses or challenge other evidence introduced by either the School of Medicine or the student at any time;
5. hear from the Council Chair about dispositions made in similar cases and any dispositions offered to the student appearing before the Council;
6. call additional witnesses or require additional investigation;
7. dismiss any action at any time or permit informal disposition as otherwise provided;
8. permit or require at any time, within a reasonable time as determined by the Council, amendment of the Notice of Hearing to include new or additional matters which may come to the attention of the Council before final determination of the case; provided, however, that in such event the Council shall grant to the student or the School such time as the Council may determine reasonable under the circumstances to answer or explain such additional matters; and,
9. dismiss any person from the hearing who interferes with or obstructs the hearing or fails to abide by the rulings of the Council Chair on any procedural question or request of the Chair for order.

B. Rights of the Accused Student

A student scheduled to appear before the Honor Council pursuant to formal notice of charges and disciplinary hearing shall have the right to:

1. submit a written response to the charge outlined in the Notice before the scheduled hearing is to commence;
2. request in advance of the scheduled hearing a review of any materials contained in his/her hearing file. ;
3. submit a written request for the identities of witnesses to be called to testify before the Council;
4. be present at the hearing;
5. have an adviser or counselor appear with him/her and to consult with such an adviser or counselor during the hearing; however, the adviser/counselor will not be allowed to question witnesses and/or members of the Council;
6. hear or examine evidence presented to the Honor Council against him/her;
7. question witnesses present who are testifying against him/her at the hearing;
8. present evidence by witness, affidavit, written report, other memoranda, photographs, drawings, and any other relevant evidence of any defense the student desires;
9. make any statement to the Honor Council in mitigation or explanation of the conduct in question;
10. remain silent to avoid self-incrimination;
11. be informed in writing of the findings and any decisions imposed by the Honor Council, Coordinating Committee, and the Dean; and,
12. appeal the decision and/or disposition to the Chancellor, as herein provided.

C. Rights of Witnesses

Witnesses shall be notified of the scheduled time, date, and location of the hearing. Witnesses shall bring with them whatever documentation is requested. Failure of a student witness to appear, without good cause, is a violation of the Standards of Professional Conduct.

D. Record of Hearing

All proceedings of the Honor Council are to be held in the strictest confidence by the members and all other persons involved. The hearings shall be audio taped, and written minutes are also recorded. The notice, exhibits, hearing record, verdict, and disposition of the Honor Council shall become the "Record of the Case". This official document shall be filed under strictest security in the permanent records. The record shall be accessible at reasonable times and places to both the University and the student for the purposes of review or appeal.

E. Conduct of the Hearing

The Honor Council Chair shall preside at the hearing, call the hearing to order, call the roll of the Honor Council members in attendance, ascertain the presence or absence of the student charged with misconduct, read the Notice of Hearing and charge and verify the receipt of notice of charge by the student, report any continuances requested or granted, establish the presence of any adviser or counselor of the student, call to the attention of the student charged and the adviser any special or extraordinary procedures to be employed during the hearing, and permit the student to make suggestions of or objections to any procedures for the Honor Council to consider.

All requests to address the Council shall be addressed to the Chair. The Chair will rule on all requests and points of order and may consult with Council's legal adviser prior to any ruling. The Chair's ruling shall be final, and all participants shall abide thereby, unless the Chair shall present the question to the Council at the request of a member of the Council, in which event the ruling of the Council by majority vote shall be final.

Rules of common courtesy and decency shall be observed at all times. An adviser or counselor may be permitted to address the Council at the discretion of the Chair. An adviser or counselor may request clarification of a procedural matter or object on the basis of procedure at any time by addressing the Chair after recognition.

Opening Statements: 1) The Honor Council Chair or his/her designee shall make opening remarks outlining the general nature of the case and testify to any facts the investigation has revealed. 2) The accused student may make an opening statement to the Council about the charge at this time or at the conclusion of the School of Medicine's presentation.

School of Medicine Evidence: 1) School of Medicine witnesses are to be called by the Chair of the Honor Council and identified or written reports of evidence are introduced as appropriate. 2) The Council may question witnesses at any time. 3) The student may question witnesses or examine evidence at the conclusion of the School of Medicine's presentation.

Student Evidence: 1) The student shall have the opportunity to make a statement to the Honor Council about the charge. 2) The student may present evidence through witnesses or written memoranda. 3) The Council may question the student or witnesses at any time.

Rebuttal Evidence: The Honor Council may permit the School of Medicine or the student to offer a rebuttal of the other's presentation.

If it appears that essential testimony is unavailable, or that for other good cause the hearing should be deferred, the Council may continue, recess, or discontinue the hearing without prejudice.

V. Determination of the Honor Council

Following the hearing, the Council shall promptly deliberate in closed session out of the presence of the student charged. Determination is to be made regarding both the validity of the misconduct charge and on the discipline, if any, to be imposed.

A. Violation of the Standards of Professional Conduct

The Honor Council shall determine if the evidence presented in the hearing supports the charge of violation of the Standards of Professional Conduct. The Council shall render a decision, by simple majority vote, of whether a violation has been committed by the accused. Each charge of misconduct, if there is more than one, shall be considered individually and/or collectively at the discretion of the Council.

B. Discipline Imposed

The Honor Council shall determine the discipline to be imposed, if any, based upon its deliberations. One of the following forms of discipline is to be recommended by means of simple majority vote of the Council members. Where there are multiple violations, there can be separate sanctions for each violation. The sanctions include, but are not limited to, the following:

No Disciplinary Action. Given when the student is not found in violation of the Standards of Professional Conduct.

Warning. A written reprimand to the student that the student has violated the Standards of Professional Conduct. A copy is to be placed in the student's file.

Probation. A written reprimand to the student for violation of the Standards of Academic Conduct that includes a designated period of time, the probability of more severe sanctions if the student violates any institutional regulation(s) during the probationary period, and subject to any appropriate terms or conditions, such as loss of privileges, restitution, and discretionary assignments.

Suspension. An involuntary separation of the student from the School of Medicine for a specified period of time or until a special conditions have been met, with a statement whether suspension should relate back to the date of the offense, begin at the time imposed, or begin at a date specified in the future. At the conclusion of the period of suspension, the suspended student is automatically returned to student status. Conditions for readmission may be specified.

Dismissal. An involuntary separation from the School of Medicine for an indefinite period of time. The order of dismissal may specify a date before which the faculty will not consider a petition for readmission from the dismissed student.

Expulsion. Permanent separation of the student from the School of Medicine.

The above sanctions apply to the status of the accused student in the School of Medicine. Any sanction impacting a student's enrollment status and/or privileges will be forwarded to the Vice Chancellor for Student Affairs or designee for information purposes.

An oral presentation of the Council's findings and recommendations is permitted following the hearing, but a written document including findings of fact, verdict, and recommended disposition shall be completed as soon as possible after the hearing. This Final Report of the Council shall be submitted to the Coordinating Committee, the Dean, and the Office of the Vice Chancellor for Student Affairs.

VI. Decision of the Coordinating Committee

The findings and determination of the Honor Council serve as recommendations to the Coordinating Committee and to the Dean of the School of Medicine. The Coordinating Committee, chaired by the Associate Dean for Academic Affairs and composed of members detailed in *The Academic Plan for the School of Medicine*, reviews the charge of misconduct, the findings of fact, the decision of the Council, and the recommended discipline to be imposed from the Honor Council.

After deliberation and careful consideration, the Coordinating Committee approves, by simple majority vote, one of the following actions: 1) to sustain the recommendations of the Honor Council; 2) to amend the recommendations of the Honor Council to another type of sanction; 3) to remand the Honor Council's recommendations; or, 4) to reverse the Honor Council's recommendations.

The findings and determinations of the Honor Council and the Coordinating Committee shall be transmitted to the Dean in writing within seven (7) consecutive calendar days following the Coordinating Committee meeting. A copy of this recommendation shall also be transmitted to the accused student by email or personal delivery in the indicated time frame.

VII. Decision of the Dean

Upon receipt of the documents from the Honor Council and the Coordinating Committee, the Dean shall review the entire record that includes the following: 1) formal notice of the charges; 2) minutes of the Honor Council hearing; 3) written findings of the Honor Council and its recommendations to the Coordinating Committee; and 4) written decision of the Coordinating Committee concerning the sanction passed.

The Dean will, within a reasonable amount of time, make a decision to affirm, amend, or reverse the Coordinating Committee's sentence, or remand the Coordinating Committee for further proceedings.

The Dean shall notify the student in writing by certified mail or personal delivery of his/her final decision. Copies of the letter will be sent to the Honor Council Chair and the Coordinating Committee Chair, and will be placed in the student's file and in the official hearing file.

VIII. Right of Appeal

When a recommendation from the Honor Council and the Coordinating Committee is made for some form of disciplinary action other than "none", and this is upheld by the Dean, or if a recommendation of "no disciplinary action" is revised to one of greater severity by the Dean, the student may appeal such decision to the Chancellor or his/her designated representative by filing written notice of appeal with the Chancellor within ten (10) consecutive calendar days after notification of the decision of the Dean. A copy of the Notice of Appeal will also be given by the student to the Dean of the School of Medicine at the time of filing. The student may file a written memorandum for consideration by the Chancellor with the Notice of Appeal.

The Chancellor or his/her designated representative shall review the full record of the case and the appeal documents and may affirm, reverse, or remand the case for further proceedings and shall notify the Dean and the student in writing of the decision on the appeal. The action of the Chancellor shall be final unless it is to remand the matter for further proceedings.

Status during Appeal: In cases of suspension, dismissal, or expulsion where a Notice of Appeal is filed within the required time, a student may petition the Chancellor in writing for permission to attend classes pending final determination of appeal. The Chancellor may permit a student to continue in school under such conditions as may be designated pending completion of appellate procedures, provided such continuance will not disrupt the University or constitute a danger to the health, safety, or welfare of the University community. In such event, however, any final disciplinary action imposed shall be effective from the date of the action of the Dean.

IX. Status of the Standards of Professional Conduct

Amendments to the Standards of Professional Conduct and/or Honor Council Procedures for Violations may be proposed by petition of any twenty-five members of the student body, the Honor Council on its own motion, or the faculty.

A proposed amendment in the Standards of Professional Conduct and/or Honor Council Procedures for Violations must be approved by the Honor Council, the Coordinating Committee, the Dean, the Chancellor, and the Board of Curators.

The Standards of Professional Conduct and/or Honor Council Procedures for Violations may be terminated at any time by action under the general amending procedure.

All students in the School of Medicine, including students enrolled in either the M.D. or graduate Professional programs involving direct patient care at the UMKC School of Medicine are subject to the jurisdiction of the Standards of Professional Conduct and Honor Council Procedures for Violations upon enrollment. To insure their knowledge of the Standards of Professional Conduct and Honor Council Procedures for Violations, the presentation of these documents shall be an integral part of the orientation of newly accepted students in these programs to the School of Medicine.

School of Nursing Honor Codes

Honor Code Procedures for Violations of the Standards of Professional and Ethical Behavior

University of Missouri-Kansas City School of Nursing

I. Jurisdiction of the School of Nursing

The School of Nursing (SON) shall have jurisdiction over incidents of alleged violations of the University of Missouri-Kansas City School of Nursing's Standards of Professional and Ethical Behavior, Sections IIA and IIB by students accepted into degree programs in the School of Nursing while at the School of Nursing or enrolled in any nursing course or on clinical rotations at affiliated institutions. Alleged violations of the University of Missouri Student Conduct Code as described in Section III will be referred to the Office of the Vice Chancellor for Student Affairs. The Standards of Professional and Ethical Behavior identify areas of conduct which are judged unacceptable for individuals who are either in or aspire to be in the profession of nursing. The Standards of Professional and Ethical Behavior and these Procedures will be distributed to all newly enrolled students during orientation. When a nursing student has been charged with one or more acts of misconduct according to these standards, the Honor Council shall adhere to the following procedures detailed herein.

The Honor Council shall have the authority to recommend sanctions upon any accused appearing before the Council. The disciplinary proceedings described are not to be construed as judicial trials. Care shall be taken, however, to comply as fully as possible with the spirit and intent of these procedural safeguards.

II. Sanctions

The following sanctions may be imposed upon any nursing student found to have violated Sections IIA and IIB of the University of Missouri – Kansas City School of Nursing Standards of Professional and Ethical Behavior:

- Warning – A notice in writing that the student is violating or has violated the Standards of Professional and Ethical Behavior.
- Probation – A written reprimand for violation of specific provisions of the Standards of Professional and Ethical Behavior that includes a designated period of time and the probability of more severe sanctions if the student violates any institutional regulations(s) during the probationary period.
- Loss of Privileges - Denial of specified privileges in the School of Nursing for a designated period of time. Discretionary Sanctions. Work assignments in the School of Nursing, service to the School of Nursing, or other related discretionary assignments in the School of Nursing.
- Suspension from the School of Nursing – An involuntary separation from the School of Nursing for a specified period of time after which the student is eligible to return. Conditions for readmission may be specified.
- Dismissal from the School of Nursing – An involuntary separation from the School of Nursing for an indefinite period of time. It does not imply or state a minimum separation time.
- Expulsion from the School of Nursing – Permanent separation from the School of Nursing.

III. Organization of the Honor Council

A. Composition

The Honor Council members shall consist of the Chair; three voting faculty members, one representing each program, BSN, MSN, PhD (3 votes); five student members, 4 from the BSN program and one from the MSN or PhD program. Five members or their alternates (2 faculty, excluding the chair, and three students) constitute a quorum. An assigned staff member will assist the Chair in generation of reports and will be present at the hearings to take minutes.

B. Eligibility and Appointment

Faculty members Voting members of the faculty who have no more than a 50% administrative appointment are eligible to serve as chair or members of the honor council. Voting members of the School of Nursing Faculty Forum shall elect the chair of the Honor Council and the undergraduate and graduate faculty representatives. Alternates for each position will also be elected.

Student members In order to be eligible for election to the Honor council, students must be in good standing within the School. A student who is placed on academic or disciplinary probation is ineligible for service on the Honor council. In addition, a student may be determined ineligible for service if his or her membership on the Council is assessed by the Chair not to be in the best interest of the School.

Each BSN class shall elect their student representative and their alternates. The graduate representative and alternate shall be elected from among students in all SON graduate programs.

C. Time of Appointment and Term of Office

All members shall serve a one-year appointment, with the exception of the chair who will serve 2 years. Members may be serve more than one term if they are re-elected in subsequent years. Members will serve until they resign or a new member is voted into their position.

Election of student members shall be held on an annual basis at the beginning of the academic year, no later than September 15.

Election of faculty will occur at the last spring faculty forum meeting of the year for the next academic year during regular School committee elections.

Faculty vacancies are filled by special election.

After fall elections, a preliminary meeting of all members (including the chair) will be held within two weeks in order to discuss the role and function of the Honor Council.

D. Hearing Panel of the Honor Council

All faculty representatives including alternate and the three most senior students not in the accused student's class will serve as a hearing panel for the honor code violation. A chair of the Hearing Panel will be elected by simple majority vote of the members of the panel.

Voting by the hearing panel will take place by secret ballot.

The chair of the hearing panel will not vote except in case of a tie among the rest of the hearing panel in which case, the chair shall vote to break the tie.

Proxy votes will not be allowed.

E. Primary Administrative Liaison (PAL)

A primary administrative liaison (PAL) will be appointed by the Dean for a minimum of a two year term. The PAL is not eligible to serve as a member of the Honor Council while serving as the PAL. The PAL and the Chair, when possible, should be serve overlapping terms. The PAL will draft the charge and represent the School of Nursing in all cases.

IV. Procedures for Report of Violation, Investigation, Informal Disposition, and Notice

A. Report of Violation

An alleged violation of the Standards of Professional and Ethical Behavior should be reported to the PAL of the Honor Council or designee as soon as possible after discovery of the incident. The PAL shall inform the chair and Honor Council of the alleged violation within one week if a hearing will be required. The Chair shall notify the Dean of all accusations. If the PAL determines that no violation occurred then the Dean and the Honor Council will be informed via an annual report submitted at the end of each academic year.

B. Preliminary Procedures and Meeting

The PAL shall determine whether the allegations fall within Sections IIA or IIB, or Section III of the Standards of Professional and Ethical Behavior, and shall refer any allegations of violations of Section II to the UMKC Office of Student Affairs. The PAL shall investigate any reported violation of Sections IIA or IIB before initiating formal conduct procedures.

The PAL will notify the accused, in writing by certified mail, of the allegations brought against him/her prior to the commencement of the preliminary meeting between the PAL and the student. In addition, the student shall receive a copy of these Procedures for Violations of the Standards of Professional and Ethical Behavior along with the written notice. The PAL shall meet with the accused student to give the student the opportunity to present a personal version of the incident or occurrence.

Following the investigation the PAL shall determine the appropriate preliminary outcome: no formal charge of misconduct, informal disposition, or formal disposition involving an honor council meeting. The PAL will notify the Chair and the Dean of the outcome as required in section IV A.

C. Informal Disposition

The PAL shall have the authority to propose appropriate sanctions to the accused student and within a week the student shall accept or reject a proposed informal disposition.

A failure of the student either to accept or reject the informal disposition within the 10 working days shall be deemed to be an acceptance and, in such event, the proposed disposition shall become final upon expiration of such time.

If the student rejects informal disposition, it must be in writing and the matter shall then be forwarded to the Honor Council for a formal hearing.

D. General Statement of Procedures

A student charged with a breach of the Standards of Professional and Ethical Behavior is entitled to a written notice of the charge against him or her and a formal hearing unless the matter is disposed of under the rules for informal disposition. Honor Code Procedures are not to be construed as judicial trials and need not wait for legal action before proceeding; however, care shall be taken to comply as fully as possible with the spirit and intent of the procedural safeguards set forth herein. The University of Missouri Office of the General Counsel shall be legal advisor to the Committee and to the PAL.

E. Notice

The PAL shall initiate formal proceedings by arranging with the chair to call a meeting of the Honor Council and by giving written notice to the accused student by email and by certified mail to the student's last address currently on record with the Office of the Registrar. Failure of the student to have

a current correct local address on record shall not be construed to invalidate such notice. The notice shall set forth the date, time and place of the alleged violation and the date, time and place of the hearing before the Honor Council.

F. Conflicts of Interest

Any member of the Honor Council may recuse him or herself if he or she believes he or she has a conflict of interest. The PAL or the accused student may raise the question of a member's Conflict of Interest at the initial meeting of the Honor Council to hear the charge against the student, and the Chair will determine whether the member should be recused. The member will be replaced by his or her alternate. If both the member and the alternate are recused, the appropriate electing body will choose a second alternate for this case only. [See Section IIB for election procedures.].

G. Temporary Suspension

The Dean or his/her designee may at any time temporarily suspend or deny readmission to a student from the School of Nursing pending formal procedures when the Dean or his/her designee finds and believes from available information that the student would seriously disrupt the School of Nursing or constitute a danger to the health, safety or welfare of members of the School of Nursing Community. The appropriate procedure to determine the future status of the student will be initiated within seven calendar days.

V. Procedure for Honor Council Hearing

A. Rights of the Honor Council

- Hear together cases involving more than one accused student which arise out of the same transaction or occurrence, but in that event shall make separate findings and determinations for each accused;
- Permit a stipulation of facts by the involved accused and the PAL;
- Permit the incorporation in the record by a reference of any documentation produced and desired in the record by the PAL or the accused student;
- Question witnesses or challenge other evidence introduced by either the PAL or the accused student at any time;
- Hear from the PAL about dispositions made in similar cases and any dispositions offered to the student appearing before the Committee;
- Call additional witnesses or require additional investigation; · Dismiss any action at any time;
- Permit or require at any time amendment of the Notice of Hearing to include new or additional matters which may come to the attention of the Council before final determination of the case; provided, however, that in such event the Council shall grant to the accused or the PAL such time as the Council may determine reasonable under the circumstances to answer or explain such additional matters; and,
- Dismiss any person from the hearing who interferes with or obstructs the hearing or fails to abide by the rulings of the Council Chair.

B. Rights of the Accused Student Upon Hearing – An accused student appearing before the Honor Council shall have the right to:

Submit, if he or she should choose to do so, a written response to the charge outlined in the Notice before the scheduled hearing is to commence;

- Review and obtain copies, in advance, of any materials that will be presented by the PAL at the hearing;
- Submit a written request for a list of witnesses to be called by the PAL at the hearing;
- Be present at the hearing;
- Have an advisor or counselor appear with the accused and to consult with such an advisor or counselor before and/or during the hearing; however, the advisor/counselor will not be allowed to question witnesses and/or address members of the Council. The accused student must notify the chair at least 48 hours in advance with the name and relationship of the advisor and the name of any witness that will attend the hearing;
- Hear or examine evidence presented to the Honor Council; · Question the PAL and any witnesses who testify at the hearing;
- Present evidence by witness, affidavit, or documents in any media; · Make any statement to the Honor Council in mitigation or explanation of the conduct in question;
- Be informed in writing of the findings and any decisions imposed by the Honor Council;
- Appeal the decision and/or disposition to the Dean and to the Chancellor, as herein provided.

C. Conduct of the Hearing

All proceedings of the Honor Council are to be held in confidence by the members. The hearings shall be taped or stenographically recorded. The notice, exhibits, hearing record, verdict, and findings and determination of the Honor Council shall become the record of the Case and shall be filed in the Dean's office at the School of Nursing. The record shall be accessible at the reasonable times and places to both the PAL and the accused student for the purpose of review or appeal.

The Honor Council Chair shall preside at the hearing, call the hearing to order, call the roll of the Honor Council members in attendance, ascertain the presence or absence of the accused student, read the Notice of Hearing and Charge and verify the receipt of Notice of Charge by the accused, report any continuances requested or granted, establish the presence of any advisor or counselor of the accused student, call to the attention of the accused student and the advisor any special or extraordinary procedures to be employed during the hearing, and permit suggestions for or objections to any procedures for the Honor Council to consider. NOTE: Advisors will not be allowed to question the PAL, witnesses, and/or address members of the Council.

All requests to address the Council shall be addressed to the Chair. The Chair will rule on all requests and points of order and may consult with Council's legal advisor prior to any ruling. The Chair's ruling shall be final, and all participants shall abide thereby, unless the Chair shall present the question to the Council at the request of a member of the Council, in which event, the ruling of the Council by majority vote shall be final.

Rules of common courtesy and decency shall be observed at all times.

1. Opening Statements:

- The PAL may make an opening statement outlining the general nature of the case.
- The accused student may make an opening statement to the Council about the charge at this time or at the conclusion of the School of Nursing's presentation.

2. School of Nursing's Evidence:

- Witnesses of the School of Nursing are to be called, identified and questioned by the PAL, and any written reports or evidence introduced by the PAL as appropriate.
- The Council may question witnesses at any time.
- The accused student may question witnesses or examine evidence at the conclusion of the PAL's presentation.

3. Accused Student's Evidence:

- If the accused student has not elected to make an opening statement previously, he or she shall have the opportunity to make a statement to the Honor Council about the charge at this time.
- The accused student may present evidence through questioning witnesses or by written memoranda or other documents.
- The Council may question the accused student or witnesses at any time.
- The PAL may question witness or examine evidence at the conclusion of the accused student's presentation.

4. Rebuttal Evidence:

The Honor Council may permit the PAL or the accused to offer a rebuttal to the other's presentation.

VI. Determination of the Honor Council

Following the hearing, the Council shall promptly deliberate in closed session out of the presence of the accused, the witnesses, and the PAL. The Honor Council shall determine by a simple majority vote based on the evidence presented in the hearing whether they believe the student violated the Standards of Professional and Ethical Behavior as charged, and if so what sanction, if any, is appropriate. Separate findings shall be made as to the conduct of the student and as to the sanction, if any, to be imposed. The Council shall promptly submit its findings and determination in writing to the accused student and to the PAL.

The findings and determination of the Honor Council shall serve as a decision for the School of Nursing.

VII. Appeal to the Dean

If the student so desires, he or she may appeal the decision of the Council to the Dean within 10 business days of the Honor Council decision. A copy of the Notice of Appeal shall be given by the student to the PAL. The student may file a written memorandum for consideration by the Dean with the Notice of Appeal, and the Dean may request a reply from the PAL. The Dean shall review the record of the case and the appeal documents, and may affirm, reverse, or remand the case for further proceedings before the Honor Council.

The Dean shall notify the accused of his or her decision in writing, by certified mail. Copies of the letter will be sent to the Honor Council Chair, the PAL, and will be included with the official hearing file.

VIII. Appeal to the Chancellor

The accused student may appeal from the Dean's decision to the Chancellor or designated representative by filing written notice of appeal with the Chancellor within ten (10) business days after notification of the decision of the Dean. A copy of the Notice of Appeal will also be given by the accused to the Dean of the School of Nursing and to the PAL at the time of filing. The accused student may file a written memorandum for consideration by the Chancellor with the Notice of Appeal.

The Chancellor or designated representative shall review the record of the case and the appeal documents and may affirm, reverse, or remand the case for further proceedings and shall notify the Dean and the accused student in writing of the decision on the appeal. The action of the Chancellor shall be final unless it be to remand the matter for further proceedings.

IX. Status during the Appeal

In cases of suspension, dismissal or expulsion where a Notice of Appeal is filed within the required time, the accused student may petition the Chancellor in writing for permission to attend classes pending final determination of appeal. The Chancellor may permit the accused student to continue in school under such conditions as may be designated pending completion of appellate procedures, provided such continuance will not disrupt the University or constitute a danger to the health, safety or welfare of the University Community. In such event, however, any final disciplinary action imposed shall be effective from the date of the action of the Honor Council.

X. Status of the Standards of Professional and Ethical Behavior

Amendments to the Standards of Professional and Ethical Behavior and/or Honor Council Procedures for Violations may be proposed by petition of any twenty-five members of the student body, or the Honor Council on its own motion, or the faculty.

A proposed amendment in the Standards of Professional and Ethical Behavior and/or Honor Council Procedures for Violations must be approved by a 2/3 majority vote of the Honor Council members present (all members have the right to vote on amendments = 9 votes), by a 2/3 majority vote of the faculty present, by the Chancellor, and by the Board of Curators.

The Standards of Professional and Ethical Behavior and/or Honor Council Procedures for Violations may be terminated at any time by action under the general amending procedure.

Standards of Professional and Ethical Behaviour

University of Missouri – Kansas City School of Nursing

I. Preamble

One of the goals of a school of nursing is to educate student nurses during the transition to a professional life. The University of Missouri – Kansas City School of Nursing (UMKC-SON) has an obligation to society¹ to evaluate students pursuing the B.S.N., M.S.N., and Ph.D. degrees, as thoroughly as possible. This responsibility includes their cognitive abilities, their academic and professional knowledge and skills, their integrity, and their suitability to practice nursing in their desired professional role. Accordingly, the Standards of Professional and Ethical Behavior detailed in this document have been developed to guide students who are enrolled at all levels with the UMKC-SON, including undergraduate and graduate students, and are designed to assure accountability for the professional and ethical standards of the nursing profession.

II. Integrity

A. Personal and Professional Integrity

1. Honesty

A student nurse shall deal honestly with people including, but not limited to, colleagues, instructors, representatives of the University, patients, attending physicians, nursing staff, any representative of our clinical agencies, and other members of the health care team. Student nurses are expected to demonstrate honesty and integrity in all aspects of their interaction with patients and staff – particularly in assuring accuracy and completeness in their actions and documentation. The student nurse shall be willing to admit errors and must not mislead others or promote himself or herself at the patient's expense. The student nurse shall strive to report, by utilizing the Honor Council Procedures for Violations of the Standards of Professional and Ethical Behavior, those student nurses deficient in character or competence, or who engage in fraud, deception, and/or dishonesty.

A basic principal underlying all research is honesty. Scientists and student nurses who participate in research have a responsibility to provide research results of the highest quality; to gather facts meticulously, to keep impeccable records of work done; to interpret results realistically, not forcing them into preconceived molds or models; and to report new knowledge through appropriate channels. Co-authors of research reports must be sufficiently acquainted with the work of their co-workers that they can personally vouch for the integrity of the study and validity of the findings, and must have been active in the research itself.

- Examples of academic dishonesty include, but are not limited to, the following:

i. Cheating

- Use of any unauthorized assistance in taking quizzes, tests, or examinations;
- Dependence upon the aid of unauthorized sources in writing papers, preparing reports, solving problems, or carrying out assignments;
- Acquisition or possession without permission of tests or other academic material belonging to a member of the University faculty or staff;
- Use of assignments or papers prepared in one class for another class without disclosing such information to the faculty
- In any way giving assistance to others who are participating in any of the three preceding types of behavior; or
- Falsifying attendance records or other official documents.

ii. Plagiarism

- Use by paraphrase or direct quotation of the published or unpublished work of another person without fully and properly crediting the author with footnotes, citations or bibliographical reference;
- Unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials; or
- Unacknowledged use of original work/material that has been produced through collaboration with others without release in writing from collaborators.

iii. Sabotage

- Unauthorized interference with, modification of, or destruction of the work or intellectual property of another member of the University.

iv. Falsification of Patient's Medical Record or Information

- Examples of dishonesty related to clinical practice include, but are not limited to, the following:
 - Writing progress notes or other documentation regarding the patient's status, including, but not limited to, clinical observations, medication administration or results in the patient's chart when the student nurse has not seen or evaluated the patient, or using incorrect times of data entry.
 - Reporting medical information such as physical examination findings, lab values, test results, medications, or any other relevant patient information to other students, nurses, nursing supervisors, residents, attending physicians, the patient, the patient's family or other relevant health care personnel that has been fabricated by the student nurse.

2. Responsibility

A student nurse must acquire competencies with the appropriate concepts, knowledge and skills that the faculty determine essential. These competencies shall be utilized to care for the sick and to promote the health and welfare of society². A student nurse shall recognize a responsibility to participate in activities contributing to an improved community.

Student nurses in the care of patients must not be harmful, dangerous, or negligent to the mental or physical health of a patient or the public. Negligent means failure to exercise that degree of skill and learning ordinarily used under the same or similar circumstances by other student nurses.

Students must be familiar with and follow the rules and regulations of the School of Nursing, the University, and professional organizations which they are required to follow as nursing students. Copies of such rules and regulations are attached herewith.

B. Professional Nursing Behavior

1. Nondiscrimination

A nursing student shall provide care to patients without discriminating based on race, color, creed, sex, age, national origin, disability or Vietnam Era Veterans status.

It is against the University regulations to discriminate on the basis of race, color, creed, sex, age, national origin, disability, or Vietnam Era Veterans status. The University has an AIDS policy statement consistent with state law that prohibits discrimination against persons with AIDS or who are HIV positive.

2. Confidentiality

A student nurse shall respect the rights of patients, colleagues, affiliated institutions, and other health professionals, and shall safeguard patient confidences within the constraints of law. The patient's right to confidentiality in regard to his or her medical record, which includes confidentiality of personal and social history, is a fundamental tenet to health care.

The discussion in public of the problems of an identified patient, without the patient's permission, by professional staff (including other students) violates patient confidentiality and is unethical. Under no circumstances can any medical record be removed from any institution. Photocopying of the entire record is never permitted for presentations, rounds, or conferences; if permitted by the health care institution or provider students are permitted to extract information, but not copy 'wholesale' parts of the chart. Names of the patients should be omitted from any documents used for these presentations.

3. Disclosure

While the student nurse is a member of the patient care team and under direct or indirect faculty supervision, a student nurse shall continue to study, apply and advance scientific knowledge, make relevant information available to patients, colleagues, and the public, obtain consultation and use the talents of other health professionals when indicated.

Sharing of medical information appropriately with a patient and colleagues involved in the care of the patient is a fundamental ethical requirement.

The patient must be well informed to make health care decisions and work intelligently in partnership with the patient care team. Information that the patient needs for decision-making shall be presented in terms that patient can understand. If, for some reason, the patient is unable to comprehend, there shall be disclosure to the patient's authorized representative.

Failure of a student nurse to share medical information relevant to a patient with a patient and colleagues involved in the care of the patient is unethical. Providing inaccurate information with these individuals is also unacceptable.

4. Misconduct with Patients

The student nurse will not engage in nonprofessional behaviors with a patient – even upon the apparent request of a patient – while the student nurse is involved with the patient's care.

5. Representation

A student nurse shall accurately represent himself or herself to others including, but not limited to, colleagues, instructors, representatives of the University and their affiliates, partner institutions, patients, nurses, and other members of the health care team.

Examples of misrepresentation include, but are not limited to the following:

- Misrepresentation of the student's position, knowledge, and authority, including use of the title "nurse" by an undergraduate student nurse, or by use of the titles advanced practice nurse (APRN), nurse practitioner (NP), clinical nurse specialist (CNS), nurse midwife (NM), or nurse anesthetist (CRNA) by a graduate student.
- Use of fraud, deception, lies, or bribery in securing any certificate or registration or authority, diploma, permit or license issued, or in obtaining permission to take any examinations.
- Impersonation of any person holding a certificate of registration or authority, permit, license or allowing any person to use his/her certificate of registration or authority, permit license, or diploma from any school.
- Forgery, alteration, or misuse of a patient's medical records or knowingly furnishing false information to the other members of the health care profession and/or professional organizations.

6. Assessment of Personal Competence (Self-Evaluation)

Student nurses shall seek consultation and supervision whenever their ability to play their role in the care for a patient is inadequate because of lack of knowledge or experience.

Students are expected to respond to constructive criticism by appropriate modification of behavior.

7. Professional Demeanor

The student nurse is a representative of UMKC, and should realize that their behavior may positively and negatively affect the judgments of others about UMKC-SON.

UMKC-SON students are expected to be thoughtful and professional when interacting with faculty, patients and their families, nurses, attending physicians, nursing preceptors, affiliated institutional staff, other students, and other members of the health care team.

Students shall maintain a neat and clean appearance, and dress in attire that is generally accepted as professional by the patient populations served.

Inappropriate behavior includes, but is not limited to, the use of offensive language, gestures, or remarks. Attempting, directly or indirectly, by way of intimidation, coercion or deception, to obtain or retain a patient or discourage the use of a second opinion or consultation is not appropriate.

8. Impairment

The student nurse will not use alcohol or drugs in ways that impair his/her ability to perform the work of the profession or results in compromised patient care. It is the responsibility of every student nurse to strive to protect the public from an impaired colleague and to assist that colleague whose capability is impaired because of alcohol or drug use.

9. Conflict of Interest

If a conflict of interest arises, the moral principle is clear – the welfare of the patient must be, at all times, paramount. For example, gifts, hospitality, or subsidies offered by manufacturers and distributors of medical and or other equipment/goods shall not be accepted if acceptance would influence the objectivity of clinical judgment.

10. Criticism of Colleagues

Professional relations among all members of the medical community shall be marked by civility. Scholarly contributions shall be acknowledged and each person shall recognize and facilitate the contributions of others to this community; slanderous comments and acts are not acceptable. Student nurses shall deal with professional, staff, and peer members of the health team in a considerate manner and with a spirit of cooperation. It is unethical and harmful for a student nurse to disparage, without sufficient evidence, the professional competence, knowledge, qualifications, or services of a colleague to anyone. It is also unethical to imply without reliable evidence – by word, gesture, or deed – that a patient has been poorly managed or mistreated by a colleague.

11. Teaching

It is incumbent upon those entering this profession to teach what they know of the science, art, and ethics of nursing care. It includes communicating clearly and teaching patients so that they are properly prepared to participate in their own care and in the maintenance of their health.

III. The University of Missouri Student Conduct Code

In addition to the conduct detailed in the preceding sections, a student nurse is subject to the University of Missouri Student Conduct Code, as administered by the Office of the Vice Chancellor for Student Affairs, except for provisions dealing with academic dishonesty, Section 200.01 0 B. 1.

Conduct for which students are subject to sanctions falls into the following categories:

1. Forgery, alteration, or misuse of University documents, records or identification, or knowingly furnishing false information to the University.
2. Obstruction or disruption of teaching, research, administration, conduct proceedings, or other University activities, including its public service functions on or off campus.
3. Physical abuse or conduct which threatens or endangers the health or safety of any person.
4. Attempted or actual theft of, damage to, or possession without permission of property of the University or of a member of the University community or of a campus visitor.
5. Unauthorized possession, duplication, or use of keys to any University facilities or unauthorized entry to or use of University facilities.
6. Violations of University policies, rules or regulations or of campus regulations including, but not limited to, those governing residence in University-provided housing, or the use of University facilities, or the time, place and manner of public expression.
7. Manufacture, use, possession, sale or distribution of alcoholic beverages or any controlled substance without proper prescription or required license or as expressly permitted by law or University regulations.
8. Disruptive or disorderly conduct or lewd, indecent, or obscene conduct or expression.
9. Failure to comply with direction of University officials acting in the performance of their duties.
10. Illegal or unauthorized possession of firearms, explosives, other weapons, or dangerous chemicals.
11. Actual or attempted theft or other abuse of computer time, including but not limited to:
 - Unauthorized entry into a file to use, read, or change the contents, or for any other purpose;
 - Unauthorized transfer of a file;
 - Unauthorized use of another individual's identification and password;
 - Use of computing facilities to interfere with the work of another student, faculty member, or University official;
 - Knowingly causing a computer virus to become installed in a computer system or file.

Details of the policies, procedures, sanctions, and due process for violations of the University of Missouri Student Conduct Code are found in the University of Missouri – Kansas City General Catalogue and the student handbook.

¹ ANA (2003). Nursing's Social Policy Statement.

² ANA(2003). Nursing's Social Policy Statement.

School of Pharmacy Honor Codes

Honor Council Procedures for Violations of the Standards of Professional Growth and Ethical Behavior

University of Missouri-Kansas City School of Pharmacy

I. Jurisdiction of the Honor Council

The Honor Council shall be concerned with specified incidents of alleged violations by University of Missouri-Kansas City School of Pharmacy students of the School's Standards of Professional and Ethical Behavior, Sections IIA and IIB. Violations of the University of Missouri Student Conduct Code as described in Section III will be referred to the Office of the Vice Chancellor for Student Affairs. The standards identify areas of conduct which are judged unacceptable for individuals who are either in or aspire to be in the profession of pharmacy. The Standards of Professional and Ethical Behavior are distributed to all newly enrolled students during orientation. When a pharmacy student has been charged with one or more acts of misconduct according to these standards, the Honor Council shall adhere to the following procedures detail herein. The Honor Council shall have the authority to recommend sanctions upon any accused appearing before the Council. The disciplinary proceedings described are not to be construed as judicial trials. Care shall be taken, however, to comply as fully as possible with the spirit and intent of these procedural safeguards.

II. Organization of the Honor Council

A. Composition

The Honor Council members shall consist of the Chair; three voting faculty members, one from each division (3 votes); and one student member from each year 2-6 of the professional degree programs (5 students). The three most senior students no in accused's class will vote. Voting will take place by secret ballot. The chair and faculty members will not be administrators or division chairs. Four members or their alternates (2 faculty (to exclude the chair), 2 students) constitute a quorum. One nonvoting Honor Council staff member will assist the Chair in generation of reports and will be present at the hearings to take minutes. In case of a tie among the Honor Council as a whole, the chair shall vote in order to make the final determination upon recommendations from the other members. Proxy votes will not be allowed.

B. Eligibility and Appointment

The chair of the Honor Council shall be elected by the full faculty. An alternate will also be elected. The three division representatives and an alternate for each shall be elected by their respective divisions. The student representatives and their alternates shall be elected by their class officers. All elections shall be held on an annual basis at the beginning of the academic year, no later than September 15. After elections, a preliminary meeting of all members to discuss the role and function of the Honor Council will be held within two weeks.

C. Time of Appointment and Term of Office

All members shall serve a one year appointment or until replaced by election but may be re-elected in subsequent years. A student is ineligible to continue as a member of the Honor Council if placed on academic or disciplinary probation, or if for any other reason membership of the Council may not be in the best interest of the School of Pharmacy as determined by the Honor Council chair. In this case, the alternate would assume membership on the Council, and another alternate would be chosen by the class officers.

D. Primary Administrative Liaison (PAL)

A primary administrative liaison (PAL) will be appointed by the Dean for a minimum of a two year term. The PAL will draft the charge and represent the School of Pharmacy in all cases. The PAL will include all references to the School of Pharmacy within this document.

III. Procedures for Report of Violation, Investigation, Informal Disposition, and Notice

A. Report of Violation

An alleged violation of the Standards of Professional and Ethical Behavior should be reported to the PAL of the Honor Council or designee as soon as possible after discovery of the incident. The Chair shall notify the Dean of all accusations.

B. Preliminary Procedures and Meeting

The PAL shall investigate any reported student misconduct before initiating formal conduct procedures. The PAL is responsible for notifying the accused, in writing by certified mail, of the allegations brought against him/her prior to the commencement of the preliminary meeting and shall receive a copy of these Procedures for Violations of the Standards of Professional and Ethical Behavior along with the written notice. The PAL shall meet with the accused student to give the student the opportunity to present a personal version of the incident or occurrence.

C. Informal Disposition

The PAL shall have the authority to dismiss an allegation or propose appropriate sanctions to the accused student and shall fix a reasonable time within which the student shall accept or reject a proposed informal disposition. A failure of the student either to accept or reject within the time fixed shall be deemed to be an acceptance and, in such event, the proposed disposition shall become final upon expiration of such time. If the student rejects informal disposition, it must be in writing and shall be forwarded to the Honor Council.

D. Prior to Formal Hearing

The PAL shall draft the charge and call the Honor Council into session for a preliminary meeting within 10 working days of receipt of a written accusation of misconduct. The Chair of the Honor Council shall approve meeting dates. In the case that an elected member and an alternate have a conflict of interest in the case, the electing body would choose another member for the one case at the time of the preliminary meeting. [See section IIB for election procedures.] If the case is found to be within the jurisdiction of the Honor Council, a formal hearing will be held. If it is not within the jurisdiction of the Honor Council, the case will be forwarded to the Office of the Vice Chancellor for Student Affairs or other appropriate action.

will be taken. The PAL and the accused may meet with the Chair separately to discuss these policies and procedures. The Dean, designee, or other appropriate university official(s), may at any time temporarily suspend or deny readmission to the accused from the School of Pharmacy pending formal procedures when the Dean or the Chancellor or the Chancellor's designee finds and believes from available information that the presence of the accused on campus would seriously disrupt the School of Pharmacy or constitute a danger to the health, safety, or welfare of members of the School of Pharmacy community. The appropriate procedure to determine the future status of the accused will be initiated within seven calendar days of any action taken.

E. Notice of Formal Hearing

If the accusation is found at the preliminary meeting to be within the jurisdiction of the Honor Council, the formal hearing will be held within 15 working days of mailing of the official notice. Notice by certified mail will be sent to the address currently on record with the UMKC Registrar's Office. Failure by the accused to have a current local address on record with the Registrar's Office shall not be construed to invalidate such notice. The PAL, witnesses, and the accused will be given written notice of the hearing by certified mail. The notice shall set forth the date, time, and place of the alleged violation, the conduct for inquiry, the date, time and place of the hearing before the Council, request for attendance of the parties involved, and a reference for the accused to the Rights of the Accused Student Upon Hearing which are outlined in these Procedures. The notice shall be given at least seven (7) consecutive calendar days prior to the hearing, unless a shorter time be fixed by the Chair for good cause. Any request for continuance shall be made in writing to the Chair who shall have the authority to postpone the hearing if it is determined that the request is timely and made for good cause. The Chair shall notify the Honor Council members, the accused, the PAL, the witnesses, and any other relevant individuals of the new date for the hearing. If the accused fails to appear at the scheduled time, the Honor Council may hear and determine the matter in the accused's absence.

IV. Procedure for Honor Council Hearing

A. Rights of the Honor Council

The Honor Council shall have the right to:

- hear together cases involving more than one accused which arise out of the same act of misconduct, but in that event shall make separate findings and determinations for each accused;
- permit a stipulation of facts by the accused involved and the PAL;
- permit the incorporation in the record by a reference of any document, affidavit, or other material produced and desired in the record by the PAL or the accused charged and make a determination of whether the information is relevant to the case at hand.
- question witnesses, the accused, and/or the PAL or challenge other evidence introduced by either the PAL or the accused at any time;
- hear from the Council Chair about dispositions made in similar cases;
- call additional witnesses or require additional investigation,
- dismiss any action at any time;
- permit or require at any time, within a reasonable time as determined by the Council, amendment of the Notice of Hearing to include new or additional matters which may come to the attention of the Council before final determination of the case; provided, however, that in such event the Council shall grant to the accused or the School such time as the Council may determine reasonable under the circumstances to answer or explain such additional matters; and,
- dismiss any person from the hearing who interferes with or obstructs the hearing or fails to abide by the rulings of the Council Chair on any procedural question or request of the Chair for order.

B. Rights of the Accused Upon Hearing

The accused scheduled to appear before the Honor council pursuant to formal notice of charges and disciplinary hearing shall have the right to:

- submit a written response to the charge outlined in the Notice before the scheduled hearing is to commence;
- request in advance of the scheduled hearing a review of any materials contained in the accused's hearing file which will be kept in the Student Affairs Office;
- submit a written request for the identities of witnesses to be called to testify before the Council;
- be present at the hearing;
- have an advisor or counselor appear with the accused and to consult with such an advisor or counselor before and/or during the hearing: however, the advisor/counselor will not be allowed to question witnesses and/or address members of the Council;
- hear or examine evidence presented to the Honor Council
- question the PAL and/or witnesses present who are testifying at the hearing.
- present evidence by witness, affidavit, written report, other memoranda, photographs, drawings, and any other relevant evidence of any defense the accused desires:
- make any statement to the Honor Council in mitigation or explanation of the conduct in question;
- remain silent to avoid self-incrimination;
- be informed in writing of the findings and any decisions imposed by the Honor Council, the Executive Committee; and, • appeal the decision and/or disposition to the Chancellor, as herein provided.

C. Rights of School of Pharmacy

The Primary Administrative Liaison (PAL) has the right to:

- be present at the hearing;
- present evidence by witness, affidavit, written report, other memoranda, photographs, drawings, and any other relevant evidence the PAL desires;
- offer rebuttal at the appropriate time as determined by the Chair;
- question witnesses or the accused;
- have an advisor or counselor appear with the PAL and to consult with such an advisor or counselor before or during the hearing; however, the advisor/counselor will not be allowed to question witnesses and/or address members of the Council;
- hear or examine evidence presented to the Honor Council by witnesses or the accused; and,
- be informed in writing of the findings and any decisions imposed by the Honor Council or the Executive Committee.

D. Rights of Witnesses

Witnesses shall be notified of the scheduled time, date, and location of the hearing. Witnesses shall bring with them whatever documentation is requested. Failure of a student witness to appear, without good cause, is a violation of the Standards of Professional and Ethical Behavior.

E. Record of Hearing

All proceedings of the Honor Council are to be held in the strictest confidence by the members and all other persons involved. The hearings shall be audio taped, and written minutes will also be recorded. The notice, exhibits, hearing record, verdict, and disposition of the Honor Council shall become the record of the Case. This official document shall be filed under strictest security in the permanent records of the Students Affairs Office of the School of Pharmacy. The record shall be accessible at the reasonable times and places to both the University and the accused for the purpose of review or appeal.

F. Conduct of the Hearing

The Honor Council Chair shall preside at the hearing, call the hearing to order, call the roll of the Honor Council members in attendance, ascertain the presence or absence of the accused, read the Notice of Hearing and Charge and verify the receipt of Notice of Charge by the accused, report any continuances requested or granted, establish the presence of any advisor or councilor of the accused, call to the attention of the accused and the advisor any special or extraordinary procedures to be employed during the hearing, and permit suggestions for or objections to any procedures for the Honor Council to consider. NOTE: Advisors will not be allowed to question the PAL, witnesses, and/or address members of the Council. All requests to address the Council shall be addressed to the Chair. The Chair will rule on all requests and points of order and may consult with Council's legal advisor prior to any ruling. The Chair's ruling shall be final, and all participants shall abide thereby, unless the Chair shall present the question to the Council at the request of a member of the Council, in which event, the ruling of the Council by majority vote shall be final. Rules of common courtesy and decency shall be observed at all times.

1. Opening Statements

- The Honor Council Chair or designee shall make opening remarks outlining the general nature of the case.
- The accused may make an opening statement to the Council about the charge at this time.
- The PAL may make an opening statement and may add additional clarification to other opening statements as necessary.
- Witnesses of the School of Pharmacy are to be called by the PAL and identified or written reports of evidence are introduced as appropriate.
- The Council may question witnesses at any time.
- The accused may question witnesses or examine evidence at the conclusion of the PAL's presentation.

2. School of Pharmacy's Evidence

- The PAL may question own witnesses.
- The accused shall have the opportunity to make a statement to the Honor Council about the charge.
- The accused may present evidence through witnesses or written memoranda.
- The Council may question the accused or witnesses at any time.
- The PAL may question witnesses or examine evidence at the conclusion of the accused's presentation.
- the accused may question own witnesses.
- Accused's Evidence:

3. Rebuttal Evidence:

The Honor Council may permit the PAL or the accused to offer a rebuttal to the other's presentation. If it appears that essential testimony is unavailable, or that for other good cause the hearing should be deferred, the Council may continue, recess or discontinue the hearing without prejudice.

V. Determination of the Honor Council

Following the hearing, the Council shall promptly deliberate in closed session out of the presence of the accused, the witnesses, or the PAL. Determination is to be made regarding both the validity of the charge and the discipline, if any, to be imposed.

A. Violation of the Standards of Professional and Ethical Behavior

The Honor Council shall determine if the evidence presented in the hearing supports the charge of violation of the Standards of Professional and Ethical Behavior. The Council shall render a decision, by simple majority vote, of whether a violation has been committed by the accused. Each charge, if there are more than one, shall be considered individually and/or collectively at the discretion of the Council.

B. Discipline Imposed

The Honor Council shall determine the discipline to be imposed, if any, based upon its deliberations. The following forms of discipline are to be recommended by means of a simple majority vote of the Council members. Where there are multiple violations, there can be separate sanctions for each violation. The sanctions include, but are not limited to, the following:

- **No Disciplinary Action –**
Given when the student is not found in violation of the Standards of Professional and Ethical Behavior.
- **Warning –**
A written reprimand that the student has violated the Standards of Professional and Ethical Behavior.
- **Probation –**
A written reprimand for violation of the Standards of Academic Conduct that includes a designated period of time, the probability of more severe sanctions if the student violates any institutional regulations(s) during the probationary period, and subject to any appropriate terms or conditions, such as loss of privileges, restitution, and discretionary assignments.
- **Suspension –**
An involuntary separation from the School of Pharmacy for a specified period of time or until special conditions have been met, with a statement whether suspension should relate back to the date of the offense, begin at the time imposed, or begin at a date specified in the future. At the conclusion of the period of suspension, the suspended student is automatically returned to student status. Conciliation for readmission may be specified.
- **Dismissal –**
An involuntary separation from the School of Pharmacy for an indefinite period of time. The order of dismissal may specify a date before which the faculty will not consider a petition for readmission from the dismissed student.
- **Expulsion –**
Permanent separation from the School of Pharmacy. A copy of the imposed sanction is to be placed in the student's non-academic file.

C.

An oral presentation of the Council's findings and recommendations is permitted following the hearing, but a written document including findings of fact, verdict, and recommended disposition shall be completed as soon as possible after the hearing. This Final Report of the Council shall be submitted to the Executive Committee and the Office of the Vice Chancellor for Student Affairs. All parties will be notified in writing of the Honor Council's recommendation by certified mail within seven calendar days.

VI. Decision of the Executive Committee

The findings and determination of the Honor Council serve as recommendations to the Executive Committee. The Executive Committee, as described in the School of Pharmacy By-Laws, chaired by the Dean or designee, reviews the charge, the finding of fact, the decision of the Council, and the recommended discipline to be imposed from the Honor Council. They also assured that the procedures outlined for the Honor Council were successfully followed. The Executive Committee has the right to request further information from either party. Either party can also request to address the Executive Committee. In either case, both parties will be notified of the request, the nature of the request, and be asked to attend if deemed necessary by the Executive Committee. Both parties will have the same rights as they have upon hearing as outlined in IV B & C of this document. The Executive Committee hearings shall be audio taped, and written minutes will also be recorded. The notice, exhibits, hearing record, verdict, and disposition of the Executive Committee shall become the record of the Case. This official document shall be filed in the permanent records of the Student Affairs Office of the School of Pharmacy. The record shall be accessible at the reasonable times and places to both the University and the accused for the purpose of review or appeal. After deliberation and careful consideration, the Executive Committee approves, by simple majority vote, one of the following actions:

- to sustain the recommendations of the Honor Council;
- to amend the recommendations of the Honor Council to another type of sanction;
- to remand the Honor Council's recommendations; or,
- to reverse the Honor Council's recommendations.

The Dean shall notify the accused of the findings of the Honor Council and the Executive Committee in writing, by certified mail, within seven calendar days of the Executive Committee meeting. Copies of the letter will be sent to the Honor Council Chair, the PAL, and the Office of Student Affairs for placement in the accused's file and in the official hearing file.

VII. Right of Appeal

When a recommendation from the Honor Council and the Executive Committee is made for some form of disciplinary action other than 'no disciplinary action', the accused may appeal such decision to the Chancellor or designated representative by filing written notice of appeal with the Chancellor within ten (10) consecutive calendar days after notification of the decision of the Executive Committee. A copy of the Notice of Appeal will also be given by the accused to the Dean of the School of Pharmacy at the time of filing who will transmit copies to the Executive Committee and the Honor Council. The accused may file a written memorandum for consideration by the Chancellor with the Notice of Appeal.

The Chancellor or designated representative shall review the record of the case and the appeal documents and may affirm, reverse, or remand the case for further proceedings and shall notify the Dean and the accused in writing of the decision on the appeal. The action of the Chancellor shall be final unless it be to remand the matter for further proceedings.

Status During Appeal

In cases of suspension, dismissal or expulsion where a Notice of Appeal is filed within the required time, the accused may petition the Chancellor in writing for permission to attend classes pending final determination of appeal. The Chancellor may permit the accused to continue in school under such conditions as may be designated pending completion of appellate procedures, provided such continuance will not disrupt the University or constitute a danger to the health, safety or welfare of the University Community. In such event, however, any final disciplinary action imposed shall be effective from the date of the action of the Executive Committee.

VIII. Status of the Standards of Professional and Ethical Behavior

Amendments to the Standards of Professional and Ethical Behavior and/or Honor Council Procedures for Violations may be proposed by petition of any twenty-five members of the student body, or the Honor Council on its own motion, or the faculty.

A proposed amendment in the Standards of Professional and Ethical Behavior and/or Honor Council Procedures for Violations must be approved by a 2/3 majority vote of the Honor Council members present (all members have the right to vote on amendments = 9 votes), by a 2/3 majority vote of the faculty present, by the Chancellor, and the Board of Curators.

The Standards of Professional and Ethical Behavior and/or Honor Council Procedures for Violations may be terminated at any time by action under the general amending procedure.

Standards of Professional and Ethical Behavior

University of Missouri-Kansas City School of Pharmacy

I. Preamble

One of the goals of a pharmacy school is to educate a pharmacy student during the transition to a professional life. The University of Missouri-Kansas City School of Pharmacy has an obligation to evaluate students pursuing the B.S. and Pharm.D. practice degrees as thoroughly as possible for their cognitive abilities, their academic and professional knowledge and skills, their integrity, and their suitability for the practice of pharmacy. Accordingly, the Standards of Professional and Ethical Behavior detailed in this document have been developed to guide the pre-professional behavior of **professional degree-seeking** pharmacy students of the University of Missouri-Kansas City School of Pharmacy and to prepare the pharmacy students to meet the ethical standards of the pharmacy profession.

Students enrolled in the graduate programs in pharmaceutical sciences and pharmacology will be governed by the University of Missouri Student Conduct Code.

II. Professional Integrity

A. Professional Integrity

1. Honesty

A pharmacy student shall deal honestly with people including, but not limited to, colleagues, instructors, representatives of the University, patients, attending physicians, and other members of the health care team. Pharmacy students are expected to demonstrate honesty and integrity in all aspects of their interaction with patients and staff – particularly in assuring accuracy and completeness in their actions and documentation. The pharmacy student shall be willing to admit errors and must not mislead others or promote himself/herself at the patient's expense. The pharmacy student shall strive to report, by utilizing the Honor Council Procedures for Violations of the Standards of Professional and Ethical Behavior, those pharmacy students deficient in character or competence, or who engage in fraud or deception.

The basic principle underlying all research is honesty. Scientists and pharmacy students who participate in research have a responsibility to provide research results of the highest quality; to gather facts meticulously, to keep impeccable records of work done; to interpret results realistically, not forcing them into preconceived molds or models; and to report new knowledge through appropriate channels. Co-authors of research reports must be sufficiently acquainted with the work of their co-workers that they can personally vouch for the integrity of the study and validity of the findings, and must have been active in the research itself.

- Examples of academic dishonesty include, but are not limited to, the following:

- **Cheating**

- use of any unauthorized assistance in taking quizzes, tests, or examinations;
- dependence upon the aid of unauthorized sources in writing papers, preparing reports, solving problems, or carrying out other assignments;
- acquisition or possession without permission of tests or other academic material belonging to a member of the University faculty or staff;
- in any way giving assistance to others who are participating in any of the three preceding types of behavior; or
- falsifying attendance records or other official documents.

- **Plagiarism**

- use by paraphrase or direct quotation of the published or unpublished work of another person without fully and properly crediting the author with footnotes, citations or bibliographical reference;
- unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials; or
- unacknowledged use of original work/material that has been produced through collaboration with others without release in writing from collaborators.

- **Sabotage**

- unauthorized interference with, modification of, or destruction of the work or intellectual property of another member of the University community.
- Examples of dishonesty related to clinical practice include, but are not limited to, the following:
 - **Falsification of Patient's Medical Record or Information**
 - Writing progress notes or other documentation regarding the patient's status, including, but not limited to, clinical observations or results in the patient's chart when the pharmacy student has not seen or evaluated the patient, or using incorrect times of data entry.
 - Reporting medical information such as physical examination finds, lab values, test results, and any other relevant patient information to other students, residents, attending physicians, the patient, the patient's family, or other relevant health care personnel that has been fabricated by the pharmacy student.

2. Responsibility

A pharmacy student must acquire competencies with the appropriate concepts, knowledge, and skills which the faculty determine to be essential. These competencies shall be utilized to care for the sick and to promote the health and welfare of society. A pharmacy student shall recognize a responsibility to participate in activities contributing to an improved community.

Pharmacy students in the care of patients must not be harmful, dangerous, or negligent to the mental or physical health of a patient or the public. Negligent means the failure to use that degree of skill and learning ordinarily used under the same or similar circumstances by other pharmacy students.

Students must be familiar with and follow the rules and regulations of the School of Pharmacy, the University, and related professional organizations.

B. Pharmacy Professional Behavior

1. Nondiscrimination

It is against University regulations to discriminate on the basis of race, color, creed, sex, age, national origin, disability, or Vietnam Era Veterans status. The University has an AIDS policy statement consistent with state law that prohibits discrimination against persons with AID or who are HIV positive.

2. Representation

A pharmacy student shall accurately represent himself/herself to others including, but not limited to, colleagues, instructors, representatives of the University, patients, pharmacists and other members of the health care team.

Examples of misrepresentation include, but are not limited to the following:

- A pharmacy student shall never use the title of "pharmacist", as this clearly misrepresents the student's position, knowledge, and authority.
- Use of fraud, deception, lies, or bribery in securing any certificate of registration or authority, diploma, permit or license issued, or in obtaining permission to take any examinations.
- Impersonation of any person holding a certificate of registration or authority, permit, license or allowing any person to use his/her certificate of registration or authority, permit, license, or diploma from any school.
- Forgery, alteration, or misuse of a patient's medical records or knowingly furnishing false information to the other members of the health care profession and/or professional organizations.

3. Confidentiality

A pharmacy student shall respect the rights of patients, colleagues, and other health professionals, and shall safeguard patient confidences within the constraints of the law. The patient's right to confidentiality in regard to his/her medical record, which includes confidentiality of personal and social history, is a fundamental tenet to medical care. Proprietary information from clerkship and/or externships shall not be shared.

The discussion in public of the problems of an identified patient, without the patient's permission, by professional staff (including other students) violates patient confidentiality and is unethical. Under no circumstances can any medical record be removed from the institution. Photocopying of the entire record is never permitted for presentations or rounds; students are permitted to extract information, but not copy 'wholesale' parts of the chart. Names of patients should be omitted from any documents used for these presentations.

4. Disclosure

While the pharmacy student is a member of the patient care team and under faculty supervision, a pharmacy student shall continue to study, apply and advance scientific knowledge, make relevant information available to patients, colleagues, and the public, obtain consultation, and use the talents of other health professionals when indicated.

Sharing of medical information appropriately with a patient and colleagues involved in the care of the patient is a fundamental ethical requirement. The patient must be well informed to make health care decisions and work intelligently in partnership with the patient care team. Information that the patient needs for decision making shall be presented in terms the patient can understand. If, for some reason, the patient is unable to comprehend, there shall be disclosure to the patient's authorized representative.

Failure of a pharmacy student to share medical information relevant to a patient with the patient and colleagues involved in the care of the patient is unethical. Providing inaccurate information with these individuals is also unacceptable.

5. Assessment of Personal Competence (Self-Evaluation)

Pharmacy students shall seek consultation and supervision whenever their ability to play their role in the care for a patient is inadequate because of lack of knowledge or experience.

Students are expected to respond to constructive criticism by appropriate modification of behavior.

It is unacceptable for a pharmacy student to dispense prescription medications or to prescribe therapies without supervision.

6. Professional Demeanor

The pharmacy student is expected to be thoughtful and professional when interacting with faculty, patients and their families, attending physicians, pharmacy preceptors, other students, and other members of the health care team and whenever his/her behavior may influence adversely the judgments of others about the professional school of University.

Students shall maintain a neat and clean appearance, and dress in attire that is generally accepted as professional by the patient populations served.

Inappropriate behavior includes, but is not limited to, the use of offensive language, gestures, or remarks. Attempting, directly or indirectly, by way of intimidation, coercion or deception, to obtain or retain a patient or discourage the use of a second opinion or consultation is not appropriate.

7. **Conflict of Interest**

If a conflict of interest arises, the moral principle is clear – the welfare of the patient must be, at all times, paramount. For example, gifts, hospitality, or subsidies offered by manufacturers and distributors of medical and pharmaceutical equipment/goods shall not be accepted if acceptance would influence the objectivity of clinical judgment.

8. **Misconduct with Patients**

The pharmacy student will not engage in romantic, sexual, or other nonprofessional behaviors with a patient – even upon the apparent request of a patient – while the pharmacy student is involved with the patient's care.

9. **Impairment**

The pharmacy student will not use alcohol or drugs in ways that impair his/her ability to perform the work of the profession or results in compromised patient care. It is the responsibility of every pharmacy student to strive to protect the public from an impaired colleague and to assist that colleague whose capability is impaired because of alcohol or drug use.

10. **Criticism of Colleagues**

Professional relations among all members of the medical community shall be marked by civility. Scholarly contributions shall be acknowledged and each person shall recognize and facilitate the contributions of others to this community; slanderous comments and acts are not acceptable. Pharmacy students shall deal with professional, staff, and peer members of the health team in a considerate manner and with a spirit of cooperation.

It is unethical and harmful for a pharmacy student to disparage, without sufficient evidence, the professional competence, knowledge, qualifications, or services of a colleague to anyone. It is also unethical to imply without reliable evidence – by word, gesture, or deed – that a patient has been poorly managed or mistreated by a colleague.

11. **Teaching**

It is incumbent upon those entering this profession to teach what they know of the science, art, and ethics of pharmaceutical care. It includes communicating clearly and teaching patients so that they are properly prepared to participate in their own care and in the maintenance of their health.

III. The University of Missouri Student Conduct Code

In addition to the conduct detailed in the preceding sections, a pharmacy student is subject to the University of Missouri Student Conduct Code, Section 200.010 Section B of the Collected Rules and Regulations of the University of Missouri (except for provisions dealing with academic dishonesty) (http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.010_standard_of_conduct (http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.010_standard_of_conduct/)), which is enforced with the procedures appearing in Section 200.020 (http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.020_rules_of_procedures_in_student_conduct_matters (http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.020_rules_of_procedures_in_student_conduct_matters/)).

Summary:

- Details of the policies, procedures, sanctions, and due process for violations of the Standards are available on the School of Pharmacy website.
- Details of the policies, procedures, sanctions, and due process for violations of the University of Missouri Student Conduct Code are found in the University of Missouri-Kansas City General Catalogue and the student handbook.
- Please contact the School of Pharmacy Associate Dean for Student Affairs if you have questions or need additional information about any of the policies covered in this document.

Revision: 12/18/13 – Non-substantive/clerical revision only.

Acceptable Use Policy

(110.005 Acceptable Use Policy; Bd. Min. 9-14-00.)

This policy is also available at http://www.umsystem.edu/ums/rules/collected_rules/facilities/ch110/110.005_acceptable_use_policy (http://www.umsystem.edu/ums/rules/collected_rules/facilities/ch110/110.005_acceptable_use_policy/).

This policy applies to all users including faculty, staff, students, and guest users of University of Missouri computer networks, equipment, or connecting resources.

1. **University Inspection of Personal Electronic Information**

Electronic information on University networks or equipment, including, but not limited to, electronic mail and personal information, is subject to examination by the University where:

- a. It is necessary to maintain or improve the functioning of University computing resources;
- b. Where there is a suspicion of misconduct under University policies, or suspicion of violation of Federal or State laws; or
- c. It is necessary to comply with or verify compliance with Federal or State law.

2. Acceptable Use Guidelines

- a. Responsibilities of Users of University Computer Resources:
 - i. Respect the intellectual property rights of authors, contributors, and publishers in all media.
 - ii. Protect user ID, password, and system from unauthorized use.
 - iii. Adhere to the terms of software licenses and other contracts. Persons loading software on any University computer must adhere to all licensing requirements for the software. Except where allowed by University site licenses, copying software licensed for University use for personal use is a violation of this policy.
 - iv. Adhere to other University and campus policies, including the Collected Rules and Regulations of the University of Missouri, and, if applicable, the University Business Policy Manual, Human Resources Manual and policies established for a specific resource.
 - v. Adhere to data access policies of the University or those established by law.
 - vi. Use University computer resources in a manner that is compliant with University policies and State and Federal law.
- b. Prohibited Uses of University Computer Resources:
 - i. Unauthorized or excessive personal use. Use may be excessive if it overburdens a network, results in substantial use of system capacity, or otherwise subjects the institution to increased costs or risks (employees additionally may be subject to discipline for unauthorized or excessive personal use of computer resources).
 - ii. Uses that interfere with the proper functioning of the University's information technology resources.
 - iii. Uses that unreasonably interfere with the ability of others to make use of University computer resources.
 - iv. Attempting to gain or gaining unauthorized access to the computer system, or files of another.
 - v. Use of University computer resources to infringe the intellectual property rights of others.
 - vi. Use of University computer resources for personal profit, except as permitted under the University's conflict of interest policy.

3. Enforcement of Acceptable Use Policy

Violation of the Acceptable Use Policy may result in a denial of access to University computer resources, and those disciplinary actions provided or authorized by the Collected Rules and Regulations of the University of Missouri.

Students who violate these guidelines will be subject to sanctions as outlined in section 200.010 (<http://www.umkc.edu/umkc/catalog/html/append/policy/conduct.html>) of the Student Conduct Code. All such cases will be forwarded to the Primary Administrative Officer in the Student Life Office for appropriate action.

Faculty or staff who violate these guidelines will be subject to disciplinary measures as outlined within the University Policy Manuals.

Violations of some of the above guidelines may constitute a criminal offense. Individuals using UMKC computing resources are urged to review the University Policy Manual, Computer Crimes Bill passed by the Missouri State Legislature (<http://www.umkc.edu/is/cio/policy/mo-crime.html>) and the MOREnet Acceptable Use Policy (<http://www.more.net/>), all of which are stored on-line for easy access.

Equal Opportunity & Title IX

Equal Opportunity & Educational Access

UMKC is committed to providing equal opportunities to all students without unlawful discrimination on the basis of a protected identity, or their race, color, national origin, ancestry, religion, sex, pregnancy, sexual orientation, gender identity, gender expression, age, disability, protected veteran status, or any other status protected by applicable state or federal law.

Discrimination & Harassment: Compliance with UM System Collected Rules and Regulations (CRRs) 600.010 (https://www.umsystem.edu/ums/rules/collected_rules/equal_employment_educational_opportunity/ch600/) (link) is monitored by the Office of Affirmative Action (<https://info.umkc.edu/title9/>) (link), but it is the responsibility of the entire university community to provide equal opportunity through relevant practices, initiatives, and programs. If you or someone you know has experienced discrimination or harassment based on their protected identity, we encourage you to visit Making a Report (<https://info.umkc.edu/title9/makingareport/>) (link). Also included under CRR 600.010 (https://www.umsystem.edu/ums/rules/collected_rules/equal_employment_educational_opportunity/ch600/) is sexual harassment and sexual misconduct by a student, employee, volunteer, or visitor that is not prohibited under CRR 600.020 (https://www.umsystem.edu/ums/rules/collected_rules/equal_employment_educational_opportunity/ch600/) and Title IX, and that occurs within a UMKC educational program or activity, on- or off-campus, as well as when the conduct occurs off-campus and interferes with or limits the ability of any person to participate in or benefit from UMKC's educational programs or activities or employment. For those who have experienced discrimination or harassment, the Roos Respond Resource Guide (<https://info.umkc.edu/title9/resources/>) (link) provides a list of campus and community support services.

Failure to Accommodate Students with Disabilities: UM System Collected Rules and Regulations (CRRs) 600.010 (https://www.umsystem.edu/ums/rules/collected_rules/equal_employment_educational_opportunity/ch600/) (link) prohibits discrimination against students with disabilities and ensures these students receive educational accommodations as issued by Student Disability Services (<https://info.umkc.edu/disability-services/>) (link). If you believe an employee of the university has failed to accommodate your disability, visit Making a Report (<https://info.umkc.edu/title9/makingareport/>) (link).

Sexual Harassment under Title IX: UM System Collected Rules and Regulations (CRRs) 600.020 (https://www.umsystem.edu/ums/rules/collected_rules/equal_employment_educational_opportunity/ch600/) (link) prohibits all students, employees, volunteers, and visitors from engaging in sexual harassment, including sexual assault, dating violence, domestic violence, and stalking, in a university education program or activity against a person in the United States. If you or someone you know has experienced any of these forms of prohibited conduct, you can access the Roos Respond Resource Guide (<https://info.umkc.edu/title9/resources/>) (link) for a list of support services on campus and in the community. For information on how to make a report to the university, visit Making a Report (<https://info.umkc.edu/title9/makingareport/>) (link).

Mandated Reporting: Nearly all UMKC employees, including your course instructors, advisors, and other support staff, are required to report all information related to any known or suspected discrimination, harassment, or sexual misconduct to the Office of Affirmative Action and cannot offer confidentiality. However, students may seek confidential support from RISE: Resources, Intervention, Support, & Education (<https://info.umkc.edu/vpr/>) (link), Counseling Services (<https://info.umkc.edu/counseling-services/>) (link), and Student Health & Wellness (<http://catalog.umkc.edu/info.umkc.edu/studenthealth/>) (link). Employees of these offices are exempt from mandated reporting so long as the disclosure of prohibited conduct occurs in a confidential communication while they are acting as support advocates, professional counselors, or medical personnel. An exemption does not extend to these employees when the disclosure is made in non-confidential setting. If you have a question about confidentiality when making a disclosure to RISE, Counseling Services, or Student Health & Wellness, you should first ask whether the exemption applies.

Minimum Standards of Progress for Veterans

Veterans Affairs regulations require that all veterans drawing VA educational benefits at UMKC must comply with the Veterans Affairs Minimum Standards of Progress. These standards dictate that the veteran must be making satisfactory progress toward a degree while enrolled. The University's academic and probation policies have been approved by the Veterans Affairs as those Minimum Standards of Progress.

Undergraduate Student

Undergraduate degree-seeking students' academic status is assessed at the end of every term, whether the student is full-time or part-time for that term. A summer session is considered the same as a semester for the purpose of the following regulations:

1. In general, students will be placed on academic probation whenever their official UM grade-point average falls below 2.0 (C average). Some academic units may have a higher grade-point average requirement. New freshman admitted to UMKC on the basis of high school records, who have grade-point averages between 1.50 and 1.99 at the end of the first semester of either full- or part-time study will be placed on academic warning. Students on academic warning must achieve an overall C average by the end of their second semester or be placed on regular probation. They then would be subject to the regular probation requirements.
2. Students on academic probation will be restored to good standing when their UM grade-point average reaches 2.0 or the GPA level established by their academic units.
3. Students on academic probation must maintain the grade-point average required by their academic units during each subsequent semester or summer session while on probation. Otherwise, they are ineligible to re-enroll without the approval of the academic units.
4. Students on academic probation must remove themselves from probation within three successive semesters (including the semester in which they originally were placed on probation). Otherwise, they are ineligible to re-enroll without the approval of the academic units.
5. Students are responsible for knowing their academic status by referring to the term grade reports and their permanent academic records in the UMKC Records Office.

Graduate and Professional Students

Because there may be some variation in the academic and probation policies in the various graduate and professional schools within the University, reference should be made to the appropriate sections in this catalog.

Conduct

Institutional policy relating to conduct for veteran students is the same as for all other students. Statement of requirements is shown elsewhere in this catalog.

Student Records

Adequate records are kept by the school to show the progress of each eligible veteran. The records are sufficient to show continued pursuit at the rate for which enrolled and the progress being made.

These records include the final grade in each subject completed and a record of the date of withdrawal from any class the veteran does not complete. The last date of attendance must be reported to the Veterans Affairs.

No veteran will be considered to have made satisfactory progress when the veteran fails all subjects undertaken except with a show of mitigating circumstances, when enrolled in two or more unit subjects. This is immediately reported to Veterans Affairs. The determination for the continuance of benefits is made by the regional office of the Veterans Affairs.

Policy on Student Records

UMKC conforms to federal regulations known as the Family Educational Rights and Privacy Act, or FERPA. The purpose of FERPA is to provide rights to students and their families with regard to access and privacy of academic records. FERPA guarantees students at the postsecondary level the right to inspect and view their academic records. It also prohibits UMKC from releasing information from a student's record to any third party unless the student authorizes the release.

The UM System policy on student records is available at: http://www.umsystem.edu/ums/rules/collected_rules/information/ch180/180.020_student_records (http://www.umsystem.edu/ums/rules/collected_rules/information/ch180/180.020_student_records/).

Student's Right-To-Know

In accordance with Public Law 101-542.

The UMKC Police Department publishes an annual campus report on personal safety and crime statistics. The report includes statistics for the previous three years concerning reported crimes that occurred on campus; in certain off-campus buildings owned or controlled by UMKC; and on public property within, or immediately adjacent to and accessible from the campus. The report also includes institutional policies concerning campus security, such as policies concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assault and other matters.

The report is available at the UMKC Police Department, Room 214B, 4825 Troost Building or via the Web site: <http://www.umkc.edu/safetyreport> (<http://www.umkc.edu/safetyreport/>).

Various state and federal laws, specifically the Higher Education Opportunity Act (<http://www2.ed.gov/policy/highered/leg/hea08/>), require the University of Missouri—Kansas City to provide information and notice to students on a variety of topics. Federal disclosure requirements for student consumer information can be found at the following website: <http://www.umkc.edu/registrar/procedures/student-consumer-info.asp>.

Telecommunications Services for the Speech and Hearing Impaired

UMKC offices and departments may be reached through Relay Missouri, a telecommunications relay service for those who are hearing or speech impaired. Trained relay agents ensure the calls are completed. The toll-free Relay Missouri access numbers:

- (800)735-2966 (Text Telephone)
- (800)735-2466 (Voice)

UMKC AIDS Policy Statement

To address special needs of the University of Missouri-Kansas City, the following policy is in effect:

Faculty, staff and students should be aware that discrimination on the basis of race, color, religion, national origin, ancestry, sex, sexual orientation, age and handicap (to include AIDS), is prohibited by state law. All are expected to conduct university-related activities without any such discrimination. Failure to fulfill these obligations may subject faculty, staff and students to disciplinary action. Such action shall be taken in accordance with the following University of Missouri procedures: Rules of Procedure in Student Disciplinary Matters and the Dismissal for Cause Procedure.

Those who feel they may have been discriminated against may use the Grievance Procedure for Administrative, Service and Support Staff; Discrimination Grievance Procedure for Students; and Academic Grievance Procedures.

This statement is based on the recommendations of the Missouri Human Rights Commission and is in accordance with the statements of professional responsibility and codes of ethics of the Association of American Medical Colleges, the American Medical Association, the American Dental Association, and the National League of Nursing.

Veterans Benefits and Transition Act of 2018

The University of Missouri-Kansas City (UMKC) Cashiers Office (<https://www.umkc.edu/finadmin/cashiers/>) waives any late fees or finance charges that assess on balances paid by CH33 or CH31 benefit recipients when the payment from the VA is received. Any late fees or finance charges that accrue on balances not covered by VA benefits will be the student's responsibility to pay.

Students will be able to attend classes and utilize campus facilities while the US Dept of Veterans Affairs works to disburse funds to UMKC for a given term. Ch33 & Ch31 benefit recipients are exempt from being dropped for non-payment while the US Dept of Veterans Affairs works on disbursing funds to UMKC.

Ch33 & Ch31 students are free to take out loans if they so wish but it is not required. Any refundable excess from student financial aid will be refunded when payment from the US Dept of Veterans Affairs is received and there is an overage on the student account.

STUDENT SUCCESS SERVICES

Student Success Services: academic support, health and well-being, student engagement

UMKC recognizes that in order for students to be successful in the classroom, students need to be supported outside of the classroom and throughout all stages of their college journey. From first connections with the Office of Admissions, engagement with student organizations and programs, and mentorship of faculty and staff, students can expect to receive an enriching and engaging campus experience that supports personal and professional development and academic success.

The University offices and programs listed below provide students with a wide variety of co-curricular support services.

More details can be found in the UMKC Student Handbook (<https://info.umkc.edu/saem/students/student-handbook/>). In addition, feel free to contact the [UMKC Dean of Students Office \(https://info.umkc.edu/saem/\)](https://info.umkc.edu/saem/) and the Student Services Offices located in the Academic Units (<https://info.umkc.edu/saem/students/student-handbook/student-services-offices/>).

You may also contact the UMKC Student HelpLine (<https://info.umkc.edu/saem/helpline/>) at 816.235.2222 for questions about policies, procedures, resources, complaints, and general questions about the university.

Academic Support:

- Academic Support and Mentoring (<https://www.umkc.edu/asm/>):
 - Roo Up Seminars
 - Supplemental Instruction
 - Tutoring
 - Writing Studio
- Advising information (<https://www.umkc.edu/registrar/academic-programs/advising.html>)
- Bookstores:
 - Student Union Bookstore (<https://www.umkcbookstore.com/>)
 - Health Sciences Bookstore (<https://www.umkc-hsbookstore.com/>)
- Career Services (<https://career.umkc.edu/>):
 - Handshake system (resumes, mock interviews, job searches)
 - Major and career exploration
 - Career Fairs
- Disability Services (<https://info.umkc.edu/disability-services/>):
 - Accommodation services
 - Campus disability awareness
- International Academic Programs (<https://info.umkc.edu/international/>):
 - Study abroad opportunities
 - National Fellowships
- Peer Academic Leadership (<https://ucollege.umkc.edu/PAL.html>) (PAL):
 - Transition to college mentoring
 - Goal setting and resources
- Undergraduate research (<https://www.umkc.edu/searchsite/>) (SEARCH):
 - Faculty mentors
 - Grant opportunities

Health and Well-Being:

- Campus Recreation (<https://www.umkc.edu/recreation/>):
 - Swinney Center and Annex on Hospital Hill
 - Fitness and wellness classes
 - Campus intramurals
- Counseling Services (<https://info.umkc.edu/counseling-services/>):
 - Individual and group therapy
 - Crisis intervention
 - Alcohol and drug abuse prevention
- Kangaroo Food Pantry (<https://info.umkc.edu/get-involved/food-pantry/>)
- MindBody Connection (<https://www.umkc.edu/mindbody/>):

- Identify and capitalize on strengths
- Identify and cope with stress
- Student Health & Wellness (<https://www.umkc.edu/studenthealth/>):
 - Health care, immunizations, tests
 - Outreach and health education
- Title IX Office (<https://info.umkc.edu/title9/>):
 - Compliance, investigation, advocacy, education, and support
 - Violence Prevention and Response (<https://info.umkc.edu/vpr/>)
 - For questions about Title IX or to report an incident, contact the UMKC Title IX Coordinator at 816.235.6910 (<http://umkc-preview.courseleaf.com/student-success-services/>)

Student Engagement:

- International Student Affairs (<https://info.umkc.edu/ISA/>):
 - International student admissions
 - Immigration advising
 - Campus cultural programming
- Multicultural Student Affairs (<https://info.umkc.edu/multiculturalstudentaffairs/>):
 - Student Organizations
 - Multicultural Presentations
 - Student mentoring programs
- Office of Student Involvement (<https://info.umkc.edu/get-involved/>):
 - Student Organizations
 - Events & Entertainment
 - Greek Life
 - LGBTQIA Programs and Services (<https://info.umkc.edu/get-involved/lgbtqia-programs/>)
 - Parent and Family Programs
- Residential Life (<https://info.umkc.edu/housing/>):
 - Johnson Residence Hall
 - Oak Street Residence Hall
 - Hospital Hill Apartments
- Student Conduct and Civility (<https://info.umkc.edu/saem/students/student-conduct/>):
 - Student Standard of Conduct
 - UMKC CARE Team
- Student Union (<https://info.umkc.edu/studentunion/>) and Atterbury Student Success Center (<https://info.umkc.edu/atterbury/>) Operations:
 - Central hubs for student programming and engagement
 - Student One Card
 - Dining Services
 - US Bank branch
- Veteran Student Support Services (<https://info.umkc.edu/saem/veteran-and-military-resources/>):
 - Support and advocacy
 - At-Ease Zone
- UMKC Central (<https://www.umkc.edu/central/>)
 - One-stop for students to take care of core business transactions related to:
 - Admissions (<https://www.umkc.edu/admissions/>)
 - Financial Aid and Scholarships (<https://finaid.umkc.edu/>)
 - Cashiers (<https://www.umkc.edu/finadmin/cashiers/>)
 - Registration and Records (<https://www.umkc.edu/registrar/>)
- Women's Center (<https://info.umkc.edu/womenc/>):
 - Support, education, and advocacy
 - Women's and gender issues

UMKC COLLEGES & SCHOOLS

UMKC Volker Campus

College of Arts & Sciences (p. 554)

Conservatory (p. 1021)

Henry W. Bloch School of Management (p. 1676)

Honors College (p. 1124)

School of Biological and Chemical Sciences (p. 1131)

School of Computing & Engineering (p. 1226)

School of Education (p. 1430)

School of Law (p. 1608)

School of Graduate Studies (p. 1538)

University College (p. 1949)

UMKC Health Sciences Campus

School of Dentistry (p. 1371)

School of Medicine (p. 1801)

School of Nursing & Health Studies (p. 1851)

School of Pharmacy (p. 1913)

College of Arts and Sciences

Dean's Office
Schofield Hall, 3rd Floor
711 E. 51st Street
Kansas City, MO 64110-2499
(816) 235-1136
Fax: (816) 235-5191
college@umkc.edu
<http://cas.umkc.edu/>

Dean:

John Herron (Interim)

Associate Deans:

Alex Holsinger
Kristi Holsinger
Beth Vonnahme (Interim)

Statement of Purpose

The primary academic missions of the College of Arts and Sciences are teaching, research and service. Through these functions, the College serves the community, the state and society at large. The research and scholarship of the College's faculty not only expand the body of knowledge generally, but also enrich and enhance its teaching and instructional programs.

Most departments of the College offer both undergraduate and graduate study. The College enables students to develop the creative, analytical and communication skills which sustain a lifelong educational process. In addition to serving its own students, the College provides instruction in the liberal arts and sciences for students in the UMKC professional schools. Through its continuing education division and certificate programs, the College also serves individuals and groups in the community.

The College's degree requirements, in coordination with the UMKC general education core, give students a breadth of knowledge, enabling them to understand and appreciate the many facets of human experience, to make meaningful relationships between the various fields of knowledge, and

to increase their understanding of themselves, their interests and special abilities. The general requirements and introductory courses allow for maximum freedom in selection of a field of study and provide the basic knowledge for that particular program.

Work in a field of study provides students with a comprehensive and systematic introduction that prepares them to function in the professional fields of their choice. The objective of the total academic program of the College is to engage students in study that will enable them to work competently in their chosen fields or pursue graduate work, while at the same time developing a breadth of knowledge in the arts and sciences. In that way, students can understand their specializations in the larger context of the intellectual and social life of the community.

Graduate-level studies provide students with advanced instruction and/or independent research in a major field of study. Students pursuing master's-level work in a major field or a Ph.D. in Clinical Psychology are directed to the relevant department or program listing in the Arts and Sciences section of this catalog and to the General Graduate Academic Regulations and Information section of this catalog. Those planning other Ph.D.-level studies are directed to UMKC's Interdisciplinary Ph.D. program listing in the School of Graduate Studies section of this catalog.

Departments and Programs

Department of Architecture, Urban Planning and Design

Katz Hall Room 109
5005 Rockhill Road
(816) 235-1725
aupd@umkc.edu
<http://cas.umkc.edu/AUPD> (<http://cas.umkc.edu/aupd/>)

Mailing Address

University of Missouri-Kansas City
Department of Architecture, Urban Planning + Design
109 Katz Hall
5005 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:

Michael Frisch

Professor:

Sungyop Kim, Ph.D.; Clara Irazabal-Zurita, Ph.D.

Associate Professors:

Michael Frisch, Ph.D., A.I.C.P.; Jacob A. Wagner, Ph.D., A.I.C.P.

Assistant Professor:

Stephanie Frank, Ph.D.

Associate Teaching Professor:

John Eck, M.Arch., R.A.

Adjunct Faculty:

Ruben Alonso; Judi Bauer; Christopher Brewster, J.D., A.I.C.P.; Denise DiPiazza; Dominic Musso; Sara Copeland; Jon Birkel;

Administrator:

Stella Szymanski

Professor Emerita:

Joy D. Swallow, M.Arch., F.A.I.A.

Department Description

The Department of Architecture, Urban Planning and Design has three degree programs to choose from.

One degree program is a B.A. in Urban Planning and Design. This accredited degree program is a four-year degree and can be completed at UMKC in its entirety.

The second degree program leads to a degree in one of the following professional areas: architecture, landscape architecture and interior architecture. This track is a two-year program, offered in conjunction with Kansas State University's College of Architecture, Planning and Design.

The third degree program is a B.A. in Urban Studies. The urban studies program prepares students for careers dedicated to understanding the city and improving the life of urban societies. The program provides students with analytical skills vital to the study of the city and urban life. Working to fulfill UMKC's mission of urban engagement, the program and its students actively participate in community partnerships.

UMKC is an urban university, and architecture, urban planning and design is consistent with our vision for our community and region. Kansas City is a great urban laboratory. Few American cities have the planning and design tradition of Kansas City. We think this sets us apart, and places the students within a professional community with unmatched resources, whether one is studying architecture, interior architecture, landscape architecture or urban planning and design.

As the United States population continues to grow and is concentrated in metropolitan areas, urban planning and design is becoming a societal imperative. Planners address diverse public issues affecting where people live, work, and play; where they shop and receive health care; how they get from place to place; what our communities look like; and how we use our resources.

Financial Aid

Many scholarships and student financial aid opportunities are available. Every year approximately 80 percent of our students have some form of scholarship. For students who qualify, UMKC can be a great resource for scholarship assistance. Contact the UMKC Financial Aid Office, phone: (816) 235-1154, website: <http://www.umkc.edu/finaid> (<http://www.umkc.edu/finaid/>) for scholarship information.

Student Activities

The department supports two student organizations.

Planning and Design Students (PDS) is a student organization for students studying Urban Planning and Design. The students interact with the local APA (American Planning Association (<http://www.planning.org/>)) chapter in a variety of activities. A group of students attend the national conventions that are held in various locations around the country every year.

The American Public Works Association (<http://www.apwa.net/>) (APWA) is a student organization that consists of a multidisciplinary group (i.e. engineering, geosciences, public administration) from across the campus.

Faculty

John Eck Associate Teaching Professor of Architecture; B.Arch. (Kansas State University); M.Arch. (University of Virginia); R.A.

Stephanie Frank¹ Assistant Professor of Urban Planning and Design; M.A. (University of Maryland); Ph.D (University of Southern California).

Michael Frisch¹, Chair, Associate Professor of Urban Planning and Design; M. City Planning (Massachusetts Institute of Technology); Ph.D. (Rutgers University); A.I.C.P.

Clara Irazabal-Zurita^{1,2} Professor of Urban Planning and Design, Director of the Latinx and Latin American Studies Program; M.S.(Central University of Venezuela); M.Arch and Ph.D. (University of California at Berkeley).

Sungyop Kim^{1,2} Professor of Urban Planning and Design; M. Urban and Regional Planning (University of Hawaii); Ph.D. (University of Washington).

Jacob A. Wagner Associate Professor of Urban Planning and Design; B.A.,M.S. (University of Oregon); Ph.D. (University of New Orleans).

¹ Members of UMKC Graduate Faculty

² Members of UMKC Doctoral Faculty

Undergraduate

Undergraduate Degrees:

- Architectural Studies Major (p. 560)
- Bachelor of Arts in Urban Planning and Design (p. 561)
- Bachelor of Arts in Urban Studies (p. 565)
- Minor in Urban Studies (p. 572)

Graduate

Graduate Programs (p. 571)

- Graduate Certificate in Historic Preservation (p. 571)

Architectural Studies Courses

ENV-DSN 110 The Meaning Of Architecture Credits: 3

Architecture is a visual and physical expression of civilization. This course will introduce to the student an understanding and appreciation of architecture and our built environment through a broad examination of cultural and aesthetic paradigms. May not be taken for credit by students enrolled in the Architectural Studies curricula.

ENV-DSN 201 Environmental Design Studio I Credits: 4

Foundation studies introducing the principles, processes and vocabularies of environmental design. Instruction in two and three dimensional visualization of objects and spaces. Instruction in the use of instrument-aided drawing, freehand drawing and model building to represent and communicate design ideas at different scales of observation.

ENV-DSN 202 Environmental Design Studio II Credits: 4

Continuation of ENV-DSN 201.

Prerequisites: ENV-DSN 201.

ENV-DSN 203 Survey of the Design Professions Credit: 1

Overview of the design professions. Comparative study of the roles of the architect, interior architect, interior designer, landscape architect, and planner; their working methods, collaborative endeavors, and interaction with consultants and specialists. Description of career paths, educational alternatives, licensure, and professional organizations.

ENV-DSN 248 Fundamentals of Architectural Technology Credits: 3

Instruction in the fundamentals of architectural technology with emphasis on the concepts and principles necessary for developing an integrated approach to building design.

ENV-DSN 250 History of the Designed Environment I Credits: 3

This course will present an overview of the developments in architectural, urban, landscape and interior design which have had an impact on the physical environment from ancient times through the medieval up to the gothic period. A central objective of the course is to gain an understanding of why these developments occurred and how the needs and aspirations of a given time were manifested in physical form.

ENV-DSN 251 History of the Designed Environment II Credits: 3

This course will present an overview of the developments in architectural, urban, landscape and interior design which have had a consequential impact on the physical environment of the Western world from the Italian Renaissance (starting in the 15th century) up to the present day.

ENV-DSN 252 History of the Designed Environment III Credits: 3

The history of the designed environment from the mid-18th century to the present.

ENV-DSN 301 Architectural Design Studio I Credits: 5

Instruction in architectural design focusing on the application of elements and principles of form and space in design. Instruction in the use of techniques for visually representing design ideas.

Prerequisites: ENV-DSN 202.

ENV-DSN 302 Architectural Design Studio II Credits: 5

Instruction in architectural design focusing on the synthesis of basic social, functional, technical, and aesthetic factors in design. Continued instruction in techniques for visually representing ideas.

Prerequisites: ENV-DSN 301.

ENV-DSN 347 Structural Systems in Architecture I Credits: 4

Introduction to structure as a building system. Overview of contemporary structural systems and their components, including wood, timber, steel, concrete, masonry, and hybrid structures. Discussion of building code requirements for structure, general guidelines for building structures, including appropriate application, and methods for schematic estimation of structural member sizing. Basic understanding of how gravity and lateral forces are propagated through a structural frame from load to building foundation. Recommended preparation: PHYSICS 210.

Prerequisites: MATH 110 or MATH 120 or higher.

ENV-DSN 433 Building Construction Systems in Architecture I Credits: 3

In this lecture course, students develop an understanding of how materials and systems assembly reinforce and extend the intentions of the designer as well as an understanding of the strategies and techniques for integration and coordination of the building components.

Prerequisites: ENV-DSN 248.

Urban Planning Design Courses

UPD 203 GIS For Urban Planning Credits: 3

This introductory level GIS course is designed to expose planning students to Geographical Information Systems (GIS). Students will learn basic concepts and theories of GIS and applications of GIS software with hands-on experience. Students will also learn how to search for demographic, socio-economic, land use, transportation, and geospatial data, and how to use such data for their academic research and professional planning work with GIS. Students will apply GIS to the multiple scales of planning work.

UPD 260 History Of Planning And Urban Design Credits: 3

An overview of planning history with an emphasis on the 19th and 20th centuries. The historic framework will include urban history, the rise and development of urban planning, urban design, and social theory and how these areas have affected the shape of our cities.

UPD 280 Land Use Planning Credits: 3

This course explores the basic principles of plan making, land use development and regulation. Students are introduced to contemporary planning and policy issues. Including land use conflicts and alternative models for sustainable planning, design and management. Students will learn how to develop a land use plan using Geographic Information Systems (GIS) and other design tools. An introductory GIS course (UPD 203) is highly recommended.

UPD 300 Quantitative Planning Methods And Techniques Credits: 3

Statistical analysis and other analytic techniques of data gathering. Data and problems framed from complex, real world situations. Competence in firsthand research; survey design; case study method; data gathering methods such as observation, open-ended interviewing and questionnaires.

Prerequisites: MATH 110 or higher; or ALEKS score of 61 or higher; or ACT MATH sub-score of 28 or higher, or SAT MATH sub-score of 660 or higher.

UPD 310 Planning And Design Studio I Credits: 4

This Urban Planning + Design studio course will introduce methods for analyzing urban spaces at the site and neighborhood level. Students will actively solve problems related to the physical planning of cities and communities while continuing to develop abilities in methods of written, oral and graphic presentation.

Prerequisites: ENV-DSN 202 or equivalent.

UPD 312 Planning And Design Studio II Credits: 4

Studio instruction in urban planning and design focusing on the synthesis of land use analyses, regulatory reviews, urban design issues, and public participation facilitation. Continued instruction in techniques for visually presenting planning and design ideas.

Prerequisites: UPD 310.

UPD 320 Planning Theory And Practice Credits: 3

This course examines contemporary urban planning and design practice. Theories about planning practice and related case studies will be the basis of this course. Topics covered will include the definition of urban planning, the idea of the "public realm," planning/design expertise and the rational model, the role of diversity, public participation, communicative planning, advocacy and equity planning, ethics comprehensiveness and the limits of planning. The course will include assignments that will build student's ability to write quick and analytical assessments, often required in planning practice. Students will be required to attend public planning forums in and around the region.

UPD 332CZ Environmental Sustainability Credits: 3

This course will introduce the concept of sustainability and review how sustainability might work at the individual, neighborhood, state, nation and global scales. Students will participate in some form of community engagement on sustainability as well as reflect upon how their own practices impact the environment. Counts toward AS Interdisciplinary "Cluster course." Key course in sustainability minor.

UPD 340 Neighborhood And Community Development Credits: 3

Course provides a comprehensive introduction to the field of community development and neighborhood planning. The development of theoretical models that explain neighborhood change and history in the U.S. will serve as the basis. Issues explored include: community organizing, social movements, federal and state policies, and the role of planning organizations and community development corporations in neighborhood revitalization.

UPD 400 Advanced GIS For Urban Planning Credits: 3

This advanced level GIS course is designed to expose students to high level GIS techniques and geospatial analyses in urban planning. Students will learn advanced theories and geographic information tools with hands-on experiences. Students will have an opportunity to apply their knowledge and skills in GIS to a real world planning project in class.

Prerequisites: UPD 203 or UPD 403 or equivalent.

UPD 403 GIS for Urban Planning Credits: 3

The introductory level GIS course is designed to expose graduate students to Geographical Information Systems (GIS). Students will learn basic concepts and theories of GIS and application of GIS software with hands-on experience. Students will also learn how to search for demographic, socio-economic, land use, transportation, and geospatial data.

UPD 410 Planning and Design Studio III Credits: 4

Instruction in problem analysis and plan development for defined urban or suburban location with multiple constituencies.

Prerequisites: UPD 312.

UPD 411 Professional Practice I Credit: 1

A seminar preparing students for professional practice in urban planning + design including the preparation of a professional resume and portfolio.

UPD 412WI Planning and Design Studio IV Credits: 5

Capstone course that incorporates a topical plan or a comprehensive plan for a client comprising a development subdivision, a community or a redevelopment area.

Prerequisites: UPD 410, RooWriter.

UPD 413 Professional Practice II Credit: 1

A continuation of professional practice seminar addressing issues of professional writing in Urban Planning and Design practice.

UPD 420 Transportation Planning Credits: 3

The course provides fundamental theories, methods, and contemporary issues in transportation planning. The topics covered in this course include the transportation planning process, transportation systems, travel demand analysis, and policy issues such as the linkage between land use and transportation, urban transportation finance, social and environmental justice, transportation and environmental impacts, and traffic congestion.

UPD 430 Planning For Historic Preservation Credits: 3

The course provides a survey of major issues in the field of historic preservation and heritage studies from a planning perspective. Will focus primarily on the built environment of the United States, as well as world heritage sites and international perspectives. The course will include the urban planning techniques used for preserving historic buildings, neighborhood and districts, as well as some of the landmark legal decisions and legislation that have shaped heritage preservation practice in the U.S. Recommended Preparation: UPD 260.

UPD 432 Urban Environment Planning And Design Credits: 3

The built environment does not exist in a vacuum. Cities operate within broad ecological processes. Effective environmental planning can protect important natural resources while providing for a higher quality of life for urban residents. As a survey course in a subfield of urban planning, this course introduces students to environment planning approaches and techniques.

UPD 450 Planning Law And Practice Credits: 3

Introduction to legal procedures basic to urban planning; including legal, constitutional, legislative, and administrative concepts, controls, and land-use regulations.

UPD 472 Urban Redevelopment Credits: 3

Contemporary issues of urban redevelopment, with an emphasis on American cities, will be examined. Redevelopment processes recently completed or underway in the greater Kansas City region will be the subject of a case study and a theoretical review by each student.

UPD 475 American Housing Credits: 3

Students will explore housing in cultural, design, and historical terms and examine contemporary American housing policy.

UPD 490 Urban Planning Internship Credits: 3

Urban planning work experience off-campus with an approved professional, Government, or non-profit agency sponsor. A contract specifying the expected product of the internship is required between the student, agency, and faculty coordinator.

Prerequisites: UPD 203.

UPD 496 Directed Studies In Urban Planning Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 499 Special Topics In Urban Planning Credits: 1-3

Advanced independent research and analysis in urban planning. Topics and methods used in research, to be established by student and academic supervisor prior to enrollment.

UPD 5526 History of Urban Planning & Design Credits: 3

The course provides a survey of the history of urban planning and design with emphasis on the nineteenth and twentieth centuries in the United States. The course also teaches basic historic research methods.

UPD 5596 Directed Study In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5596A Directed Study In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5596B Directed Study In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5596C Directed Study In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5599 Special Topics In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5599A Special Topics In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5599B Special Topics In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5599C Special Topics In Urban Planning And Design Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5630 Quantitative Planning Methods I Credits: 3

This course introduces graduate students to quantitative methods in urban planning analysis. Topics include relating built form to function, demographic forecasting, economic impact analysis, trip generation, and housing market dynamics.

Prerequisites: STAT 235.

UPD 5700 Advanced Planning Theory & Practice Credits: 3

Exploration of contemporary planning theory and practice, including planning knowledge, skills, values, and ethics.

UPD 5710 Historic Preservation Studio Credits: 3

Studio instruction in historic preservation planning focusing on research, context, evaluation, policy, and plan creation for historic resources.

UPD 5740 Advanced GIS for Urban Planning Credits: 3

This advanced level GIS course is designed to expose graduate students to high level GIS techniques and geospatial analysis in the urban planning context. Students will learn data management skills in GIS and advanced geoprocessing tools with hand-on experiences. Students will also have an opportunity to work on a real world GIS project as part of course requirements.

Prerequisites: UPD 203.

UPD 5742 Transportation Planning Credits: 3

This course provides fundamental theories, methods, and contemporary issues in transportation planning. The topics covered in this course include the transportation planning process, transportation systems, travel demand analysis, and policy issues such as the linkage between land use and transportation and environmental impacts, and traffic congestion.

UPD 5743 Introduction to Historic Preservation Credits: 3

The course introduces the history and theory of historic preservation through a survey of major issues in the field from a planning perspective. The course focuses on preservation through cultural, social, historical, legal, policy, and economic lenses, primarily in the United States.

UPD 5744 History of the Built Environment Credits: 3

Survey of the built environment concentrating on nineteenth and twentieth century design in the United States.

UPD 5745 Historic Preservation Methods Credits: 3

Exploration of historic preservation methods, including survey, documentation, policy, and management approaches used in practice.

UPD 5746 Urban Environmental Planning Credits: 3

Urban environmental planning examines ecological change due to urbanization. It looks at ways to measure and demonstrate ecological change at the site, neighborhood, and regional scales. Students incorporate environmental ideas and policies into plans developed for a client.

UPD 5747 Urban Redevelopment Credits: 3

This course examines techniques of urban redevelopment within urban planning and real estate. Graduate students learn about the development process, real estate markets, techniques of development finance and local policy approaches to urban redevelopment incentives.

UPD 5750 American Housing Credits: 3

Students will explore housing in cultural, design, and historical terms and examine contemporary American housing policy.

UPD 5790 Historic Preservation Internship Credits: 3

Off-campus work experience with an approved professional, government, or nonprofit agency sponsor.

Prerequisites: UPD 5743.

Urban Studies Courses

URBAN ST 346 Urban Latin America Credits: 3

Introduction, overview, and analysis of major contemporary urban issues in Latin America.

URBAN ST 495 Urban Studies Internship Credits: 1-6

Students obtain directed practical experience working with non-profits, governments, or private enterprises. Duties will vary based on contractual agreement between the student, host organization, and the professor.

URBAN ST 499WI Urban Studies Seminar Credits: 3

This is the capstone course in the Urban Studies Program and is required for majors in the junior/senior year. Students critique urban research and prepare a paper and an oral presentation on an approved topic.

Architectural Studies Major

Architectural Studies is a two-year cooperative program with Kansas State University that began in 1987. The accredited curriculum at the KSU College of Architecture Planning and Design is offered at UMKC for the first two years of study. After successfully completing the coursework at UMKC, students are eligible for entry to Kansas State University, College of Architecture Planning and Design. There, students can study architecture, interior architecture and landscape architecture. Students must maintain a minimum 2.75 GPA in the Architectural Studies program.

Architectural Accreditation

The Kansas State University College of Architecture, Planning and Design (with which the UMKC Architectural Studies Program collaboratively participates) is accredited by the National Architectural Accrediting Board (NAAB).

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes two types of degrees: the bachelor of architecture and the master of architecture.

A program may be granted a five-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards.

Master's degree programs may consist of a pre-professional undergraduate degree and professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

Bachelor of Arts in Urban Planning and Design

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Students use planning knowledge to create planning solutions for a project.
- Students demonstrate written, oral, and graphic communication skills and professional work capacity required in planning and design practice.
- Students can articulate and exercise professional ethics and responsibility.

The Urban Planning and Design program provides an innovative curriculum that incorporates a combination of broad liberal arts courses, with a core of professional planning classes, coupled with a series of design studios. The design studio represents a forum where students employ a creative process, infused with knowledge gained from supporting courses, to generate holistic urban planning and design solutions. Urban design projects will engage professionals, civic officials, neighborhood leaders and government officials into an important dialogue.

Admission to the program is selective and reviewed by the UPD program.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	

COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		10

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
Studio		
ENV-DSN 201	Environmental Design Studio I	4
ENV-DSN 202	Environmental Design Studio II	4
UPD 310	Planning And Design Studio I	4

UPD 312	Planning And Design Studio II	4
UPD 410	Planning and Design Studio III	4
UPD 411	Professional Practice I	1
UPD 412WI	Planning and Design Studio IV	5
UPD 413	Professional Practice II	1
Urban Planning		
ENV-DSN 203	Survey of the Design Professions	1
UPD 203	GIS For Urban Planning	3
UPD 260	History Of Planning And Urban Design	3
UPD 280	Land Use Planning	3
UPD 300	Quantitative Planning Methods And Techniques	3
UPD 320	Planning Theory And Practice	3
UPD 432	Urban Environment Planning And Design	3
UPD 450	Planning Law And Practice	3
UPD 490	Urban Planning Internship	3
STAT 235	Elementary Statistics	3
ECON 201	Introduction to Economics I	3
or ECON 202	Introduction To Economics II	
Planning and Professional Electives		
Select a minimum of 2 of the following:		6
UPD 340	Neighborhood And Community Development	
UPD 400	Advanced GIS For Urban Planning	
UPD 420	Transportation Planning	
UPD 430	Planning For Historic Preservation	
UPD 472	Urban Redevelopment	
Urban Social Science		
Select a minimum of one course, this includes but is not limited to the following: ¹		3
ANTHRO 331	Urban Anthropology	
CJC 332	Race, Class and Justice	
ECON 336	The Kansas City Economy	
ECON 458	Urban Economics	
GEOG 309	Urban Geography	
LLS/URBAN ST 346	Urban Latin America	
LLS 348	Latinx Immigrants, Migrants, and Refugees in the U.S.	
HISTORY 356	Rise of the City in the U.S.	
SOCIO 431	Social Organization Of The City	
SOCIO 433	Immigration and the City	

Total Credits	70
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¹ The Department will review other related urban social science classes as needed.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		10

Minimum GPA: 2.0 (2.5 in all major coursework)

Total Credit Hours 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 110		3 ENGLISH 225	3
GEFSE 101 ^{CC}		3 GECRT-AH 101	3
MATH 110		3 HISTORY 101, 102, or POL-SCI 210	3
COMM-ST 110, 140, or 277		3 STAT 235 ^{CC}	3
GECRT-SS 101		3 Foreign Language Requirement (110 or higher)	3
	15		15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ENV-DSN 203 ^{CC}		1 ENV-DSN 202 ^{CC}	4
ENV-DSN 201 ^{CC}		4 UPD 280	3
UPD 203		3 ECON 201 or 202	3
UPD 260		3 GECDV 201	3
Foreign Language course (120 or higher)		3 Foreign Language Requirement (210)	3
	14		16

Third Year

Fall Semester	Credits	Spring Semester	Credits
UPD 310		4 UPD 312	4
UPD 300		3 UPD 320 or 450	3
UPD 3XX/4XX Elective		3 UPD 411	1
GECRT-SC 101		3 UPD 3XX/4XX Elective	3

GECUE 201	3	General Elective	3
	16		14
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
UPD 410		4 UPD 412WI	5
UPD 413		1 UPD 450 or 320	3
UPD 432		3 UPD 490	3
Urban Social Science Elective		3 Lab Science ^{LO}	1
General Elective		3 General Elective	3
		General Elective	1
	14		16
Total Credits: 120			

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Arts: Urban Studies

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Be able to analyze how gender, ethnicity, and race play important roles in understanding the city. They will be exposed to the broader public through internships in the community.
- Be able to analyze how local, regional, and state governments and related institutions interact.
- Be able to describe how the urban society is structured in interrelated sectors that influence each other locally and interact with sectors beyond the local city.
- Be able to interpret demographic patterns at various scales, from the city block to the metropolitan area.
- Be able to design and implement a research project analyzing a specific urban issue.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		10

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

During the first 60 hours of coursework, students are advised to fulfill prerequisites for core courses and for required courses in the urban studies concentration they choose.

When prerequisites and general requirements have been satisfied, students must complete for the urban studies major:

- Core course requirements: 22 hours
- Interest area requirements: 18 hours

Total hours required for the major in urban studies: 40 hours

Code	Title	Credits
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
Required Courses		
GEOG 309/UPD 320	Urban Geography	3
URBAN ST 495	Urban Studies Internship	1
URBAN ST 499WI/SOCIOL 404WI/ ECON 406WI	Urban Studies Seminar	3
History		3
UPD 260	History Of Planning And Urban Design	
Statistics (Choose 1)		3
SOCIOL 363/CJC 303	Introduction To Statistics In Sociology/Criminal Justice	
STAT 235	Elementary Statistics	
Race/Class/Gender (Choose 1)		3
ANTHRO/LLS/SOCIOL 322	Race And Ethnic Relations	
CJC 431	Hate & Bias Crimes	
ECON 314	Political Economy of Race, Class And Gender: Theory, History, And Policy	
LLS 201	Introduction to Latinx and Latin American Studies	
Urban Political Economy (Choose 1)		3
ECON 336	The Kansas City Economy	
ECON 458	Urban Economics	
Methods (Choose 1)		3
SOCIOL 362	Methods Of Sociological Research	
UPD 300	Quantitative Planning Methods And Techniques	
Interest Area Electives (see below)		18
Total Credits		43

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		37

Minimum GPA: 2.0

Total Credit Hours: 120

Interest Areas (18 hours)

In addition to the core requirements, 18 hours should be taken in an interest area:

- Community Development and Housing
- Community Organization and Social Services
- Urban Policy/Management

In consultation with an advisor, selected by the student or designated by the program director, students are expected to develop a program (reflecting interest and applicability to career goals) in one interest area: a recommended course and five electives from those listed under the interest area chosen. Students may not double count any core courses toward the 18 hours.

Community Development and Housing

Code	Title	Credits
Recommended Course		
UPD 340	Neighborhood And Community Development	3
Electives		
Select five of the following:		15
ANTHRO 331	Urban Anthropology	
ECON 336	The Kansas City Economy	
ENV-DSN 201	Environmental Design Studio I	
ENV-DSN 202	Environmental Design Studio II	
GEOG 203	Introduction to Geographic Information Systems	
SOCIOL/LLS 348	Latinx Immigrants, Migrants, and Refugees in the U.S	
SOCIOL 431	Social Organization Of The City	
UPD 203	GIS For Urban Planning	
UPD 260	History Of Planning And Urban Design	
UPD 280	Land Use Planning	
UPD 310	Planning And Design Studio I	
UPD 312	Planning And Design Studio II	
UPD 320	Planning Theory And Practice	
UPD 420	Transportation Planning	
UPD 430	Planning For Historic Preservation	
UPD 450	Planning Law And Practice	
UPD 472	Urban Redevelopment	
URBAN ST/LLS 346	Urban Latin America	
Total Credits		18

Community Organization and Social Services

Code	Title	Credits
Recommended Course		
ANTHRO 331	Urban Anthropology	3
Electives		
Select five of the following:		15
CJC 101	Introduction To Criminal Justice	

CJC 431	Hate & Bias Crimes	
CJC 481	Restorative Justice	
ECON 314	Political Economy of Race, Class And Gender: Theory, History, And Policy	
GEOG 203	Introduction to Geographic Information Systems	
POL-SCI 360	Labor, Politics and Society	
SOCIO 211	Social And Psychological Development Through The Life Cycle	
SOCIO 302	Social Stratification	
SOCIO 322	Race And Ethnic Relations	
SOCIO/LLS 348	Latinx Immigrants, Migrants, and Refugees in the U.S	
SOCIO 431	Social Organization Of The City	
SOCIO 433	Immigration and the City	
UPD 203	GIS For Urban Planning	
UPD 340	Neighborhood And Community Development	
URBAN ST/LLS 346	Urban Latin America	
Total Credits		18

Urban Policy/Management

Code	Title	Credits
Electives		
Select six of the following:		18
CJC 431	Hate & Bias Crimes	
ECON 336	The Kansas City Economy	
ECON 435	Public Finance	
ECON 458	Urban Economics	
GEOG 203	Introduction to Geographic Information Systems	
POL-SCI 360	Labor, Politics and Society	
PUB-ADM 495	Voluntarism, Philanthropy & The Non-Profit Sector In The U.S.	
SOCIO/LLS 348	Latinx Immigrants, Migrants, and Refugees in the U.S	
SOCIO 357	Social Movements	
SOCIO 433	Immigration and the City	
UPD 203	GIS For Urban Planning	
UPD 320	Planning Theory And Practice	
UPD 420	Transportation Planning	
UPD 430	Planning For Historic Preservation	
UPD 432	Urban Environment Planning And Design	
UPD 450	Planning Law And Practice	
URBAN ST/LLS 346	Urban Latin America	
Total Credits		18

NOTE: Courses counted towards the core requirements cannot be double-counted for the Interest Area Internship (3-6 hours)

In developing internships, students should first contact the urban studies director.

The student is expected to participate in work activities in a community organization and receive instruction from agency staff for a minimum of 240 hours on site by the end of the program.

The internship may be repeated up to a maximum of two semesters and should be taken as URBAN ST 495. Other internship courses may satisfy this requirement with approval of the advisor.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 110		3 ENGLISH 225 ^{CC}	3
MATH 110 or STAT 115 ^{CC}		3 COMM-ST 110 or 277	3
GEFSE 101 ^{CC}		3 GECRT-AH 101	3
GECRT-SS 101		3 STAT 235, 263, or CJC 303 ^{CC}	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
GEOG 105, ECON 201, PSYCH 210, or SOCIOL 101 (or other General Elective)		3 GEOG 309 or UPD 320	3
GEOG 203 (or other General Elective)		4 2XX/3XX/4XX Urban Studies Interest Area course	3
Urban Studies 'History' Area Course ^{CC}		3 GECRT-SC 101	3
GECUE 201		3 GECDV 201	3
Foreign Language course (211)		3 HISTORY 101, 102, or POL-SCI 210	3
		16	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
3XX/4XX Urban Studies 'Methods' Area Course		3 3XX/4XX Urban Studies 'Urban Political Economy' Area Course	3
2XX/3XX/4XX Urban Studies Interest Area course		3 3XX/4XX Urban Studies Interest Area course	3
3XX/4XX Urban Studies Interest Area course		3 3XX/4XX Urban Studies Interest Area course	3
General Elective		3 General Elective	3

General Elective	3	General Elective	3
Lab Science ^{LO}	1		
	16		15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
URBAN ST 495		3 SOCIOL 404WI or ECON 406WI	3
Urban Studies 'Race/Class/Gender' Area Course		3 General Elective (3XX/4XX if needed)	3
3XX/4XX Urban Studies Interest Area course		3 General Elective (3XX/4XX if needed)	3
General Elective (3XX/4XX if needed)		3 General Elective	3
General Elective		3 General Elective	1
	15		13
Total Credits: 120			

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Graduate Certificate in Historic Preservation

Student Learning Outcomes

Students graduating from this program will:

- demonstrate the ability to identify, synthesize, and interpret historic resources.
- demonstrate the ability to apply historic preservation methods and techniques.
- demonstrate effective professional writing and communication skills.

The highest standard for historic preservation education is membership in the National Council for Preservation Education (NCPE). Once approved, the program will seek membership. The program has been designed in accordance with NCPE membership standards, which are found at the following link: <http://www.ncpe.us/about-ncpe/standards/>

The certificate requires 18 credits (six 3-credit courses), as follows:

Program Requirements:

Code	Title	Credits
UPD 5743	Introduction to Historic Preservation	3
UPD 5744	History of the Built Environment	3
UPD 5745	Historic Preservation Methods	3
UPD 5700	Advanced Planning Theory & Practice	3
UPD 5710	Historic Preservation Studio	3
or UPD 5790	Historic Preservation Internship	
Electives selected from below or as approved by advisor		3
UPD 5526	History of Urban Planning & Design	
UPD 5740	Advanced GIS for Urban Planning	
UPD 5746	Urban Environmental Planning	
UPD 5747	Urban Redevelopment	
UPD 5750	American Housing	
HISTORY 5556	Rise of the City in the U.S.	
HISTORY 5556R	Kansas City: History of a Regional Metropolis	
HISTORY 5570	Introduction to Material Culture	
HISTORY 5579	Public History: Theory and Method	
HISTORY 5594	Public History and New Media	
ART-HIST 5562	History of Modern Design	
PUB-ADM 5535	Urban Policy And Administration	
PUB-ADM 5555	Topics In Nonprofit Fundraising	
GEOG 5508	Archaeological Field Survey Methods	
GEOG 5509	Urban Geography	
GEOG 5512	Global Tourism	
LAW 8729	Preservation Law	
LAW 8729C	Cultural Preservation Law	

Year I

Fall Semester	Credits	Spring Semester	Credits
UPD 5743		3 UPD 5700	3
UPD 5744		3 UPD 5745	3
		6	6

Year II

Fall Semester	Credits
UPD 5710 or 5790	3
Elective(s)	3
	6

Total Credits: 18

Minor in Urban Studies

Student Learning Outcomes

Students graduating from this program will:

- appreciate how gender, ethnicity, and race play important roles in understanding the city.
- be able to demonstrate knowledge of how local, regional, and state governments and related institutions interact. They will understand how the urban economy is structured in interrelated sectors that influence each other locally and interact with sectors beyond the local city. They will understand how to interpret demographic patterns at various scales, from the city block to the metropolitan area.
- will demonstrate the ability of critical thinking about urban space.

Code	Title	Credits
Required Course		
Choose one of the following:		3
GEOG 309	Urban Geography	
SOCIOL 431	Social Organization Of The City	
UPD 320	Planning Theory And Practice	
Methods		
Choose one of the following:		3
GEOG 203	Introduction to Geographic Information Systems	
SOCIOL 362	Methods Of Sociological Research	
UPD 203	GIS For Urban Planning	
UPD 260	History Of Planning And Urban Design	
UPD 300	Quantitative Planning Methods And Techniques	
Urban Political Economy		
Choose one of the following:		3
BLKS 302	Conceptual and Theoretical Foundations in African American Studies	
ECON 336	The Kansas City Economy	
ECON 458	Urban Economics	
POL-SCI 438	Urban Politics	
Race/Class/Gender		
Choose one of the following:		3
ANTHRO/SOCIOL 302	Social Stratification	
ANTHRO/SOCIOL/LLS 322	Race And Ethnic Relations	
ANTHRO 331	Urban Anthropology	
BLKS 201	Global Systems and the Origins of Black American Culture and Institutions	
CJC 332	Race, Class and Justice	
ECON 314	Political Economy of Race, Class And Gender: Theory, History, And Policy	
LLS 201	Introduction to Latinx and Latin American Studies	
SOCIOL 433	Immigration and the City	
The Urban Built Environment		
Choose one of the following:		3
GEOG 309	Urban Geography	
HISTORY 356	Rise of the City in the U.S.	
PHILOS 370	Environmental Ethics And Policy	
UPD 280	Land Use Planning	
UPD 420	Transportation Planning	
UPD 432	Urban Environment Planning And Design	
UPD 472	Urban Redevelopment (can fulfill elective for The Urban Built Environment OR Urban Policy and Management)	
Urban Policy and Management		
Choose one of the following:		3
ECON 435	Public Finance	
SOCIOL/LLS 348	Latinx Immigrants, Migrants, and Refugees in the U.S	
UPD 430	Planning For Historic Preservation	
UPD 450	Planning Law And Practice	
UPD 472	Urban Redevelopment (can fulfill elective for The Urban Built Environment OR Urban Policy and Management)	
URBAN ST/LLS 346	Urban Latin America	

Total Credits	18
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Total Hours Required: 18

Minimum of 9 hours from UMKC.

Courses selected to meet minor requirements cannot be double-counted.

Department of Art and Art History

Fine Arts Building, Room 204
5015 Holmes Street
Kansas City, MO 64110
(816) 235-1501
art@umkc.edu
<http://cas.umkc.edu/art/>

Department Chair:

Elijah Gowin

Professors:

Barry Anderson, Principal Graduate Advisor in Studio Art (<https://cf1.umkc.edu/intapps/lookup/?LastName=anderson>)
Elijah Gowin
Kati Toivanen

Associate Professors:

Cristina Albu, Principal Graduate Advisor in Art History
Richard W. Allman
HyeYoung Shin
Paul Tosh

Assistant Professor:

Joseph R. Hartman

Full-time Lecturer:

Davin Watne

Professors Emeriti:

Eric J. Bransby
Frances S. Connelly
William Crist
Barbara Mueller
Craig A. Subler
Rochelle Ziskin

Instructor Emeritus:

Nancy DeLaurier

Department Description

The Department of Art and Art History is a dynamic environment that aims to provide all UMKC students with education and experience to develop their creative- and critical-thinking skills, their art-making abilities, and their versatility in professional and personal situations. The Department serves a variety of students, ranging from the non-major to the professionally oriented. The department offers programs leading to the Bachelor of Arts and Master of Arts degree in Art History or Studio Art, as well as minors in each area. Art History also participates in the Interdisciplinary Ph.D. program.

Students studying Art History or Studio Art obtain a broad liberal arts foundation during their educational career and receive sound fundamental training in the arts. Small class sizes combined with interactive teaching methods offer a comprehensive learning environment for the aspiring arts professional. The department also collaborates with other departments and schools, and works with the School of Education (<https://catalog.umkc.edu/colleges-schools/education/>) on Art Education degrees.

Kansas City is nationally known for its vibrant arts scene, with the UMKC Gallery of Art, Plug Projects (<http://www.pluginprojects.com/>), and many galleries located in the Crossroads Arts District (<http://www.kccrossroads.org/>). The department's partnerships with art organizations like Charlotte Street Foundation (<http://www.charlottestreet.org/>), ArtsKC (<http://www.artskc.org/>), Studios Inc (<http://thestudiosinc.org/>), and others structure internships, networking, entrepreneurial mentoring and other professional development opportunities. Visiting artists and scholars (<http://info.umkc.edu/art/visiting-artist-and-scholar-lecture-series/>), gallery exhibitions (<http://info.umkc.edu/art/>), and enrichment programs supplement course work.

Outside of the classroom, physical proximity and close professional connections to the museums, studios, galleries, and art organizations in the Kansas City community offer students additional opportunities for exposure to new ideas, media, and special events. The extensive collection of The Nelson-Atkins Museum of Art (<http://www.nelson-atkins.org>) is located three blocks away, and there are also major contemporary collections

nearby, including those of the Kemper Museum of Contemporary Art (<http://www.kemperart.org>), H&R Block Artspace (<http://www.kcai.edu/hr-block-artspace/>), the Belger Arts Center (<http://www.belgerartscenter.org>), and the Nerman Museum of Contemporary Art (<http://www.nermanmuseum.org>).

Special Resources/Programs

UMKC Gallery of Art

The department is home to the UMKC Gallery of Art (<http://info.umkc.edu/gallery/>). The gallery organizes curated shows from visiting local, national, and international artists, as well as arranging shows of student and alumni work. The annual Student Art Exhibition is a guest-juried exhibition that features the work of the current student body.

Visual Resources Library (VRL)

The department is also home to the Visual Resources Library (<http://info.umkc.edu/art/about/>), which hosts an online collection of approximately 45,000 digital images representing significant works of Western art and architecture, ancient through contemporary; the history of photography, printmaking, decorative arts and design; and art of Islam, Asia, Africa and the Americas. The VRL is also a space that hosts workshops for student needs and development, such as informational sessions about department events/opportunities as well as special events like the VRL Book Sale.

The Nelson-Atkins Museum of Art

The University of Missouri-Kansas City is fortunate to be adjacent to one of the most comprehensive and distinguished art museums in the country: The Nelson-Atkins Museum of Art (<http://www.nelson-atkins.org>). In addition to having ready access to the gallery's collection, advanced students may be privileged to use the museum's other facilities, such as the reference library, the acquisition records or the museum's collections. Use of these facilities is undertaken only after consultation with a member of the faculty. Admission to the museum is free to everyone.

The Department maintains a close relationship with the museum through joint appointments, curator-taught seminars, student internships and other cooperative programs.

Undergraduate Admission Information

In undergraduate studies, the Studio Art (p. 587) and Art History (p. 583) programs offer Bachelor of Arts degrees. For incoming freshmen, there are no special requirements beyond those for admission to the University. Transfer students to UMKC need to meet with both a department and a general education advisor prior to beginning classes to evaluate their transcripts to determine course equivalencies.

Program Overview

Degree programs in Studio Art and Art History at UMKC are the B.A. and the M.A. Art History also participates in the Interdisciplinary Ph.D. program. All the programs provide an exciting educational experience in a liberal arts setting.

The Studio Art faculty is comprised of accomplished and actively exhibiting artists, offering courses in drawing, painting, graphic design, print media, digital imaging, motion design, and photography. The faculty of six art historians, one a joint appointment with the Nelson-Atkins Museum, offer courses in the art and architecture of Ancient, Northern Renaissance, Baroque, Modern European, Contemporary, and American, Native American, African, and African-American cultures. The strong adjunct faculty consists of local artists, art educators and professionals. Curators from The Nelson-Atkins Museum of Art (<http://www.nelson-atkins.org/>) regularly offer advanced Art History courses, most recently on topics like Decorative Arts, Art and Patronage in 16th Century Rome, Islamic Art and the Spiritual in Contemporary Art.

Outside of the classroom, physical proximity and professional connections to the museums, studios and art organizations in Kansas City community offer students additional opportunities for internships, visiting artists, and enrichment programs to supplement coursework. Classes make use of the extensive collections at The Nelson-Atkins (<http://www.nelson-atkins.org/>) located three blocks away, as well as the major contemporary collections in Kansas City, including those of the Kemper Museum of Contemporary Art (<http://www.kemperart.org/>), the Belger Arts Center (<http://www.belgerartscenter.org/>) and the Nerman Museum of Contemporary Art (<http://www.nermanmuseum.org/>). Community arts organizations such as the UMKC Gallery of Art (<http://info.umkc.edu/art/umkcgallery/contact/>), the H&R Block Artspace (<http://www.kcai.edu/hr-block-artspace/>), and various art galleries located in the Crossroads Arts District (<http://kccrossroads.org/>) lend unique learning opportunities for studio art and art history majors to experience. Research in Art History is supported by the Miller-Nichols Library (<http://library.umkc.edu/node/>) at UMKC, the Spencer Art Reference Library (<http://www.nelson-atkins.org/research/library/>) at the Nelson-Atkins Museum, and the Linda Hall Library (<http://www.lindahall.org/>).

Career Opportunities

Career opportunities in Studio Art include education, arts administration and practicing art and design in fields of graphic design, interactive design, video arts, print media, photography, digital arts, painting and illustration. Graduates in the Studio Art programs at UMKC have found employment with Artist Inc, Hallmark (<http://www.hallmark.com/>), Barkley (<http://www.barkleyus.com/>), Federal Reserve Bank of Kansas City (<https://www.kansascityfed.org/>), Epsten Gallery at Village Shalom (<http://www.villageshalom.org/>), mySidewalk (<http://www2.mysidewalk.com/>), the Kansas City Municipal Commission (<http://kcmo.gov/generalservices/municipal-art-commission-2/>) and as successful independent artists. Students have been accepted into graduate programs at institutions including the University of Missouri at Columbia (<http://www.missouri.edu/>), Sam Fox School at Washington University (<http://www.samfoxschool.wustl.edu/node/4145/>), Ohio State (<http://www.osu.edu/>), Guildhall at Southern Methodist University (<http://guildhall.smu.edu/>) and the Rhode Island School of Design (<http://www.risd.edu/>).

Career paths in Art History include work in museums and galleries, educational institutions, and arts administration. Other career choices that mesh well with an Art History degree are publishing, art appraisal, non-profit art or history organizations, archival work, and library science. Graduates from the Art History M.A. program at UMKC have found positions at the Los Angeles County Museum of Art (<http://www.lacma.org/>), Rhode Island School of Design, the Nelson-Atkins Museum, the H&R Block Artspace, the Kemper Museum of Contemporary Art, Avila University (<http://www.avila.edu/>), the Wadsworth Athenaeum (<http://www.wadsworthatheneum.org/>), and the University of North Carolina at Chapel Hill (<http://www.unc.edu/>), as well as right here at UMKC. The M.A. degree at UMKC provides an excellent preparation for doctoral work. Degree requirements are structured to give students a thorough background in research methodology, and courses are taught by faculty actively involved in research. Our graduates have continued their work toward the Ph.D. at institutions including the University of Chicago (<http://www.uchicago.edu/>), Princeton University (<http://www.princeton.edu/>), Case Western Reserve University (<http://www.case.edu/>), the University of Michigan (<http://www.umich.edu/>), and the University of Kansas (<http://www.ku.edu/>).

Faculty

Cristina Albu^{1,2}; Associate Professor of Art History; B.A. (University of Bucharest); M.A. (University of Warwick); M.A., Ph.D. (University of Pittsburgh).

Richard W. Allman¹; Associate Professor of Studio Art; B.F.A. (Massachusetts College of Art); M.F.A. (Rhode Island School of Design).

Barry Anderson¹; Professor of Studio Art; B.F.A. (University of Texas at Austin); M.F.A. (Indiana University - Bloomington).

Eric J. Bransby; Professor Emeritus of Studio Art; B.A., M.A. (Colorado College); M.F.A. (Yale University).

Robert Cohon; Research Associate Professor of Art History & Joint Appointment with The Nelson-Atkins Museum of Art; B.A. (Columbia University); M.A., Ph.D. (New York University).

William G. Crist; Professor Emeritus of Studio Art; B.A. (University of Washington, Seattle); M.F.A. (Cranbrook Academy of Art).

Nancy DeLaurier; Instructor Emeritus of Studio Art; B.S. (Northwestern University).

Burton L. Dunbar III^{1,2}; Professor of Art History; B.A. (Park College); M.A., Ph.D. (University of Iowa).

George Ehrlich; Professor Emeritus of Art History; B.S., M.F.A., Ph.D. (University of Illinois).

Stephen J. Gosnell; Associate Professor Emeritus of Studio Art; M.A. (State University of New York).

Elijah Gowin¹; Professor of Studio Art; B.A. (Davidson College); M.F.A. (University of New Mexico).

Joseph R. Hartman; Assistant Professor of Art History; B.A. (Goshen College); M.A. (University of North Texas); Ph.D. (Southern Methodist University)

Leonard I. Koenig; Professor Emeritus of Studio Art; B.A. (Adelphi College); M.A. (University of Iowa); M.F.A. (University of Wisconsin-Madison).

Barbara A. Mueller; Professor Emeritus of Studio Art; B.A. (Maryville College); M.A. (University of Iowa).

HyeYoung Shin; B.F.A. (Kyung-Sung University); B.F.A. (Hong-Ik University); M.F.A. (University at Buffalo)

Craig A. Subler Professor Emeritus of Studio Art; B.F.A. (Dayton Art Institute); M.A., M.F.A. (University of Iowa).

Kati Toivanen¹; Associate Dean of Undergraduate Programs (College of Arts & Sciences); Professor of Studio Art; B.F.A. (Clark University); M.F.A. (School of the Art Institute of Chicago).

Paul Tosh¹; Associate Professor of Studio Art; B.F.A. (Middle Tennessee State University); M.F.A. (University of Arizona).

Davin Watne; Full-Time Lecturer of Studio Art; B.F.A. (Kansas City Art Institute); M.F.A. (Maryland Institute College of Art)

¹ Members of UMKC Graduate Faculty

² Members of UMKC Doctoral Faculty

Undergraduate

Undergraduate Degrees

Bachelor of Arts: Art History (p. 583)
 Bachelor of Arts: Studio Art (p. 587)
 Minor in Art and Visual Communication (p. 596)
 Minor in Art History (p. 597)
 Minor in Studio Art (p. 597)

Graduate

Graduate Degrees:

Master of Arts: Art History (p. 592)

Master of Arts: Studio Art (p. 594)

Interdisciplinary Ph.D

Art Courses

ART 105 Introduction to Photography Credits: 3

An introduction to the general practice of photography. The course centers on the basic technical and aesthetic aspects of the medium. A fully adjustable digital camera is required.

ART 112 Foundation Drawing Credits: 3

This course focuses on developing skills and techniques of observational drawing. No previous drawing experience required.

ART 114 Foundation Digital Design Credits: 3

This is an introductory course on techniques, practical applications, and aesthetic considerations for digital arts, graphic design, and computer multimedia. Students will create visual projects and learn to participate in a creative class community.

ART 114 - MOTR PERF 105GA: Studio Art-Graphic Arts



ART 121 Foundation 2D Design Credits: 3

The principles of visual thinking with emphasis on color theory and perception of form and space.

ART 206 Photography I Credits: 3

An introduction to photography as a means of creative self-expression. The course centers on the technical and aesthetic aspects of the medium. A fully adjustable digital camera is required.

Prerequisites: ART 105 or ART 114.

ART 212 Intermediate Drawing Credits: 3

Continuation of foundation drawing. Emphasis is on gaining technical facility with various drawing mediums and expanding conceptual approaches.

Prerequisites: ART 112.

ART 218 Graphic Design I Credits: 3

A beginning level introduction to Graphic Design principles, such as layout, design, concept, basis design theory, graphic design production, and use of industry-level design software and tools.

Prerequisites: ART 112, ART 114, and ART 121.

ART 221 Painting I Credits: 3

Exploration of the visual language in paint with continued emphasis on color and design.

Prerequisites: ART 112, ART 114, and ART 121.

ART 224 Print Media I Credits: 3

Through hands-on lessons, students will learn printmaking methods, including relief and screen printing, to practice historical and contemporary approaches.

Prerequisites: ART 112, ART 114, and ART 121.

ART 230 Fibers I Credits: 3

From altering the surface of fabric to three-dimensional construction, students are taught the basics of fiber arts. This is a hands-on introduction to surface design and soft sculptural hand processes. The course will cover dyeing, shibori, screen-printing, knitting, crochet, and basic sewing. Projects are individualized by expertise, availability of supplies, and students' own objectives.

ART 230 - MOTR PERF 105M: Studio Art-Multimedia Crafts

**ART 309 Print Media II Credits: 3**

A continuation of ART 224, this course deepens students' understanding of the historical conventions of and contemporary approaches to print media. Explores concepts and techniques through material involvement.

Prerequisites: ART 224.

ART 310 Digital Video and Motion Design Credits: 3

This course provides an overview of techniques and concepts in contemporary video and animation practices for art and graphic design. Intended for studio art majors and minors, the course features lectures, demonstrations, discussions and projects.

Prerequisite: ART 114.

ART 311 Painting II Credits: 3

Painting in oil or acrylic on the intermediate level with continued emphasis on color.

Prerequisites: ART 221.

ART 312 Figure Drawing I Credits: 3

A study of the structure of the human figure with emphasis on the dynamics of figure movement.

Prerequisites: ART 212.

ART 330 Fibers II Credits: 3

Intermediate study of surface design and soft sculptural hand processes. Projects are individualized by expertise, availability of supplies, and students' own objectives.

Prerequisites: ART 230.

ART 337 Graphic Design and Typography I Credits: 3

This course is an introduction to the theory and practice of graphic design and typography. It covers page layout, type, concept development, basic design history and theory, and the use of industry-standard design software. Students will create their own designs based on lectures and demonstrations.

Prerequisites: ART 114 and ART 121.

ART 338 Graphic Design II Credits: 3

Intermediate study of graphic design theory, methodology and techniques, stressing a visual approach to problem solving in design, image making techniques, materials, and production processes standard to the industry.

Prerequisites: ART 218.

ART 340 3D Modeling and Animation Credits: 3

This course addresses the usage of virtual three-dimensional modeling and animation in the contemporary art and design fields.

ART 348 Introduction To Typography Credits: 3

This course explores the formal and applied aspects of typography as tools for design and artistic expression. Focus is on how type relates to art, layout, and design. Both hand produced typography and computer assisted design software will be incorporated.

Prerequisites: ART 112, ART 114, and ART 121.

ART 375 Interdisciplinary Studio Projects Credits: 3

This course explores and combines a variety of media to investigate and examine relevant topics across visual arts. Students develop their creative expression and professional practices through individual and collaborative projects in the classroom and community engagement.

Prerequisites: At least one of the following: ART 206, ART 212, ART 224, ART 221, ART 230, ART 310, ART 337, ART 312, ART 340.

ART 405 Practices in the Visual Arts Classroom Credits: 3

Candidates preparing to student teach will master the use of current research in art education, and apply theoretical and practical educational knowledge.

Prerequisites: Departmental consent.

ART 411 Painting III Credits: 3

Painting on the intermediate level with a focus on experimentation and developing a personal visual language and expression.

Prerequisites: ART 311.

ART 412 Figure Drawing II Credits: 3

A continuation of ART 312. Drawing on the advanced level with study of the figure in environmental context.

Prerequisites: ART 312.

ART 421 Painting IV Credits: 3

Painting on the advanced level with supervised individual selection of technique and subject matter.

Prerequisites: ART 411.

ART 439 Egghead: Student Advertising Agency Credits: 3

This course operates as a faculty-supervised advertising/design agency that works with clients to produce visual marketing materials.

Prerequisites: ART 337.

ART 488 Creative Project Development Credits: 3

In this class students evaluate their creative goals and styles, as well as artistic abilities, in relation to their professional aspirations. Specific artistic and appropriate technological skills are developed through projects.

Prerequisites: ART 114 and ART 121.

ART 492 Advertising Campaigns Credits: 3

This course focuses on branding, re-branding or development of an identity program, and combines advertising planning with creative execution.

Students will learn how to develop advertising/marketing/creative campaign plans for a specific client(s), conceptualize, design and develop all creative aspects including but not limited to logo/identity, copy, advertising, website development, app design, etc., and complete a presentation of the plans/briefs and final creative developments of the plans/briefs and creative to the client(s).

ART 493 Directed Projects in Studio Art Credits: 1-6

With permission of instructor, advanced students pursue independent research and production of a significant semester-long project. Acceptable for graduate credit with approval.

ART 495 Special Topics in Studio Art Credits: 1-6

In-depth exploration of a special topic in Studio Art. Course may be repeated if topic is unique for each repeated effort. Acceptable for graduate credit with approval.

ART 498Q Special Studies in Art: Internship Credits: 1-6

Advanced students gain invaluable practical experience in a professional setting in the field of art.

ART 499WI Senior Seminar Credits: 3

Capstone course for studio majors in all media. Course addresses contemporary theoretical and practical issues in studio art practice, and prepares students for graduation. Multiple papers, class presentations, and a portfolio preparation are required.

ART 5405 Practices in the Visual Arts Classroom Credits: 3

Students preparing to student teach in the spring semester read, reflect on and master the use of current research in art education and study, practice and master the use of general education thoughts of today.

ART 5506 Graduate Photography Credits: 3-6

Photography on the graduate level with individual selection of media and technique. May be repeated up to a total of 15 hours.

ART 5510 Graduate Painting Credits: 3-6

Painting on the graduate level with individual selection of medium and technique. May be repeated up to a total of 15 hours.

ART 5513 Graduate Graphic Design Credits: 3-6

Graphic design on the graduate level with individual selection of medium and technique. May be repeated up to a total of 15 hours.

ART 5515 Graduate Drawing Credits: 3-6

Drawing on the graduate level with individual selection of media and technique. Student may pursue selected projects on a group or individual basis. May be repeated up to a total of 15 hours.

ART 5520 Graduate Print Media Credits: 3-6

Print media on the graduate level with individual selection of medium and technique.

ART 5540 Graduate Digital Imaging Credits: 3-6

Digital imaging on the graduate level with individual selection of subject and technique.

Prerequisites: Departmental consent.

ART 5550 Graduate Performance Art Credits: 3-6

Performance art on the graduate level with individual selection of medium and technique. May be repeated up to a total of 15 hours.

ART 5576 Graduate Digital Video and Motion Design Credits: 3-6

Digital video and motion design on the graduate level with individual selection of subject and technique.

Prerequisites: Departmental consent.

ART 5588 Graduate Studio Art Seminar Credits: 3

Studio art seminar for graduate students in any medium. Course will focus on professional practices, as well as the development of a sustainable artistic career. Individual artistic production and shared critiques will be required.

Prerequisites: Studio Art Graduate Students.

ART 5591 Directed Technical Studies Credits: 2-4

Individually directed studies or research in selected projects of a technical nature in studio art. May be repeated up to a total of six hours applicable to a degree program.

ART 5599 Research And Thesis Credits: 1-9

Production and/or writing of thesis. Usually taken in the last term of candidacy.

ART 5899 Required Graduate Enrollment Credit: 1

Art History Courses

ART-HIST 110 Introduction to the History of Art: Pyramids to Picasso Credits: 3

This is an introduction to the history of art, with in-depth discussions of painting, sculpture, prints, and architecture. Students will be introduced to significant works from major historical periods; their cultural roles, style and composition, and the artistic processes involved in their creation. Emphasis is placed upon Western art history, with attention paid to important interactions with other world traditions, including the arts of Islam, Japan, and Africa. The comprehensive collections of The Nelson-Atkins Museum of Art contribute an important component to the course.

ART-HIST 110 - MOTR ARTS 100: Art Appreciation

**ART-HIST 201 From Cave Paintings to Cathedrals Credits: 3**

Students will learn to analyze and place in an art historical context Western art and architecture from approximately 35,000 BCE to 1250 CE. Art and architecture from all relevant cultures and religions - pagan, Christian, and Islamic - will be covered; particular emphasis will be placed on the accomplishments of Egyptian and Greek artists.

ART-HIST 201 - MOTR ARTS 101: Art History I

**ART-HIST 202 From Michelangelo to Modernism Credits: 3**

This course will examine major monuments of Western art and architecture during the late Middle Ages through the Modern period. Art will be examined in its cultural context stressing artistic intent, issues of gender, changing patterns of patronage, and the ascending status of the artist in society.

ART-HIST 202 - MOTR ARTS 102: Art History II

**ART-HIST 264 The Grotesque in Art and Culture Credits: 3**

This course explores the vibrant and subversive role of the grotesque in the visual arts from 1500 to the present day. The grotesque comprises an alternate image tradition that is often overlooked, or even actively suppressed. This course will explore the distinct strands of the grotesque: witty and inspired improvisation, from Michelangelo to Picasso; rowdy and subversive carnivalesque, from Bruegel to Hogarth to DeKooning; and the monstrous and uncanny, from Bosch to Goya to Kahlo.

ART-HIST 303 World Currents of Contemporary Art Credits: 3

This survey course provides an introduction to the densely interconnected trajectories of contemporary art in different parts of the world. It explores the continuities and discontinuities between modern and contemporary art in the context of intensifying transnational exchanges since the 1960s. Students will become familiar with the intersections of contemporary art with everyday life, mass media, politics and technology.

ART-HIST 315 Arts Of African and New World Cultures Credits: 3

This historical survey of ethnographic arts examines the diasporas of African art and the influences of Africans on the arts of new world cultures (in Brazil, Surinam, Cuba, Haiti, and the United States) and Meso-American art and the influence of Meso-Americans on the arts of the Native North American cultures.

ART-HIST 319 Asian Art Credits: 3

The survey will emphasize the philosophical and cultural context of the arts of India, Southeast Asia, China, Korea and Japan. The course will stress the elements that give an underlying unity to the arts as well as those qualities which distinguish the art of each country as unique.

ART-HIST 421 Made in the USA: Latinx Art and Experience Credits: 3

This course focuses on art of and by members of the U.S. Latinx community. Students in this course will engage with the politics of representation, gender, sexuality, race, class, and ethnicity in Latinx art, as well as visual and popular culture.

ART-HIST 469 Sensing, Feeling, Thinking: Contemporary Art and the Mind Credits: 3

Contemporary artists are challenging viewers to reflect on how they perceive, feel and think. This seminar provides an introduction to the mental processes underlying emotion and visual cognition and familiarizes students with contemporary art practices that reveal the dynamic correlations between body, mind and subjectivity.

ART-HIST 470 Art Museums: History and Practice Credits: 3

This course will familiarize students with the history of art museums and collecting practices. It will cover theories of museum government, curating, and object interpretation. Students will explore changes in the functions of art museums and will develop practical skills for future museum employment.

ART-HIST 476 Site-Specific Art: Within and Beyond the Museum Walls Credits: 3

At a time of increased transnational mobility, contemporary artists are conceiving artworks that catalyze an enhanced awareness of the geographical and socio-political conditions of existence and art making. This seminar examines artworks that are produced outside the studio and are inspired by specific natural environments, museum settings and public spaces.

Prerequisites: ART-HIST 303.

ART-HIST 482 Scope & Methods Of Art History Credits: 3

An exploration of the discipline of art history, including theoretical issues, guiding questions and problems, diverse approaches (historical and current), and research tools. The undergraduate capstone course for art history majors.

ART-HIST 493 Directed Studies in Art History Credits: 1-6

With permission of instructor, advanced students pursue independent research and production of a significant semester-long research project. Acceptable for graduate credit with approval.

ART-HIST 495 Special Topics in Art History Credits: 1-6

In depth exploration of a special topic in Art History. Course may be repeated for up to 18 credit hours if topic is unique for each repeated effort. Acceptable for graduate credit with approval.

ART-HIST 497Q Special Studies in Art History: Internship Credits: 1-6

Advanced art history students gain invaluable practical experience in a professional setting in the field of art.

ART-HIST 5501 Scope And Methods Of Art History Credits: 3

An exploration of the discipline of art history, including theoretical issues, guiding questions and problems, diverse approaches (historical and current), and research tools. Required of all Art History graduate students and best taken early in one's studies.

ART-HIST 5539 Paris in the Age of Rococo Credits: 3

In the early 18th century, Paris overtook Rome as the artistic center of Europe. We explore all of the visual arts during the vibrant "Rococo," the age of Watteau, Chardin, and Boucher.

ART-HIST 5540 Seminar in French Art: Renaissance and Baroque Credits: 3

A history of French art from the time of Louis XII through the Age of Louis XIV, with emphasis on painting and architecture.

ART-HIST 5541 Seminar in Northern Baroque Art: The Age of Rubens, Rembrandt, and Wren Credits: 3

The arts of England and the Low Countries in the 17th and early 18th centuries. Emphasis on painting and the graphic arts in the Spanish and Dutch Netherlands, and on architecture in England.

ART-HIST 5547 Seminar in Italian Baroque Art: The Age of Caravaggio, Bernini, and Borromini Credits: 3

Painting, sculpture, and architecture in Italy from the creation of the Baroque style in the late 16th century to the beginnings of the Barochetto era.

ART-HIST 5548 Seminar in Span Art: El Greco to Goya Credits: 3

A study of Spanish art from the later 15th Century to the Napoleonic invasion.

ART-HIST 5561 Traditional and Contemporary Native American Art Credits: 3

This course aims to inspire students to appreciate the history and aesthetics of traditional and contemporary Native North American arts. We examine cultural and aesthetic continuities between Meso-American and Native North American Arts. Then we explore how Native American arts reflect the history of North America, including influences from Europeans, and conclude with contemporary Native American artists and their incorporation of various global influences.

ART-HIST 5562 History of Modern Design Credits: 3

This course examines innovations in design, beginning with the Arts and Crafts movement in the 19th century, surveying all the major design trends of the twentieth century, and concluding with contemporary developments in the age of the computer.

ART-HIST 5563 Primitivism and Its Aftermath Credits: 3

This course explores one of the seminal movements of the modern era and its ramifications for the visual arts today. Class discussions will consider the complexities and contradictions of primitivism and its rejection through their appropriations from archaic, folk, and non-western art traditions, from 1800-on, while also situation these creative endeavors within the cultural and political contexts of the period.

ART-HIST 5564 Modern Art and the Grotesque Credits: 3

The course explores how the grotesque shaped the history, practice and theory of art in the nineteenth and twentieth centuries. The grotesque plays a major role in many modern styles, and its expressive possibilities encompass the capriccio, the carnivalesque and burlesque, the fantastic, and the abject and uncanny. Artists have incorporated the grotesque as a means to push beyond established boundaries, explore alternate modes of experience, and to challenge cultural and aesthetic conventions.

ART-HIST 5565 Seminar In American Art Credits: 3

Graduate-level seminar dealing with an announced area in American art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5566 Seminar In 19th-Century Art Credits: 3

Graduate-level seminar dealing with an announced area in 19th-century art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5567 Seminar In 20th-Century Art Credits: 3

Graduate-level seminar dealing with an announced area in 20th-century art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5568 Participatory Forms of Spectatorship in Contemporary Art Credits: 3

This course explores art practices from the second half of the 20th century that challenge spectators to become more actively involved in the reception and even in the production of art. The course will examine the sociopolitical conditions and technological developments which have contributed to the strengthening of participatory tendencies in contemporary art.

ART-HIST 5569 Sensing, Feeling, Thinking: Contemporary Art and the Mind Credits: 3

Contemporary artists are challenging viewers to reflect on how they perceive, feel and think. This seminar provides an introduction to the mental processes underlying emotion and visual cognition and familiarizes students with contemporary art practices that reveal the dynamic correlations between body, mind and subjectivity.

ART-HIST 5570 Seminar In Renaissance Art Credits: 3

Graduate-level seminar dealing with an announced area in Renaissance art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5571 Seminar In Art Of Africa, Oceania And New World Cultures Credits: 3

Seminar in art of Africa, oceania and new world cultures. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5572 Seminar In Asian Art Credits: 3

Seminar dealing with an announced area in Asian Art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5573 Visual Arts Administration Credits: 3

This course on professional arts administration includes assignments in: copyright laws, database management, ethics issues, evaluation design, gallery museum management, grant writing and budgeting, public relations, resume design, tax laws, and website design and management. Students are required to learn relevant computer programs. This course is also open to music and theatre majors. Research requirements for graduate credit are more comprehensive and professional.

ART-HIST 5575 Seminar In Baroque Art Credits: 3

Graduate-level seminar dealing with an announced area in Baroque art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5576 Site-Specific Art: Within and Beyond the Museum Walls Credits: 3

At a time of increased transnational mobility, contemporary artists are conceiving artworks that catalyze an enhanced awareness of the geographical and socio-political conditions of existence and art making. This seminar examines artworks that are produced outside the studio and are inspired by specific natural environments, museum settings and public spaces.

ART-HIST 5577 Contemporary Artists of the African Diaspora Credits: 3

This course examines cultural and aesthetic continuities between traditional and contemporary arts and artists in Africa and in the Americas, including the study of contemporary Africans whose cultures had the greatest influence in the Americas, as well as contemporary African-American artists in Brazil, Cuba, Haiti, and the United States.

ART-HIST 5579 From the Parthenon to the Altar of Peace Credits: 3

The course centers on the many different styles of Greek and Roman art from the fifth century B.C. to the early first century A.D. Attention is also paid to the political and literary forces behind its imagery. Three monuments serve as the pillars upon which the course rests: the Parthenon, Pergamon Altar, and the Ara Pacis. The lessons learned about style, the interaction of politics, literature, and art and the foibles of scholarship are intended to be applied to other fields of art history.

ART-HIST 5580 Art Museums: History and Practice Credits: 3

This course will familiarize students with the history of art museums and collecting practices. It will cover theories of museum government, curating, and object interpretation. Students will explore changes in the functions of art museums and will develop practical skills for future museum employment.

ART-HIST 5590 Directed Studies In Art History Credits: 1-6

Individually directed studies or research in selected topics or problems in art history. May be repeated up to a total of six hours applicable to a degree program.

ART-HIST 5599 Research & Thesis Credits: 1-9

Production and/or writing of thesis. Usually taken in the last term of candidacy.

ART-HIST 5699 Research And Dissertation Credits: 1-12

Dissertation Research and writing in Art History.

ART-HIST 5899 Required Graduate Enrollment Credit: 1

Bachelor of Arts: Art History

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Have a basic knowledge of both Western and Non-Western art history.
- Cultivate aesthetic understanding and a life-long enthusiasm for history and the arts.
- Develop skills and perspectives to understand art and architecture as complex cultural products.
- Develop effective writing skills.
- Be able to understand the context of information contained in scholarly publications.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	

Any 200-level MATH or STAT course

ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher	
Critical Thinking in Arts & Humanities (GECRT-AH)	3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)	3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)	3
Culture & Diversity Course (GECDV)	3
Civic & Urban Engagement Course (GECUE)	3
Total Credits	30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above)		3
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		13

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Students graduating with a B.A. degree in Art History will be prepared for entry into a graduate program or the job market.

Formal study of Art History begins with introductory survey courses. There are two courses in Western art (ART-HIST 201 and ART-HIST 202), a survey in contemporary art (ART-HIST 303), and two in non-Western art (ART-HIST 315 and ART-HIST 319). There are no prerequisites for these courses. Students are encouraged to take the survey sequence in Western art sequentially, if possible.

Lectures are intermediate-level courses and are assigned 400-level numbers. Seminars are advanced-level courses and are assigned 400- and 5000-level numbers. The prerequisite for these courses is the relevant survey course, or permission of the instructor.

Code	Title	Credits
Two Western Surveys:		6
ART-HIST 201	From Cave Paintings to Cathedrals	
ART-HIST 202	From Michelangelo to Modernism	
Contemporary Survey:		3
ART-HIST 303	World Currents of Contemporary Art	
Two non-Western courses: ¹		6
ART-HIST 315	Arts Of African and New World Cultures	
ART-HIST 319	Asian Art	
At least six 400-level courses, chosen in consultation with department advisor.		18
ART-HIST 421	Made in the USA: Latinx Art and Experience	
ART-HIST 470	Art Museums: History and Practice	
ART-HIST 476	Site-Specific Art: Within and Beyond the Museum Walls	
ART-HIST 478	Pompeii and Herculaneum: The Archaeology of the Roman World	
ART-HIST 495	Special Topics in Art History	
ART-HIST 497Q	Special Studies in Art History: Internship	
COMM-ST 346	Art of the Short Film	
HISTORY 379	Museums, Monuments, and American Life: An Introduction to Public History	
HISTORY 406	Modern Latin America	
At least three studio arts courses. Recommended classes include:		9
ART 112	Foundation Drawing	
ART 114	Foundation Digital Design	
ART 206	Photography I	
Additional studio electives may include:		
ART 212	Intermediate Drawing	
ART 218	Graphic Design I	
ART 221	Painting I	
ART 224	Print Media I	
ART 230	Fibers I	
ART 310	Digital Video and Motion Design	
ART 312	Figure Drawing I	
ART 330	Fibers II	
ART 338	Graphic Design II	
ART 439	Egghead: Student Advertising Agency	
Capstone Course:		3
ART-HIST 482	Scope & Methods Of Art History	
Total Credits		45

¹ A 400-level course in non-Western art can count for this requirement OR towards the six 400-level courses requirement, but not both).

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		29

Minimum GPA: 2.5

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses

are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ART-HIST 201 ^{CC}		3 ART-HIST 202 ^{CC}	3
ENGLISH 110		3 ENGLISH 225	3
GEFSE 101		3 MATH 116 or STAT 115 ^{CC}	3
GECRT-AH 101		3 GECRT-SC 101	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ART 1XX/2XX Studio Art Elective		3 ART-HIST 303 ^{CC}	3
GECRT-SS 101		3 ART-HIST 319	3
GECUE 201		3 GECDV 201	3
HISTORY 101, 102, or POL-SCI 210		3 COMM-ST 110 or 277	3
Foreign Language course (211)		3 Lab Science ^{LO}	1
		General Elective	3
		15	16

Third Year

Fall Semester	Credits	Spring Semester	Credits
ART-HIST 315		3 ART-HIST 4XX Major Elective	3
ART-HIST 4XX Major Elective		3 ART-HIST 4XX Major Elective	3
ART 1XX/2XX/3XX Studio Art Elective		3 ART 1XX/2XX/3XX Studio Art Elective	3
General Elective		3 General Elective	3

General Elective	3 General Elective	3
	15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
ART-HIST 482		3 ART-HIST 4XX Major Elective	3
ART-HIST 4XX Major Elective		3 ART-HIST 4XX Major Elective	3
3XX/4XXWI Writing Intensive course		3 3XX/4XX General Elective	3
General Elective (3XX/4XX if needed)		3 General Elective	3
General Elective		3 General Elective	2
	15		14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Arts: Studio Art University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Create artwork demonstrating effective formal qualities
- Recognize and apply the specific characteristics of student's own creative expression
- Explain own artwork clearly and thoughtfully, using vocabularies of the discipline
- Develop professional skills necessary for their art practice

Program Requirements

Students graduating with a B.A. degree in Studio Art will be prepared for entry into a professional school, a graduate program or the job market.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	

HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above)		3
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		13

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Intermediate and advanced courses typically require the foundation series and possibly other prerequisites. ART 495: Special Topics may be offered that can count towards the Studio Electives. Recent Special Topics include screenprinting, art book publishing, and advertising campaigns (with Communication Studies).

Another important part of the Studio Art program is the Junior Portfolio Reviews that happen each spring semester. Students gather around 10 of their strongest pieces to present to a group of faculty and guests for a comprehensive critique of their work with suggestions for areas of growth, classes to take before graduating, and more. Many students benefit from this process so much that they do it again as a senior.

Code	Title	Credits
Foundation Courses		9
ART 112	Foundation Drawing	
ART 114	Foundation Digital Design	
ART 121	Foundation 2D Design	
Studio Electives selected from at least 3 different areas:		9
DRAWING:		
ART 212	Intermediate Drawing	
GRAPHIC DESIGN:		
ART 337	Graphic Design and Typography I	
PRINTMAKING:		
ART 224	Print Media I	
PHOTOGRAPHY:		
ART 206	Photography I	
MULTIMEDIA:		
ART 310	Digital Video and Motion Design	
PAINTING:		
ART 221	Painting I	
Additional Studio Electives:		9
Any course not already completed above.		
ART 312	Figure Drawing I	
ART 338	Graphic Design II	

ART 439	Egghead: Student Advertising Agency	
ART 230	Fibers I	
ART 330	Fibers II	
Art History Requirements		
Select three from 200- and 300-level survey courses:		9
ART-HIST 201	From Cave Paintings to Cathedrals	
ART-HIST 202	From Michelangelo to Modernism	
ART-HIST 303	World Currents of Contemporary Art	
ART-HIST 315	Arts Of African and New World Cultures	
ART-HIST 319	Asian Art	
One 400-level Art History course:		3
ART-HIST 421	Made in the USA: Latinx Art and Experience	
ART-HIST 470	Art Museums: History and Practice	
ART-HIST 476	Site-Specific Art: Within and Beyond the Museum Walls	
ART-HIST 482	Scope & Methods Of Art History	
ART-HIST 495	Special Topics in Art History	
Required Studio (must be taken at least twice)		
ART 375	Interdisciplinary Studio Projects	6
Capstone:		3
ART 499WI	Senior Seminar	
or ART 488	Creative Project Development	
Total Credits		48

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		26

Minimum GPA: 2.0; 2.5 in the major

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ART 112, 114, or 121 ^{CC}		3 ART 112, 114, or 121 ^{CC}	3
GEFSE 101		3 ART 112, 114, or 121 ^{CC}	3
ENGLISH 110		3 ENGLISH 225	3
GECRT-AH 101		3 MATH 116 or STAT 115	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ART-HIST 201, 303, or 315		3 ART 2XX Major Elective	3
COMM-ST 110, 277, or 140		3 GECRT-SC 101	3
GECDV 201		3 GECUE 201	3
GECRT-SS 101		3 HISTORY 101, 102, or POL-SCI 210	3
Foreign Language course (211)		3 Lab Science ^{LO}	1
		General Elective	3
		15	16

Third Year

Fall Semester	Credits	Spring Semester	Credits
ART-HIST 201, 303, or 315		3 ART-HIST 202, 303, 315, or 319	3
ART 2XX Major Elective		3 ART 375	3
ART 2XX/3XX Major Elective		3 ART 3XX/4XX Major Elective	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
ART 499WI or 488		3 ART-HIST 4XX Art History Elective	3
ART 375		3 ART 3XX/4XX Major Elective	3
ART 3XX/4XX Major Elective		3 General Elective (3XX/4XX if needed)	3
General Elective (3XX/4XXWI if needed)		3 General Elective	3
General Elective		3 General Elective	2
		15	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Master of Arts: Art History

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate advanced knowledge of specialized areas of art history.
- Cultivate independent and original thinking.
- Employ comprehensive communication through written, oral, and technological methods.
- Express aesthetic appreciation of art and architecture.
- Explain works of art and architecture as complex cultural products.
- Students graduating with an M.A. in Art History will be prepared for entry into a Ph.D. program or the job market.

Applications for Graduate Study

Applications for the M.A. degree in Art History are reviewed continually during the calendar year. However, students must have their applications completed by November 15 for admission for the spring semester and by June 15 for the fall term. To be considered for graduate assistantships (GTAs) and fellowships during the following academic year, and for maximum choice in coursework for the first semester, fall candidates need to have their application submitted by February 1.

How to Apply for the M.A. in Art History:

- To Office of Admissions (<http://www.umkc.edu/admissions/>)
 - Application (\$35 online, \$45 paper)
 - Transcripts
- To Department of Art & Art History (umkcarthistorygrad@umkc.edu), Attention: Graduate Advisor in Art History
 - Writing Sample
 - Two letters of recommendation
 - Personal statement, addressing: 1) Reason(s) for pursuing admittance into graduate-level study, 2) Reason(s) for choosing UMKC's Department of Art & Art History as educational institution, 3) Ultimate professional ambitions, and 4) Why you should be selected for the M.A. program.

Art History Classification of Entering Students

Admission to the graduate program in art history requires a B.A. or equivalent degree and sufficient undergraduate study in art history to provide a sound foundation for advanced study. Ideally, this foundation would include a solid grounding in the history of Western art, some study of non-Western art, and sufficient advanced-level work to indicate that a student can succeed in the specialized or topical courses and seminars associated with graduate study. Admission review is done by the graduate advisor in Art History.

The applicant should have, in addition to a good general education in the humanities, 18 to 24 credit hours in art history with a grade-point average of 3.0 or better. Students with fewer hours and/or a restricted exposure to other humanities and fine arts courses, or having inconsistent grades, are eligible for admission to the graduate program on the basis of recent evidence indicating the potential for success, such as performance in 400-level courses, or through papers and exams for courses elsewhere. If there are some deficiencies in preparation that can be met readily by one or two undergraduate survey courses, a student will be admitted to graduate study. However, the survey courses must be taken for undergraduate credit before the student is allowed to take the qualifying examination that is required for advancement to degree candidacy.

Applicants lacking the minimum preparation deemed necessary for admission to graduate-level study in art history may make up their deficiency through enrollment in selected undergraduate courses offered by the department. These will be determined after consultation with a faculty advisor and in all cases must include 400-level work. Progress will be reviewed at the end of each term, and if warranted, reclassification to graduate status will occur prior to the start of the next semester.

Requirements for Graduation

Option I: Non-thesis Option

(33 hours of approved coursework), including:

Code	Title	Credits
ART-HIST 5501	Scope And Methods Of Art History	3
Graduate Seminars		18
Choose from the following:		12
ART-HIST 5569	Sensing, Feeling, Thinking: Contemporary Art and the Mind	
ART-HIST 5576	Site-Specific Art: Within and Beyond the Museum Walls	
ART-HIST 5580	Art Museums: History and Practice	
ART-HIST 5590	Directed Studies In Art History	
HISTORY 5579	Public History: Theory and Method	
Total Credits		33

Option II: Thesis Option

(30 hours of approved coursework), including:

Code	Title	Credits
ART-HIST 5501	Scope And Methods Of Art History	3
Graduate Seminars		12
ART-HIST 5599	Research & Thesis	6
Choose from the following:		9
ART-HIST 5569	Sensing, Feeling, Thinking: Contemporary Art and the Mind	
ART-HIST 5576	Site-Specific Art: Within and Beyond the Museum Walls	
ART-HIST 5580	Art Museums: History and Practice	
ART-HIST 5590	Directed Studies In Art History	
HISTORY 5579	Public History: Theory and Method	
Total Credits		30

- Students must obtain permission to pursue the thesis option. Permission to do so depends on the quality of the student's thesis proposal submitted to the Department, the student's writing skills, and the ability of the Department to supervise the student in the subject area of the proposed thesis topic. An oral defense of the thesis is required. Those students who anticipate further graduate work toward the doctorate are strongly advised to elect the thesis option.

Non-Course Requirements:

- No more than 12 hours of coursework taken at the 400-level
- A minimum G. P. A. of 3.0

- As soon as possible, but no later than after 18 hours are completed, the student will select Option I or II. For students admitted to the Thesis Option, the student will select a thesis committee with the consultation of the Graduate Advisor.
- In either the 30-hour thesis option or the 33-hour non-thesis option, no more than 6 hours of readings, independent study, or directed studies credit (other than thesis hours) may be counted toward the requirements for the M.A. Exceptions may be made for credits granted for professional internships approved by the Department.

Special Requirements

Requirements for Retention

A student must maintain a graduate grade-point average of 3.0. In extenuating circumstances, a student may petition the Department of Art and Art History to be continued as a graduate student for one term (or 6 hours) if the graduate GPA falls below 3.0. The deficiency must be remedied during the approved probationary period if the student is to be continued.

Reading Knowledge in Foreign Language

M.A. students must acquire a reading knowledge of one foreign language considered essential to advanced study in art history before beginning the M.A. thesis. Students are encouraged to acquire this skill as early as possible in their graduate studies, so they may use it in graduate seminars and research papers. This requirement is most often fulfilled by three semesters at the college level, with a grade of B or better in the third semester. Students who believe they have acquired a sufficient reading knowledge, but have not completed three semesters of language training at the college level, may petition the graduate advisor to take a reading exam in that language. Normally, however, three semesters of college-level study are necessary to achieve sufficient mastery.

Thesis

The final requirement for the M.A. degree in Art History is the M.A. thesis, which is normally begun two semesters before a student completes the degree. The thesis is an approved project that demonstrates capacity for independent work of a suitably high level of proficiency, one utilizing the primary sources available on the topic in English and in the foreign language that meets the program requirement, as well as the major relevant secondary sources. This project, selected in conjunction with the thesis advisor most often develops from a seminar paper, and its presentation must conform to the requirements of the School of Graduate Studies.

Summary of Forms

1. Master's Degree Program of Study – filled out by the student and the graduate advisor/principal advisor in the department.
2. Recommendation for Appointment of Advisor or Supervisor/Examination Committee form – filled out by the student and the graduate advisor in the department.
3. Report of Results of Examination for Master's Degree Students Form – filled out by the chair of the thesis committee and mailed to the Office of Graduate Records.
4. Intent to Graduate – filled out by the student at the Records Office in the Administrative Center (no faculty signature required)
5. Thesis Review/Examination – filled out by the chair of the thesis committee and mailed to the Office of Graduate Records.

Master of Arts: Studio Art

Student Learning Outcomes

Students graduating from this program will:

- Have an advanced knowledge of a specialized area of studio art.
- Develop creative, conceptual and technical skills in a variety of visual media to produce work that can effectively contribute to the larger creative community.
- Communicate ideas visually, verbally, and through the written word.
- Recognize and understand the relevance of global art history to the current practice of art.
- Develop professional skills.
- Be proficient in adapting technology for the creation of works of art, including computer skills and digital photography.
- Students graduating with an M.A. in Studio Art will be prepared for entry into an M.F.A. program or the job market.

M.A. in Studio Art Overview

For Studio Art, the UMKC Department of Art and Art History only offers the Master of Arts Degree, which is not the terminal degree in studio art and will not qualify candidates to teach on the University level. The M.A. in studio art has the following emphasis areas: painting, drawing, printmaking, photography, digital imaging, motion design, and graphic design. Most students will take the majority of their coursework as independent study classes under the direction of one faculty member in the graduate student's area of emphasis. Students must decide which single emphasis area they plan to pursue before they apply for graduate school in the Department of Art and Art History.

Applications for Graduate Study in Studio Art

Application deadline is February 1 for the Fall semester and October 15 for the Spring semester. There is no summer semester admission.

How to Apply:

- To Office of Admissions (<http://www.umkc.edu/admissions/>)
 - Application (\$35 online, \$45 paper)
 - Transcripts
- To Department of Art & Art History, Attention: Graduate Advisor in Studio Art
 - Portfolio of recent work on CD is with 15-20 images (jpeg/bmp/QT/AVI/Flash)
 - Listing the images' titles, dates, sizes and media (hard-copy)
 - CV/resume
 - Personal statement, addressing:
 - i. Reason(s) for pursuing admittance into graduate-level study,
 - ii. Reason(s) for choosing UMKC's Department of Art & Art History as educational institution,
 - iii. Focus of art work,
 - iv. Ultimate professional ambitions, and
 - v. Why you should be selected for the M.A. program.
 - Three letters of recommendation from art professionals or professors

Applications are reviewed by a committee of Studio Art faculty.

Degree Requirements

A minimum of 36 graduate credit hours is required for the M.A. degree in studio art, including a minimum of six hours of ART 5599, and three courses in Art History on the 400- or 5000-level. Additional courses are determined in consultation with the discipline advisor and the supervising thesis committee. Courses are usually three credit hours each and are offered at both the 400 and 5000 levels. Any course counted as part of the required 36-hour minimum must be taken for credit. Students may take no more than 14 hours of 400-level classes (40 percent of a 36-hour program). Any 400- or 5000- level course taken for graduate credit must be completed with a grade of B- (2.7) or better in order to be counted toward the M.A. degree.

Code	Title	Credits
ART 5599	Research And Thesis	6
ART-HIST Coursework (choose from the following):		9
ART-HIST 5501	Scope And Methods Of Art History	
ART-HIST 5569	Sensing, Feeling, Thinking: Contemporary Art and the Mind	
ART-HIST 5576	Site-Specific Art: Within and Beyond the Museum Walls	
ART-HIST 5580	Art Museums: History and Practice	
ART-HIST 5590	Directed Studies In Art History	
ART Coursework (choose from the following):		21
ART 5405	Practices in the Visual Arts Classroom	
ART 5506	Graduate Photography	
ART 5510	Graduate Painting	
ART 5513	Graduate Graphic Design	
ART 5515	Graduate Drawing	
ART 5520	Graduate Print Media	
ART 5540	Graduate Digital Imaging	
ART 5576	Graduate Digital Video and Motion Design	
ART 5599	Research And Thesis	
Total Credits		36

Each student's program of study is designed in consultation with the lead professor in the primary discipline, who will be their principal art advisor. There is no general distribution requirement within the studio courses taken, but the student's choice and mix of classes needs to be approved by their art advisor. Courses in disciplines outside the Art and Art History department may be applied toward the degree with the preapproval of the student's principal art advisor.

Thesis Committee

After completion of an 18 to 21-hour minimum, the student selects a thesis committee. Normally, the faculty member in the student's major studio discipline is requested to act as chair of the thesis committee in addition to two other faculty members who have been asked by the student to serve on the committee. The chair of the thesis committee must be on the graduate faculty. Members of the thesis committee may include other studio faculty, an art historian or a faculty member from another department within the University. Typically, all three members of the thesis committee are faculty with whom the student has had some association. At this stage, the thesis chair consults with the student, who then submits a Master's Degree Program of Study form to the principal graduate advisor. This form is forwarded to the chair of the Department of Art and Art History, the dean of The College of Arts and Sciences and the Graduate Office.

M.A. Qualifying Exam (Review)

At some appropriate time after the completion of 18 to 21 hours toward the M.A. degree and before the beginning of the thesis, a review of the student's studio work by the chosen thesis committee is held. The purpose of this review is to determine the readiness of the student to engage in thesis-level work. For this review, the candidate presents a body of studio work representing both their present accomplishments and the potential for a thesis project. The student will also submit a prospectus for the intended thesis work. In an oral discussion with the thesis committee, student will explain the concept of the thesis and how this work will contribute to their continued art production. The committee will ask questions of the student and assess the progress of the work in order to determine whether the student should be allowed to advance to the final hours of class work leading to thesis. The thesis committee must approve the research plan and has a right to refuse it if the student does not have an available thesis project. If the prospectus is refused, the committee will make suggestions on how to improve the thesis proposal and a second review will be scheduled at a future date. Additional coursework may be recommended.

Thesis Procedure

The student plans a body of work to pursue a clearly identified artistic concept in consultation with his/her committee. An Appointment of Thesis Committee form with the names of the student's committee members is filled out by the student in consultation with the departmental principal graduate studio advisor and sent to the associate dean for graduate studies of the College of Arts and Sciences as well as to the Office of Graduate Faculties and Research. If, at any point during the thesis process, the student's committee is changed, an updated version of the form must be resubmitted. It is the responsibility of students to notify the principal graduate studio advisor of any changes in the composition of their committee, allowing the proper forms to be corrected.

At the beginning of the final semester of the student's program of study, he or she must fill out Intent to Graduate form, available online and from the Office of Registration and Records. This form enables the student to be placed on the graduation roll and on a mailing list to receive materials concerning graduation and other important information. If, for some reason, the student does not graduate that semester, he or she is required to file another form the subsequent semester. The deadline for the Intent to Graduate form is listed in the front part of each semester's catalog of courses.

Review of Thesis

(Defense/Public Manifestation of Work)

Upon completion of the thesis body of work, the student presents the work to his or thesis committee for final review and approval. This review must be in the form of a public exhibit or performance. This exhibit can be held in the UMKC Gallery of Art or any other public location within the Kansas City metropolitan area.

Summary of Forms

1. Master's Degree Program of Study – filled out by the student and the graduate advisor/principal advisor in the department.
2. Recommendation for Appointment of Advisor or Supervisor/Examination Committee form – filled out by the student and the graduate advisor in the department.
3. Report of Results of Examination for Master's Degree Students Form – filled out by the chair of the thesis committee and mailed to the Office of Graduate Records.
4. Intent to Graduate – filled out by the student at the Records Office in the Administrative Center (no faculty signature required)
5. Thesis Review/Examination – filled out by the chair of the thesis committee and mailed to the Office of Graduate Records.

Minor in Art and Visual Communication

Student Learning Outcomes

Students graduating from this program will:

- Be able to create logos and layouts using digital tools.
- Be able to produce competent visual content that demonstrates both aesthetic and technical abilities.
- Be able to communicate a message visually or use visuals to strengthen a message.
- Be able to articulate stylistic differences or similarities of art and architecture from different periods and/or geographic areas.

Code	Title	Credits
Required Foundation and Capstone Coursework		15
ART 105	Introduction to Photography	
ART 114	Foundation Digital Design	
ART 121	Foundation 2D Design	
ART-HIST 110	Introduction to the History of Art: Pyramids to Picasso	
ART 488	Creative Project Development (Capstone course)	
Electives taken at the 300-level or above (Select with Studio Art advisor)		6
ART 310	Digital Video and Motion Design	
ANCH 320	Visual Culture and Civic Engagement	
ART 337	Graphic Design and Typography I	
Additional approved courses for the minor that are not currently offered online		
ART 375	Interdisciplinary Studio Projects	
ART 439	Egghead: Student Advertising Agency	
Special Topics Coursework in Consultation with Art Advisor		
Total Credits		21

Studio Art majors are not eligible for the Art and Visual Communication minor.

Minor in Art History

Minor in Art History Requirements

Code	Title	Credits
ART-HIST 201	From Cave Paintings to Cathedrals	3
ART-HIST 202	From Michelangelo to Modernism	3
ART-HIST 303	World Currents of Contemporary Art	3
Additional courses selected with an Art History advisor at the 300- or 400- level.		9
ART-HIST 315	Arts Of African and New World Cultures	
ART-HIST 319	Asian Art	
ART-HIST 421	Made in the USA: Latinx Art and Experience	
ART-HIST 470	Art Museums: History and Practice	
ART-HIST 476	Site-Specific Art: Within and Beyond the Museum Walls	
ART-HIST 482	Scope & Methods Of Art History	
ART-HIST 495	Special Topics in Art History	
COMM-ST 346	Art of the Short Film	
HISTORY 379	Museums, Monuments, and American Life: An Introduction to Public History	
HISTORY 406	Modern Latin America	
Total Credits		18

Minor in Studio Art

Minor in Studio Art Requirements

Code	Title	Credits
Three foundation courses:		9
ART 112	Foundation Drawing	
ART 114	Foundation Digital Design	
ART 121	Foundation 2D Design	
Additional courses selected with a Studio Art advisor		12
9 hours should be at the 300- or 400-level.		
ART 206	Photography I	
ART 212	Intermediate Drawing	
ART 218	Graphic Design I	
ART 221	Painting I	

ART 224	Print Media I
ART 230	Fibers I
ART 310	Digital Video and Motion Design
ART 330	Fibers II
ART 338	Graphic Design II
ART 439	Egghead: Student Advertising Agency

Total Credits

21

Black Studies

Black Studies Office
 5305 Holmes Road
 Kansas City, MO 64110
 Phn: (816) 235-2636
 Fax: (816) 235-5596
umkcblackstudies@umkc.edu
<http://cas.umkc.edu/blackstudies> (<http://cas.umkc.edu/blackstudies/>)

Program Description

The UMKC Black Studies Program is an academic unit that holistically investigates the experience, contributions and conditions of African-descent people in the formation and evolution of American society and culture. In accordance with these objectives, our focus extends to an examination of the active role of Africa and the African Diaspora in global society and human culture. The Black Studies Program – through both a social science and a humanities orientation – provides a unique and rich approach to exploring and comprehending the human experience.

The Black Studies Program is focused on the acquisition and dissemination of an instructive body of knowledge. The curriculum prepares students with a critical skill set that will enable them to pursue diverse employment opportunities. The program makes available to students the foundational research for undergraduate, graduate and professional training in the discipline of Black Studies.

The program currently offers undergraduate courses that can lead to a Minor in Black Studies. Students can also obtain an Emphasis Area in Black Studies through the Bachelor of Liberal Arts Program. Black Studies offers students from any graduate discipline coursework toward a Graduate Certificate (p. 608). In addition, coursework is available at the graduate level leading to an Informal Emphasis in Black Studies under the Master of Arts in Liberal Studies Degree (p. 610).

Faculty

Interim Program Director:

Michael K. McDonald, Ph.D.

Associate Professor:

Jacqueline E. Wood, Ph.D.

- Black Studies and English (Drama, Literature, Poetry).

Library Co-Liaison(s):

Tracey Hughes, M.I.S.L.T., M.A.L.S.

- Library Instruction and Reference

Gloria Tibbs, M.L.S.

- Collection Development and Reference

Administrative Assistant:

Patricia C. Charles

Undergraduate

The Black Studies Program at UMKC provides instruction for undergraduate students to develop proficiency in written and oral communications regarding the study of African descent people in the Americas and in the African Diaspora. Our curriculum offers in-depth knowledge regarding an African perspective on political systems, humanities contributions and social science research in higher education. While contributing to the general education requirements of UMKC in both the humanities and the social sciences, our program serves to enhance the global literacy and professional development of our undergraduate populations.

Undergraduate Degrees:

- Bachelor of Liberal Arts: Black Studies Emphasis (p. 603)

Undergraduate Minor:

- Minor in Black Studies (p. 612)

Graduate

The Black Studies Program provides critical skill sets in written and oral communication, research, analysis, theory building, multicultural understanding and global awareness. Through a holistic examination of the African American experience, we are committed to enhancing general education and to promoting professional development as well as the training of scholars in the field.

Graduate Degrees:

- Master of Liberal Studies: Black Studies Informal Emphasis (p. 610)

Graduate Certificates:

- Certificate in Black Studies (p. 608)

Courses

BLKS 1EA Black Studies Elective Credits: 99

Transfer credit

BLKS 1EB Black Studies Elective Credits: 99

Transfer credit

BLKS 1EC Black Studies Elective Credits: 99

Transfer credit

BLKS 1ED Black Studies Elective Credits: 99

Transfer credit

BLKS 1EE Black Studies Elective Credits: 99

Transfer credit

BLKS 1EF Black Studies Elective Credits: 99

Transfer credit

BLKS 1EG Black Studies Elective Credits: 99

Transfer credit

BLKS 1EH Black Studies Elective Credits: 99

Transfer credit

BLKS 1EI Black Studies Elective Credits: 99

Transfer credit

BLKS 1EJ Black Studies Elective Credits: 99

Transfer credit

BLKS 201 Global Systems and the Origins of Black American Culture and Institutions Credits: 3

This multidisciplinary course examines global capitalism, European contact with Africa, the development of the African Diaspora, and the origins of Black American institutions and culture. Applying a Black studies perspective, the course explores such themes as cultural and gendered oppression, institutional destabilization, economic dislocation, liberation struggles, and creative impulses and aesthetics and the social and historical experiences of Black people in the Americas.

BLKS 302 Conceptual and Theoretical Foundations in African American Studies Credits: 3

This course will provide an in-depth examination of the theoretical and conceptual parameters of African American studies. We will study the evolution of the field, key scholars and creative intellectuals, and seminal categories of thought.

Prerequisites: BLKS 201.

BLKS 315 Arts of African and New World Cultures Credits: 3

This historical survey of ethnographic arts examines the diasporas of African art and the influences of Africans on the arts of new world cultures (in Brazil, Surinam, Cuba, Haiti, and the United States) and Meso-American art and the influence of Meso-Americans on the arts of the Native North American cultures.

BLKS 320 Critical Health Issues in Black Communities Credits: 3

Beginning with the African context and the opposition of chattel slavery, this course examines social, cultural and historical factors affecting the health status of African Americans to the present era.

Prerequisites: BLKS 201.

BLKS 321 The Black Family and Male-Female Relationships Credits: 3

This course examines the historical evolution and current status of the African American family in the United States. Utilizing the African experience as its starting point, the course conveys a broad understanding of the role of the family in human survival and progress. We investigate such issues as male-female relationships, sexual practices, dating, marriage, single parenting, the education and socialization of children, and so on. We also examine an array of social and economic issues, including institutionalized inequality, that affect the viability of today's African American family.

Prerequisites: BLKS 201.

BLKS 325 African American Business Development Credits: 3

This course investigates the various challenges to African American business development and entrepreneurship in the United States. We study the lives of successful, pioneering African American businesswomen and men in order to assess how they managed to transcend the barriers of racism and structured inequality. We explore why certain kinds of enterprises emerged among African Americans and why others did not, and we scrutinize the traditional business problems for African Americans of capitalization, distribution, market penetration, and wealth creation.

Prerequisites: BLKS 201.

BLKS 330 African American Migrations in Literature Credits: 3

The course examines representations of two different trajectories of migration in African American literature: African American journeys from the south to northern and mid-western regions of America, and concurrent migrations of Caribbean people to the US in the early twentieth century.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 331 African American Literature I Credits: 3

This course provides a survey of African American literature from its beginnings to the Harlem Renaissance of the 1920s and 1930s. Areas of interest will include abolitionist literature (especially slave narratives), turn-of-the-century literature and the Harlem Renaissance. This course will examine any or all of the following literary forms: fiction, poetry, drama, autobiography and essay. It will view African American literature in its historical and cultural contexts.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 332WI African American Novel Credits: 3

This course will examine the African American novel in the 19th and 20th centuries; the emphasis will be on the period from the 1920s to the present. The novels will be examined in their historical and cultural contexts.

BLKS 333 African American Literature II Credits: 3

A survey of African American literature from the end of the Harlem Renaissance to the present, covering a range of authors, texts, and contexts.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 334 From Field Shout to Hip Hop: African American Poetic Traditions Credits: 3

This course examines the development of African American poetry from its early forms as field shouts, ballads, and blues to present forms including spoken word and hip hop. Includes authors such as Phillis Wheatley, Paul Lawrence Dunbar, Langston Hughes, Gwendolyn Brooks, Tupac Shakur, and Jessica Care Moore.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 335 Stages Toward Freedom: African American Dramatic Traditions Credits: 3

This course explores the development of African American dramatic traditions from the eighteenth century through the Harlem Renaissance Black Arts Movement, to current postmodernism. Includes authors such as W.W. Brown, Zora N. Hurston, Amiri Baraka, Sonia Sanchez, August Wilson, Suzan-Lori Parks.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 337 The Civil Rights Movement in African American Literature Credits: 3

This course examines how African American literature shaped ideas about freedom, rights, citizenship and race in the civil rights movement. It draws on a variety of literary forms-speeches, essays, autobiographies, fiction, drama, poetry and film-to explore the movement's impact on communities and cultures as well as its various debates and competing visions.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 338 Women's Literature in Africa and the African Diaspora Credits: 3

This course is a comparative examination of the variety of literary works produced by women of African descent in the United States, the Caribbean and Africa. Students will explore the cross-cultural implications of texts in light of the intersections of gender, race and class.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 349 Symbols and Codes from the Diaspora: African American Visual Arts Survey Credits: 3

This course provides an examination of the theoretical and conceptual parameters of African and African American visual aesthetics. Through the writings of key scholars in African American aesthetics, students will study symbolic forms and patterns from various African cultures throughout the Diaspora and investigate formal image categories within African Diaspora visual culture.

Prerequisite: BLKS 201.

BLKS 351 African American Art History: Part I, 1600-1960 Credits: 3

This course presents a comprehensive survey of African American visual art from 1600 through 1960. Critical issues in early American art history highlight the expressions of African American artists and scholars. Students will investigate artistic expressions of this period.

Prerequisite: BLKS 201.

BLKS 3EA UL Black Studies Elective Credits: 99

Transfer credit

BLKS 3EB UL Black Studies Elective Credits: 99

Transfer credit

BLKS 3EC UL Black Studies Elective Credits: 99

Transfer credit

BLKS 3ED UL Black Studies Elective Credits: 99

Transfer credit

BLKS 3EE UL Black Studies Elective Credits: 99

Transfer credit

BLKS 3EF UL Black Studies Elective Credits: 99

Transfer credit

BLKS 3EG UL Black Studies Elective Credits: 99

Transfer credit

BLKS 3EH UL Black Studies Elective Credits: 99

Transfer credit

BLKS 3EI UL Black Studies Elective Credits: 99

Transfer credit

BLKS 3EJ UL Black Studies Elective Credits: 99

Transfer credit

BLKS 403WI Writing for African American Studies Credits: 3

This course instructs students in how to produce advanced knowledge in the field of African American studies. It provides training in the construction of quality research papers for graduate, scholarly, and professional work and exposes students to a wide array of scholarly journals, databases, and authoritative resources in African American studies. Each time the courses taught, students will develop their research around a specific topic defined by the instructor.

BLKS 404 Research Seminar Credits: 3

This course introduces the logic, theory, and techniques of empirical research and applies them to African American Studies. It exposes students to a variety of research approaches in order to examine their utility for producing knowledge within the field.

Prerequisite: BLKS 201.

BLKS 410 African American Art History: Part II, 1960-Present Day Credits: 3

This course presents a survey of African American visual arts from 1960 to the present. Visual arts include new media and processes for Diaspora artists. Students investigate contemporary artists within African Diaspora visual culture.

Prerequisite: BLKS 201.

BLKS 458 Slave Narratives: Race, Gender, and Writing Freedom Credits: 3

A truly American, home grown genre and powerful force in the development of American political and social realities, the African American Slave Narrative is an established, recognized influence in the development of African American and American literary history. In this course you will have the opportunity to explore the historical trajectory of the Slave Narrative, looking at early formulations of its structure, purpose and conventions—especially in terms of gender and race, subsequent various permutations, and the eventual development of the Neo-slave Narrative as its resurrection, which adds to the complexity and theoretical impact of the literary autobiography from black perspectives.

Prerequisites: DISC 200 or ENGLISH 225.

BLKS 480 Special Topics/Seminar Credits: 1-3

In-depth exploration of special topics in Black Studies. When available, topics will be announced prior to registration. Course may be repeated for up to six credit hours.

Prerequisite: BLKS 201.

BLKS 490 Directed Study/Research Credits: 1-3

Individual research and learning projects supervised by a faculty member. Course may be repeated for up to six credit hours.

Prerequisite: BLKS 201.

BLKS 496 Internship in Black Studies Credits: 1-3

This Internship course presents an opportunity for undergraduate students to integrate their academic studies in the discipline of Black Studies with community service and engagement. As a student intern within a business or professional organization in the urban Metropolitan community, the student gains critical information about the processes and procedures of this business entity in relation to African American community members.

Prerequisite: Departmental consent.

BLKS 5502 Conceptual and Theoretical Foundations in African American Studies Credits: 3

This course will provide an in-depth examination of the theoretical and conceptual parameters of African American studies. We will study the evolution of the field, key scholars and creative intellectuals, and seminal categories of thought.

BLKS 5503 Writing for African American Studies Credits: 3

This course instructs students in how to produce advanced knowledge in the field of African American studies. It provides training in the construction of quality research papers for graduate, scholarly, and professional work and exposes students to a wide array of scholarly journals, databases, and authoritative resources in African American studies. Each time the course is taught, students will develop their research around a specific topic defined by the instructor.

BLKS 5504 Research Seminar Credits: 3

This course introduces the logic, theory, and techniques of empirical research and applies them to African American Studies. It exposes students to a variety of research approaches in order to examine their utility for producing knowledge within the field.

BLKS 5510 African American Art History: Part II, 1960-Present Day Credits: 3

This course presents a survey of African American visual arts from 1960 to the present. The Black Arts Movement, the Black Aesthetic, mainstream arts institutions and Black collectors are reviewed. Visual arts include new media and processes for Diaspora artists. Students investigate contemporary artists within African Diaspora visual culture.

BLKS 5520 Critical Health Issues in Black Communities Credits: 3

Beginning with the African context and the imposition of chattel slavery, this course examines social, cultural, and historical factors affecting the health status of African Americans to the present era.

BLKS 5521 The Black Family & Male-Female Relationships Credits: 3

The course examines the historical evolution and current status of the African American family in the United States. Utilizing the African experience as its starting point, the course conveys a broad understanding of the role of the family in human survival and progress. We investigate such issues as male-female relationships, sexual practices, dating, marriage, single parenting, the education issues, including institutionalized inequality, that affects the viability of today's African American family.

BLKS 5525 African American Business Development Credits: 3

This course investigates the various challenges to African American business development and entrepreneurship in the United States. We study the lives of successful, pioneering African American businesswomen and men in order to assess how they managed to transcend the barriers of racism and structured inequality. We explore why certain kinds of enterprises emerged among African Americans and why others did not, and we scrutinize the traditional business problems for African Americans of capitalization, distribution, market penetration, and wealth creation.

BLKS 5530 African American Migrations in Literature Credits: 3

The course examines representations of two different trajectories of migration in African American literature: African American journeys from the south to northern and mid-western regions of America, and concurrent migrations of Caribbean people to the US in the early twentieth century.

BLKS 5534 From Field Shout to Hip Hop: African American Poetic Traditions Credits: 3

This course examines the development of African American poetry from its early forms as field shouts, ballads, and blues to present forms including spoken word and hip hop. Includes authors such as Phillis Wheatley, Paul Lawrence Dunbar, Langston Hughes, Gwendolyn Brooks, Tupac Shakur, and Jessica Care Moore.

BLKS 5535 Stages toward Freedom: African American Dramatic Traditions Credits: 3

This course explores the development of African American dramatic traditions from the eighteenth century through the Harlem Renaissance, Black Arts Movement, to current postmodernism. Includes authors such as W.W. Brown, Zora N. Hurston, Amiri Baraka, Sonia Sanchez, August Wilson, Suzan-Lori Parks.

BLKS 5537 The Civil Rights Movement in African American Literature Credits: 3

This course examines how African American literature shaped ideas about freedom, rights, citizenship and race in the civil rights movement. It draws on a variety of literary forms-speeches, essays, autobiographies, fiction, drama, poetry and film-to explore the movement's impact on communities and cultures as well as its various debates and competing visions.

BLKS 5538 Women's Literature in Africa and the African Diaspora Credits: 3

This course is a comparative examination of the variety of literary works produced by women of African descent in the United States, the Caribbean and Africa. Students will explore the cross-cultural implications of texts in light of the intersections of gender, race and class.

BLKS 5539 Slave Narratives: Race, Gender and Writing Freedom Credits: 3

A truly American, home grown genre and powerful force in the development of American political and social realities, the African American Slave Narrative is an established, recognized influence in the development of African American and American literary history. You will have the opportunity to explore the historical trajectory of the Slave Narrative, looking at early formulations of its structure, purpose and conventions—especially in terms of gender and race, subsequent various permutations, and the eventual development of the Neo-slave Narrative as its resurrection, which adds to the complexity and theoretical impact of the literary autobiography from black perspectives.

BLKS 5549 Symbols and Codes from the Diaspora: African American Visual Arts Survey Credits: 3

This course provides an examination of the theoretical and conceptual parameters of African and African American visual aesthetics. Through the writings of key scholars in African American aesthetics, students will study symbolic forms and patterns from various African cultures throughout the Diaspora and investigate formal image categories within African Diaspora visual culture.

BLKS 5551 African American Art History: Part I, 1600-1960 Credits: 3

This course presents a comprehensive survey of African American visual art from 1600 through 1960. Critical issues in early American art history highlight the expressions of African American artists and scholars. The Negro Crafts Movement, New Negro Movement and Harlem Renaissance. Students will investigate artistic expressions of this period.

BLKS 5580 Special Topics/Seminar Credits: 1-3

In-depth exploration of special topics in Black Studies.

BLKS 5590 Directed Study/Research Credits: 1-6

Individual research and learning projects supervised by a faculty member.

BLKS 5596 Internship in Black Studies Credits: 1-6

This Internship course presents an opportunity for graduate students to integrate their academic studies in the discipline of Black Studies with community service and engagement. As a student intern within a business or professional organization in the urban Metropolitan community, the student gains critical information about the processes and procedures of this business entity in relation to African American community members.

BLKS 5599 Research Thesis Credits: 1-6

Individually directed research leading to preparation and completion of a thesis.

BLKS 5699 Research and Dissertation Credits: 1-12

Individually directed research leading to preparation and completion of a doctoral dissertation.

BLKS 5899 Required Graduate Enrollment Credit: 1

Enrollment required during the completion of a thesis/dissertation.

BLKS 5XX Grad Black Studies Elective Credits: 99

Transfer credit

BLKS 5XY Grad Black Studies Elective Credits: 99

Transfer credit

Bachelor of Liberal Arts: Black Studies Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Analyze the experience, contributions, and condition of African-descent peoples in the evolution and formation of American society and culture.
- Examine the active role of Africa and the African Diaspora in global society and human culture.
- Apply Black Studies curriculum as a critical tool to analyze the human experience generally.
- Compare the breadth and depth of perspectives that give respect and voice to the Black experience.
- Apply social science and humanistic approaches to examine human society and culture.
- Demonstrate professional written and oral communication skills.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above); Satisfied in program requirements below		
	Laboratory Science Experience	1
Total Credits		1

B.L.A. Requirements with Black Studies Emphasis

Code	Title	Credits
Humanities Area		18
Natural Sciences Area		18
Social Sciences Area		18
Total Credits		54

The Emphasis Area Requirements outlined below may contribute to completion of BLA distribution requirements above.

Black Studies Emphasis Area Requirements

The emphasis area in Black Studies assists undergraduate students who want to obtain graduate and professional degrees in a variety of fields (master's degrees, Ph.D's, law, public health, counseling, social work, educational administration, business, journalism, social work, medicine, library or information science, public policy, public administration, and so on) where specialized knowledge of the broad-based experiences and perspectives of African descent peoples would be useful. At the same time, students learn skill sets that are applicable to a wide variety of circumstances, which prepare them for entry-level positions in private industry, government, and public or non-profit agencies.

Students must take **30 hours of Black Studies courses** to complete the emphasis area in Black Studies under the Bachelor of Liberal Arts Degree. A minimum of 24 hours of Black Studies courses must be at the 300 or 400 level or above. A minimum of 24 credit hours in Black Studies must be earned at UMKC.

Students declaring the Black Studies Emphasis under the Bachelor of Liberal Arts (p. 867) (B.L.A.) must meet with the Black Studies undergraduate advisor (<http://cas.umkc.edu/blackstudies/faculty.asp>) to begin a plan of study prior to enrolling in courses.

Twelve of the 30 hours of coursework must include the **Core Black Studies** courses:

Code	Title	Credits
BLKS 201	Global Systems and the Origins of Black American Culture and Institutions	3
BLKS 302	Conceptual and Theoretical Foundations in African American Studies	3
BLKS 403WI	Writing for African American Studies	3
BLKS 404	Research Seminar	3
BLKS 490 or BLKS 496	Directed Study/Research Internship in Black Studies	3
Interest Area Electives		15
Total Credits		30

Beyond the 15 hours of required core courses, students may pursue either a **Humanities interest area** in Literature and Culture or a **Social Science interest area** in Institutions and Social Process (within the field of Black Studies), two areas already existing as divisions in the B.L.A. degree.

Humanities Interest Area—Literature and Culture (15 credits):

- Under this interest area the Black Studies emphasis will require four courses (12 credits) from the humanities interest area and one course (3 credits) from the social science interest area.

Social Science Interest Area—Institutions and Social Process (15 credits):

- Under this interest area the Black Studies emphasis will require four courses (12 credits) from the social science interest area and one course (3 credits) from the humanities interest area.

Examples of elective undergraduate courses in Black Studies are:

Code	Title	Credits
BLKS 315	Arts of African and New World Cultures (Humanities Focus)	3
BLKS 320	Critical Health Issues in Black Communities (Social Science Focus)	3
BLKS 321	The Black Family and Male-Female Relationships (Social Science Focus)	3
BLKS 331	African American Literature I (Humanities Focus)	3
BLKS 332WI	African American Novel (Humanities Focus)	3
BLKS 333	African American Literature II (Humanities Focus)	3
BLKS 325	African American Business Development (Social Science Focus)	3
BLKS 334	From Field Shout to Hip Hop: African American Poetic Traditions (Humanities Focus)	3
BLKS 335	Stages Toward Freedom: African American Dramatic Traditions (Humanities Focus)	3
BLKS 337	The Civil Rights Movement in African American Literature (Humanities Focus)	3
BLKS 338	Women's Literature in Africa and the African Diaspora (Humanities Focus)	3
BLKS 349	Symbols and Codes from the Diaspora: African American Visual Arts Survey (Humanities Focus)	3
BLKS 351	African American Art History: Part I, 1600-1960 (Humanities Focus)	3
BLKS 410	African American Art History: Part II, 1960-Present Day (Humanities Focus)	3
BLKS 496	Internship in Black Studies (Designate Focus with Adviser)	1-3

Examples of **Black Studies, Special Topics** BLKS 480 courses with a **Humanities Focus** are:

- African American Experience in Literature (1773-1960)
- African American Migrations in Literature
- Contemporary African American Literature
- Film Adaptations in African American Literary Text
- Introduction to Caribbean Literature and Film

Examples of **Black Studies, Special Topics** BLKS 480 courses with a **Social Science Focus** are:

- From Vaudeville to Rhythm and Blues
- Hip-Hop's Influence on African Americans and American Society
- Kansas City and the Black Experience
- Race, Class and Justice
- Racial and Ethnic Relations

Students are strongly encouraged to take the remaining **3 hours of coursework** as an **approved community engagement project/research** under **Directed Study**, BLKS 490 or through **Internship**, BLKS 496. Because faculty consent is required in order to enroll in the Directed Study or Internship options, students should begin building an academic relationship with the Black Studies faculty member whose academic background can best guide them.

Students cannot earn credit toward the Emphasis Area in Black Studies with a grade below a "C" in a Black Studies course.

To graduate with an Emphasis Area in Black Studies, students must achieve a minimum grade-point average of 2.0 in all courses accepted toward the emphasis area.

For more information on the Black Studies Program, please visit <http://cas.umkc.edu/blackstudies/>.

Code	Title	Credits
General Electives		23
Minimum GPA: 2.0		
Total Credit Hours: 120		

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110		3 COMM-ST 110	3
GECRT-SS 101		3 GECRT-SC 101	3
GECRT-AH 101		3 HISTORY 101, 102, or POL-SCI 210	3
MATH 116 or STAT 115		3 General Elective	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
GECUE 201		3 GECDV 201	3
BLKS 201		3 BLKS 302	3
Arts/Humanities BLA Area course		3 BLKS 3XX/4XX Interest Area Course	3
Natural Science/Math BLA Area course		3 Arts/Humanities BLA Area course	3
Lab Science ^{L0}		1 Natural Science/Math BLA Area course	3
General Elective		3	
		16	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
BLKS 3XX/4XX Interest Area Course		3 BLKS 403WI	3
Arts/Humanities BLA Area course		3 BLKS 3XX/4XX Interest Area Course	3

Social/Behavioral Science BLA Area course	3	Arts/Humanities BLA Area course	3
Natural Science/Math BLA Area course	3	Social/Behavioral Science BLA Area course	3
General Elective	2	Natural Science/Math BLA Area course	3
	14		15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
BLKS 404		3 BLKS 496 or 490	3
BLKS 3XX/4XX Interest Area Course		3 BLKS 3XX/4XX Interest Area Course	3
3XX/4XX Arts/Humanities BLA Area course		3 3XX/4XX Arts/Humanities BLA Area course	3
3XX/4XX Social/Behavioral Science BLA Area course		3 3XX/4XX Social/Behavioral Science BLA Area course	3
Natural Science/Math BLA Area course		3 Natural Science/Math BLA Area course	3
	15		15
Total Credits: 120			

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Graduate Certificate in Black Studies

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate knowledge of the historical development of African American studies as an academic field.
- Be able to review and evaluate the work of key scholars in the field of African American studies.
- Demonstrate the ability to apply foundational ideas in African American studies in the interpretation of historical, political and social phenomena.

Graduate Certificate in Black Studies:

The Black Studies Program at the University of Missouri-Kansas City offers a graduate certificate in Black Studies. The certificate permits students to augment their graduate and professional work with specialized training in Black Studies.

Black Studies is a liberal arts specialty that typically draws from multiple fields of inquiry. The graduate certificate in Black Studies advances students' awareness of the multidisciplinary and trans-disciplinary character of the field, key theoretical issues that form the parameters of this specialty, and important tools for producing knowledge in Black Studies. The graduate certificate familiarizes students with the expansive character of existing knowledge in Black Studies and shows how this knowledge can be used to understand the human experience generally.

The graduate certificate offers a coherent and focused course of study for any graduate student. The certificate also prepares students to seek advanced degrees with an emphasis in Black Studies if they choose to do so. *Applicants seeking to enroll in the graduate certificate may do so as a free-standing option or within a UMKC degree program.*

Admission Criteria:

To be admitted to the graduate certificate program in Black Studies, students must be admitted as a graduate student to the University of Missouri-Kansas City and have an overall grade-point average of 3.25. They must have had an acceptable introductory course in the field of Black Studies (which may come from programs or departments of Black Studies, African American Studies, African Studies, Pan African Studies, and the like) from an accredited college or university.

If a student has not had an introductory course in the field, he or she must pass BLKS 201, with a grade of C or better.

Applicants whose undergraduate GPA is less than 3.25 may be considered for admission upon petition to the **Graduate Admission Committee** for the Black Studies Program.

Prospective students applying for admission must:

1. Complete the online UMKC Graduate Application.
2. Submit official transcripts from an accredited institution showing the awarding of an undergraduate degree. Transcripts are considered official if they are received in a sealed envelope from the institution or sent electronically to the UMKC Office of Admissions (admit@umkc.edu).
3. Provide an Academic Writing Sample.
4. Provide three letters of recommendation to the **Black Studies Graduate Admission Committee** at the **Black Studies Program, 5305 Holmes Road, Kansas City, Missouri 64110**

The **priority deadline** to apply for **Fall Semester** is **March 1**. The **final deadline** to apply for **Fall semester** is **August 1**. The **deadline** to apply for **Spring semester** is **November 1**.

Program Requirements:

To earn the graduate certificate in Black Studies students must complete 18 hours of graduate course work in Black Studies, which does not include BLKS 201. At least 12 hours must be at or above the 5500-level. Students must maintain a 3.0 grade-point average while enrolled. The requirements for the certificate must be completed within two (2) years. Students should seek advising from the Black Studies Program graduate advisor (<http://cas.umkc.edu/blackstudies/faculty.asp>) prior to beginning a *Plan of Study* and to make sure they have met the requirements for the certificate.

The 18 hours of course work must include the three core courses:

Code	Title	Credits
BLKS 5502	Conceptual and Theoretical Foundations in African American Studies (must be taken during the first year)	3
BLKS 5503	Writing for African American Studies (must be taken during the first year)	3
BLKS 5504	Research Seminar (must be taken during the final year)	3

Beyond the three required core courses, students must complete **6 hours of electives** in Black Studies, which includes any graduate level course with a Black Studies prefix (BLKS). One elective should be taken in the Humanities Focus and the second in the Social Science Focus.

Examples of elective graduate courses in Black Studies are:

Code	Title	Credits
BLKS 5510	African American Art History: Part II, 1960-Present Day (Humanities Focus)	3
BLKS 5520	Critical Health Issues in Black Communities (Social Science Focus)	3
BLKS 5521	The Black Family & Male-Female Relationships (Social Science Focus)	3
BLKS 5525	African American Business Development (Social Science Focus)	3
BLKS 5530	African American Migrations in Literature (Humanities Focus)	3

BLKS 5534	From Field Shout to Hip Hop: African American Poetic Traditions (Humanities Focus)	3
BLKS 5535	Stages toward Freedom: African American Dramatic Traditions (Humanities Focus)	3
BLKS 5537	The Civil Rights Movement in African American Literature (Humanities Focus)	3
BLKS 5538	Women's Literature in Africa and the African Diaspora (Humanities Focus)	3
BLKS 5539	Slave Narratives: Race, Gender and Writing Freedom (Humanities Focus)	3
BLKS 5549	Symbols and Codes from the Diaspora: African American Visual Arts Survey (Humanities Focus)	3
BLKS 5551	African American Art History: Part I, 1600-1960 (Humanities Focus)	3

Electives may also be **Special Topics courses** (BLKS 5580).

Examples of **Special Topics** (BLKS 5580) courses with a **Humanities Focus** are:

- African American Experience in Literature (1773-1960)
- Contemporary African American Literature
- Film Adaptations in African American Literary Text
- Introduction to Caribbean Literature and Film

Examples of **Special Topics** (BLKS 5580) courses with a **Social Science Focus** are:

- From Vaudeville to Rhythm and Blues
- Hip-Hop's Influence on African Americans and American Society
- Kansas City and the Black Experience
- Race, Class and Justice
- Racial and Ethnic Relations

Students are strongly encouraged to take the **remaining 3 hours** as an **approved community engagement project/research** under **Directed Study** (BLKS 5590) or **Internship** (BLKS 5596). Because faculty consent is required in order to enroll in the Directed Study or Internship options, students should begin building an academic relationship with the Black Studies faculty member whose academic background can best guide them.

Master of Arts in Liberal Studies: Black Studies Interest Area

Admission Requirements:

Students may be admitted to the Black Studies Interest Area if they have a baccalaureate degree in Black Studies or an equivalent degree from an accredited college or university with an overall grade-point average of 3.25. Applicants whose undergraduate GPA is less than 3.25 may be considered for admission upon petition to the **Graduate Admission Committee** for the Black Studies Program.

Students who have a baccalaureate degree with an overall GPA of 3.25 or better and who did not major in Black Studies may be conditionally admitted to the Program upon consultation with the program's graduate advisor (<http://cas.umkc.edu/blackstudies/faculty.asp>) and enrollment into the Black Studies introductory course, BLKS 201.

Upon satisfactory completion of the above course, the student must receive final approval from the Black Studies Director for full admission to the Interest Area.

Prospective students applying for admission must submit, in addition to the UMKC application, the following documents:

1. A "Statement of Purpose" in the form of a personal essay of approximately 1,000 words outlining the focus area the applicant wishes to pursue. The statement should include the student's reasons for applying to the Program along with their academic plans and goals.
2. An Academic Writing Sample.
3. Three (3) Letters of Recommendation.
4. Official transcripts from an accredited institution showing the awarding of an undergraduate degree. Transcripts are considered official if they are received in a sealed envelope from the institution or sent electronically to the UMKC Office of Admissions (admit@umkc.edu).

These documents (except the UMKC application) should be sent directly to the Master of Arts in Liberal Studies Program. The documents can be sent in print form to: **MALS Program, 106 Cockefair Hall, UMKC, 5100 Rockhill Road, Kansas City, MO 64110.**

Electronic copies may also be submitted as either Word or PDF attachments to an email to mals@umkc.edu.

Applications that indicate Black Studies as the focus area will be forwarded to the respective program for review by the Graduate Admission Committee for Black Studies.

Prior to submitting an application, prospective students should speak with the Black Studies graduate advisor (<http://cas.umkc.edu/blackstudies/faculty.asp>)

The **priority deadline** to apply for **Fall Semester** is **March 1**. The **final deadline** to apply for **Fall semester** is **August 1**. The **deadline** to apply for **Spring semester** is **November 1**.

Student Learning Outcomes:

1. Demonstrate knowledge of the historical development of African American studies as an academic field.
2. Be able to review and evaluate the work of key scholars in the field of African American studies.
3. Demonstrate the ability to apply foundational ideas in African American studies in the interpretation of historical, political and social phenomena.

Program Requirements:

The degree is a 36 credit hour program. Students who elect to participate in the Black Studies Interest area should begin by enrolling in the Black Studies core courses, BLKS 5502 and BLKS 5503 (fulfills MALS introductory seminar requirement) and during their last year of the program, students should enroll in BLKS 5504 (fulfills MALS capstone seminar requirement).

Thesis Option

A written thesis is not required, however students who have a particular interest that lends itself to detailed research are especially encouraged to consider the thesis option. Students who wish to complete a thesis project may apply three credit hours from BLKS 5599 toward their degree requirements. With the thesis option, the students must select a Black Studies faculty member as their thesis adviser who will direct the plan of study and research.

Plan of Study

Graduate students should complete the three core courses listed below. *Please note, that those students who may have taken undergraduate versions of the core courses must complete them at the graduate level.*

The three core courses are:

Code	Title	Credits
BLKS 5502	Conceptual and Theoretical Foundations in African American Studies (must be taken during the first year)	3
BLKS 5503	Writing for African American Studies (must be taken during the first year; fulfills MALS introductory seminar requirement)	3
BLKS 5504	Research Seminar (must be taken during the final year; fulfills MALS capstone seminar requirement)	3

Students should work with the Black Studies graduate advisor (<http://cas.umkc.edu/blackstudies/faculty.asp>), prior to the start of each semester, in order to review their **plan of study worksheet** and make sure they are accurately fulfilling the additional **27 hours of elective course work** that is relevant to the field. Recommended courses include all graduate-level courses with a Black Studies prefix and other courses approved by the Director of the Black Studies Program. Students are encouraged to take elective courses with both humanities and social science focuses.

Examples of elective graduate courses in Black Studies are:

Code	Title	Credits
BLKS 5510	African American Art History: Part II, 1960-Present Day (Humanities Focus)	3
BLKS 5520	Critical Health Issues in Black Communities (Social Science Focus)	3
BLKS 5521	The Black Family & Male-Female Relationships (Social Science Focus)	3
BLKS 5525	African American Business Development (Social Science Focus)	3
BLKS 5530	African American Migrations in Literature (Humanities Focus)	3
BLKS 5534	From Field Shout to Hip Hop: African American Poetic Traditions (Humanities Focus)	3
BLKS 5535	Stages toward Freedom: African American Dramatic Traditions (Humanities Focus)	3
BLKS 5537	The Civil Rights Movement in African American Literature (Humanities Focus)	3
BLKS 5538	Women's Literature in Africa and the African Diaspora (Humanities Focus)	3
BLKS 5539	Slave Narratives: Race, Gender and Writing Freedom (Humanities Focus)	3
BLKS 5549	Symbols and Codes from the Diaspora: African American Visual Arts Survey (Humanities Focus)	3
BLKS 5551	African American Art History: Part I, 1600-1960 (Humanities Focus)	3

Electives may also be Special Topics (BLKS 5580) or Research and Thesis (BLKS 5599).

Examples of **Special Topics** courses with a **Humanities Focus** are:

- African American Experience in Literature (1773-1960)
- Contemporary African American Literature
- Film Adaptations in African American Literary Text
- Introduction to Caribbean Literature and Film

Examples of **Special Topics** courses with a **Social Science Focus** are:

- From Vaudeville to Rhythm and Blues
- Hip-Hop's Influence on African Americans and American Society
- Kansas City and the Black Experience
- Race, Class and Justice
- Racial and Ethnic Relations

Students are strongly encouraged to take the remaining **3 hours of course work** as an **approved community engagement project/research** under the **Directed Study** (BLKS 5590) or through **Internship** (BLKS 5596). Because faculty consent is required in order to enroll in the Directed Study or Internship options, students should begin building an academic relationship with the Black Studies faculty member whose academic background can best guide them.

For more information on the **Master of Arts in Liberal Studies Degree**, please click here (p. 871).

Minor in Black Studies

Student Learning Outcomes

Students graduating from this program will:

- Construct knowledge based timeline which outlines evidence of seminal African American contributions to American history and American society.
- Interpret and compare current events and other contexts of human struggle based on their knowledge of historical global systems within the paper collected from core courses.
- Examine the origins and historical experience of Blacks in the Americas from the perspective of several African American scholars.
- Evaluate seminal ideas through researching the works of major scholars in the various disciplines encompassing the canon of African American Studies.
- Create well-written critical responses to articulate and communicate their analyses of course lectures and activities.

Program Requirements:

Students who elect to earn a minor in Black Studies must meet with the Black Studies undergraduate advisor (<http://cas.umkc.edu/blackstudies/faculty.asp>) to begin a plan of study prior to enrolling in courses toward the minor. There are 18 credit hours of prescribed coursework, of which nine hours must be at the 300- or 400-levels, and a minimum of nine hours must be earned at UMKC.

Code	Title	Credits
Required Coursework		
BLKS 201	Global Systems and the Origins of Black American Culture and Institutions	3
BLKS 302	Conceptual and Theoretical Foundations in African American Studies	3
BLKS 403WI	Writing for African American Studies	3
BLKS 404	Research Seminar	3
Electives		
BLKS 315	Arts of African and New World Cultures (Humanities Focus)	3
BLKS 320	Critical Health Issues in Black Communities (Social Science Focus)	
BLKS 321	The Black Family and Male-Female Relationships (Social Science Focus)	
BLKS 331	African American Literature I (Humanities Focus)	
BLKS 332WI	African American Novel (Humanities Focus)	
BLKS 325	African American Business Development (Social Science Focus)	
BLKS 333	African American Literature II (Humanities Focus)	
BLKS 334	From Field Shout to Hip Hop: African American Poetic Traditions (Humanities Focus)	
BLKS 335	Stages Toward Freedom: African American Dramatic Traditions (Humanities Focus)	
BLKS 337	The Civil Rights Movement in African American Literature (Humanities Focus)	
BLKS 338	Women's Literature in Africa and the African Diaspora (Humanities Focus)	

BLKS 349	Symbols and Codes from the Diaspora: African American Visual Arts Survey (Humanities Focus)	
BLKS 351	African American Art History: Part I, 1600-1960 (Humanities Focus)	
BLKS 410	African American Art History: Part II, 1960-Present Day (Humanities Focus)	
Directed Studies or Internship		3
BLKS 496	Internship in Black Studies	
or BLKS 490	Directed Study/Research	
Total Credits		18

Examples of **Black Studies, Special Topics** (BLKS 480) courses with a **Humanities Focus** are:

- African American Experience in Literature (1773-1960)
- African American Migrations in Literature
- Contemporary African American Literature
- Film Adaptations in African American Literary Text
- Introduction to Caribbean Literature and Film

Examples of **Black Studies, Special Topics** (BLKS 480) courses with a **Social Science Focus** are:

- From Vaudeville to Rhythm and Blues
- Hip-Hop's Influence on African Americans and American Society
- Kansas City and the Black Experience
- Race, Class and Justice
- Racial and Ethnic Relations

Students are strongly encouraged to take the remaining **3 hours of coursework** as an **approved community engagement project/research** under **Directed Study**, BLKS 490 or through **Internship**, BLKS 496. Because faculty consent is required in order to enroll in the Directed Study or Internship options, students should begin building an academic relationship with the Black Studies faculty member whose academic background can best guide them.

Students wishing to graduate with a Minor in Black Studies must achieve a minimum grade-point average of 2.0 (cannot be below a "C") in Black Studies courses.

To learn more about the Black Studies Program, please click here (<http://cas.umkc.edu/blackstudies/default.asp>).

Classical and Ancient Studies Program

Cockefair Hall 106

Phone: (816) 235-1305

Fax: (816) 235-1308

<http://cas.umkc.edu/classics> (<http://cas.umkc.edu/classics/>)

Mailing Address:

University of Missouri - Kansas City

Classical and Ancient Studies Program

Cockefair Hall 106

5121 Rockhill Road

Kansas City, MO 64110-2499

The field of Classics is the original interdisciplinary university field of study, illuminating the foundations of Western experience through the study of language, literature, religion, philosophy, art, archaeology and other subjects. Modern Classics programs continue to focus on the ancient Mediterranean world, particularly Greek and Roman culture, but also encompass the study of non-Western cultures and post-Greco-Roman societies. The broad scope and intellectual rigor of the Classical and Ancient Studies major and minor options help students to understand the contemporary world and to prepare for a wide range of careers.

The Classical and Ancient Studies program provides several options for the study of history, literature, art, culture, and language of the Ancient Mediterranean world. Students can major in English and complete the track in Classical, Medieval, and Early Modern Literature; major in History with a concentration in Antiquity and Medieval history; major in Foreign Languages with an emphasis in Classical Language and Cultures; or pursue a minor in Classical and Ancient Studies in conjunction with any of the degrees above or with any other degree program.

Faculty

Faculty:

Jeff Rydberg-Cox, Ph.D., Professor, Department of English; Classical and Ancient Studies Program Director

Elpida Scott, M.A., Instructor, Classical and Ancient Studies Program

Cynthia Jones, Ph.D., Instructor, Classical and Ancient Studies Program

James Falls, Ph.D., Associate Professor Emeritus, Department of History

Affiliated Faculty:

Virginia Blanton, Ph.D., Chair, Department of English

Robert Cohon, Ph.D., Research Associate Professor, Department of Art and Art History; Curator of Ancient Art, Nelson-Atkins Museum of Art

Laurie Ellinghausen, Ph.D., Associate Professor, Department of English

Linda Mitchell, Ph.D., Martha Jane Phillips Starr/Missouri Distinguished Professor of Women's and Gender Studies

Tina Niemi, Ph.D., Professor, Department of Geosciences

Ann Raab, Ph.D., Adjunct Lecturer

L. Mark Raab, Ph.D., Adjunct Lecturer

Massimiliano Vitiello, Ph.D., Assistant Professor, Department of History

Undergraduate

Undergraduate Degrees That Offer a Classics Emphasis:

The Classical and Ancient Studies program provides several options for the study of history, literature, art, culture, and language of the Ancient Mediterranean world. Students can major in English and complete the track in Classical, Medieval, and Early Modern Literature; major in History with a concentration in Antiquity and Medieval history; major in Foreign Languages with an emphasis in Classical Languages and Cultures; or pursue a minor in Classical and Ancient Studies in conjunction with any of the degrees above or with any other degree program.

- English Department: Emphasis in Classical, Medieval, and Early Modern Literature (<http://catalog.umkc.edu/colleges-schools/arts-sciences/academic-departments-programs/classical-ancient-studies-program/english-department-emphasis-in-classical-medieval-early-modern-literature/>)
- Foreign Languages and Literatures Department: Emphasis in Greek and Latin (p. 810)
- History Department: Antiquity and Medieval History Concentration (p. 850)
- Minor in Classical and Ancient Studies (p. 617)

Classics Courses

CLASSICS 119 Myth and Literature Credits: 3

A study of classical myth including readings from Homer to Ovid, analysis of selected myths in later literature, art, and music, and a study of contemporary definitions and approaches to myth.

CLASSICS 119 - MOTR LITR 201: Mythology



CLASSICS 131 Seven Wonders and Beyond: Archaeological Wonders of the Ancient World Credits: 3

This is a survey of the archaeology of Egypt and the Near East, the Aegean cultures of Crete and Mycenae, and the world of classical Greece and Italy. In addition, archaeological wonders of Europe and the New World will be discussed.

CLASSICS 210 Foundations Of Ancient World Literature I Credits: 3

This course studies ancient world literature such as The Descent of Inanna, Egyptian love poetry, Hebrew Scriptures, the epics of Homer and Virgil, the Analects of Confucius, and the wisdom of Laozi. The course also considers ancient creation epics such as the cosmic battle between Marduk and Tiamat, the Metamorphosis of Ovid, and the great Indian epic The Ramayana.

CLASSICS 210 - MOTR LITR 200A: World Lit-Beg w/Antiquity End 1660



CLASSICS 300 Special Topics Credits: 1-3

A course about a selected field, genre or individual figure from the ancient world that is not part of the program's regular offerings. May be repeated for credit.

CLASSICS 300CY Ancient World in Cinema Credits: 3

This course will explore the tradition of depicting the ancient Mediterranean world in film from the early silent era to the present. Topics to be covered include the ways that filmmakers respond to literary and historical sources from the ancient world, interact with the artistic tradition of films about the ancient world, the relation of these films to other works by the same creative personnel (directors, actors, writers, producers, etc.), and the political and cultural contexts in which the films were released.

CLASSICS 300CZ Archaeology Of Ancient Disasters Credits: 3

Remarkable human achievements are revealed by archaeological research, but the human past was frequently shaped as well by disasters of natural and human origin. Drawing on case studies that include data from the geosciences, archaeological excavations, and historical sources, this class examines how earth processes, the biosphere, and human cultural behavior were all sources of catastrophe. The study of ancient disasters not only gives us a wider understanding of human history, it may offer lessons for coping with future catastrophes.

CLASSICS 340AWI Classical Literature In Translation Credits: 3

This course will focus on representative authors and works from the Greek and Roman Classical periods, such as Homer, Sophocles, Euripides, Aeschylus, Aristophanes, Plato, the Greek Lyrics, Virgil, Horace, Juvenal, Ovid and Plautus.

CLASSICS 369 Introduction to Prehistoric and Classical Archaeology Credits: 3

An introduction to archaeological research methods that traces human origins and cultural development from the earliest fossil evidence to the threshold of written history and civilization. This class emphasizes the evolutionary and cultural developments that allowed our ancestors to colonize the continents and develop lifeways involving hunting and gathering, farming and urbanism.

CLASSICS 384 Frauds, Myths and Mysteries in Archaeology Credits: 3

Using archaeological hoaxes, myths, and mysteries from around the world – including local and regional examples - students will use science to make good judgments about information they receive in today's world. This course will demonstrate how science approaches questions about human antiquity and will show where pseudoscience falls short. (Lecture/on-line asynchronous).

CLASSICS 391WI Ancient Greek and Roman Medicine Credits: 3

This course explores the practice of medicine in the Ancient Greek and Roman Worlds from 800 BCE until 300 CE. Students will read primary sources in English and will also be introduced to Greek and Latin grammar and medical vocabulary so that they can understand and study essential terms from the history of medicine in their original language.

CLASSICS 471 Ancient Greece Credits: 3

This course begins with a survey of the pre-classical Minoan and Mycenaean civilizations and then describes the rise of prominent Greek city-states (with particular emphasis upon the evolution of Sparta and the political, social and cultural contributions of Athens). The course concludes with the rise of Macedon and Alexander's conquests and significance.

CLASSICS 499 Senior Tutorial Credits: 3

A three-hour comprehensive reading and research tutorial leading to the writing of a senior paper. It consist of tutorial sessions and independent research leading to a major paper using original source materials.

Greek Courses

GREEK 110 Elementary Ancient Greek I Credits: 3

The goal of this course is an ability to read classical Greek. The student will be introduced to the fundamentals of grammar and the basic vocabulary of the language and will do exercises in the reading and writing of sentences. Continuous passages of Greek will be presented by the end of the semester.

GREEK 110 - MOTR LANG 105: Foreign Language I

**GREEK 120 Elementary Ancient Greek II Credits: 3**

A continuation of the study of the grammar and vocabulary of classical Greek, with an increasing emphasis on developing skills in translation. By the middle of the semester students will be introduced to selections from Plato, Herodotus or Homer.

Prerequisites: Greek 110 or MOTR Equivalent.

GREEK 120 - MOTR LANG 106: Foreign Language II

**GREEK 211 Intermediate Ancient Greek I Credits: 3**

Instruction of Greek on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.

Prerequisites: Greek 120 or MOTR Equivalent.

GREEK 221 Intermediate Ancient Greek II Credits: 3

Continuation of GREEK 211. May not be repeated for credit.

Prerequisites: Greek 211 or MOTR Equivalent.

GREEK 301 Herodotus Credits: 3

Selected readings in Ancient Greek from Herodotus' Histories.

Prerequisites: GREEK 211.

GREEK 302 Homer Credits: 3

Selected readings in Ancient Greek from Homer's Iliad or Odyssey.

Prerequisites: GREEK 211.

GREEK 310 Selected Readings in Ancient Greek and Rhetoric Credits: 3

Selected readings in Ancient Greek from works by Plato, Aristotle, or the Attic Orators.

Prerequisites: GREEK 211.

GREEK 311 Drama and Lyric Poetry Credits: 3

Selected readings in Ancient Greek from plays by Aeschylus, Sophocles, Euripides, or the Lyric Poets.

Prerequisites: GREEK 211.

GREEK 312 Greek Narrative Prose Credits: 3

Selected readings in Ancient Greek from Herodotus, Thucydides, Xenophon, Lucian, etc.

Prerequisites: GREEK 211.

GREEK 490 Special Readings in Greek Credits: 1-3

Intensive readings in period or genre or literary figure to be selected by the student in consultation with the instructor. Available only to advanced Greek students.

Latin Courses

LATIN 110 Elementary Latin I Credits: 3

Elementary Latin I introduces students with no previous Latin experience to the fundamentals of Latin grammar. The course is continued with LATIN 120.

LATIN 110 - MOTR LANG 105: Foreign Language I



LATIN 120 Elementary Latin II Credits: 3

Elementary Latin II is a continuation of LATIN 110. This course focuses on the fundamentals of Latin grammar and morphology, and students will read longer Latin passages.

Prerequisites: LATIN 110 or MOTR Equivalent.

LATIN 120 - MOTR LANG 106: Foreign Language II



LATIN 211 Second Year Latin Readings I Credits: 3

This course introduces students to extended readings from Roman authors in Latin. Students' knowledge of basic Latin grammar, vocabulary, and morphology will be reviewed and reinforced.

Prerequisites: LATIN 120 or MOTR Equivalent.

LATIN 221 Second Year Latin Readings II Credits: 3

Prerequisites: LATIN 211 or MOTR Equivalent.

LATIN 280 Special Intermediate Latin Topics I Credits: 2-4

Instruction of Latin on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.

Prerequisites: LATIN 120.

LATIN 290 Special Intermediate Latin Topics II Credits: 2-4

Continuation of LATIN 280. May not be repeated for credit.

LATIN 301 Virgil Credits: 3

Selected readings in Classical Latin from the works of Virgil.

Prerequisites: LATIN 211.

LATIN 302 Ovid Credits: 3

Selected readings in Classical Latin from Ovid's Metamorphoses.

Prerequisites: LATIN 211.

LATIN 314 Lyric and Elegiac Poetry Credits: 3

Selected readings in Classical Latin from Catullus, Horace, Martial, Ovid, etc.

Prerequisites: LATIN 211.

LATIN 490 Special Readings In Latin Credits: 1-3

Intensive readings in period or genre or literary figure to be selected by the student in consultation with the instructor. Available only to advanced Latin students.

Foreign Languages and Literatures Department: Emphasis in Greek and Latin University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
	Writing Intensive Course (300-level or above)	3
	Foreign Language (3rd Semester Level)	9
	Laboratory Science Experience	1
Total Credits		13

If you would like to focus on the study of ancient languages, you can pursue a degree in Foreign Languages with an emphasis in Greek and Latin. This track involves a core set of language courses that allow you to become a proficient reader of Ancient Greek and Latin texts. This language core is supplemented with electives offered by the Classics Program, the History Department, the English Department, the Art and Art History Department, and the Philosophy Department. These electives are taught using translated texts, and these courses allow you to tailor your program of study to your specific interests in history, art or literature. In addition to these electives, students must also complete a capstone course. For more information, see the relevant catalog section for the Foreign Languages and Literatures Department (p. 810).

History Department: Antiquity and Medieval History Concentration

Students who are interested in ancient and medieval history can pursue a concentration in Antiquity and Medieval history as part of a history major. The history major includes two foundation courses that survey world history, four courses in the Classics area of concentration, four courses in areas outside the area of concentration, and a two-semester final research sequence: History 301WI "Historiography and Method," and History 498WI "Senior Capstone Seminar." For the Antiquity and Medieval history concentration, students take four courses in Ancient or Medieval History. Two of these courses can be taken in departments other than history including Classics, English, Art History, Philosophy, and Geosciences. For more information, see the relevant catalog section for the History Department (p. 850).

Minor in Classical and Ancient Studies

Student Learning Outcomes

Students graduating from this program will:

- Knowledge of Historical, Literary, Artistic, and Cultural Contexts Students will be able to reproduce in broad outline the main periods of Ancient Mediterranean history, along with significant events and/or developments in each period. Students will also be able to demonstrate their

awareness of basic literary, philosophical, social, and cultural developments that affect the interpretation of texts, artifacts, and historical events from cultures and across the Mediterranean.

- **Understanding of the Reception of the Ancient World** Students will be able to demonstrate knowledge of at least one of the ways in which material from the Ancient Mediterranean World has been received and integrated into other later artistic, literary, historic, or cultural contexts.
- **Proficiency With Primary Sources** Students will be able to identify and articulate scholarly problems based on interaction with primary source materials from the ancient world. Students who elect to take Greek or Latin will demonstrate further proficiency working with primary source materials in the original languages.
- **Proficiency in Research Methods** Students will be able to analyze secondary source materials and describe current scholarly conversations about the ancient world.
- **Communication of Knowledge** Students will be able to communicate results of their work effectively to others in expository prose, oral presentations, or electronic media such as films or web pages.

Students can pursue a minor in Classical and Ancient Studies in conjunction with any degree program. The minor is an 18 hour program that allows students the flexibility to pursue their individual interests in the ancient world. To complete the minor students take 18 hours of credit selected in consultation with program advisor. Nine of these hours must be at or above the 300-level. A maximum of six credit hours can count towards both a major and the Classical and Ancient Studies minor.

Code	Title	Credits
Select from the following:		18
Any course with the subject designation of CLASSICS, GREEK, or LATIN		
ANCH 302	Archaeology of Ancient Disasters	
ANCH 307	Frauds, Myths and Mysteries in Archaeology	
ART-HIST 201	From Cave Paintings to Cathedrals	
ART-HIST 253	History Of The Designed Environment I, Ancient And Medieval	
ART-HIST 479	From the Parthenon to the Altar of Peace	
COMM-ST 323	Concepts of the Hero in Ancient Literature and World Cinema	
ENGLISH 120	Literary Monstrosities	
ENGLISH 318	Bible As Literature	
ENGLISH 445	History And Principles Of Rhetoric	
HISTORY 469	Archeology and Biblical History	
HISTORY 470	Ancient Egypt	
HISTORY 471	Ancient Greece	
HISTORY 472	Ancient Rome	
HISTORY 474	Late Antiquity: The Transformation of the Mediterranean World (200–600 AD)	
PHILOS 310WI	Ancient Philosophy	
PHILOS 430	Plato	
PHILOS 431	Aristotle	
Total Credits		18

Department of Communication Studies

Haag Hall, Room 202
 5120 Rockhill Road
 (816) 235-1337
 Fax: (816) 235-5539
 com-s@umkc.edu
<http://cas.umkc.edu/comm> (<http://cas.umkc.edu/comm/>)

Mailing Address

University of Missouri-Kansas City
 Department of Communication Studies
 HH 202
 5120 Rockhill Road
 Kansas City, MO 64110-2499

Department Chair

Ye Wang

Professors Emeriti:

Joan E. Aitken, Gregory Black, Michael Neer, Robert Unger

Associate Professor Emeriti:

Gregory Gutenko, Larry G. Ehrlich, G. Thomas Poe

Professors:

Lyn Elliot (Undergraduate Advisor for Film and Media Arts)

Associate Professors:

Caitlin Horsmon (Undergraduate Advisor for Film and Media Arts), Jason Martin, Peter Morello, Ye Wang

Associate Teaching Professors:

Linda Kurz (Undergraduate Advisor), Judith K. McCormick (Undergraduate Advisor), Mitchell Brian, Steve Kraske, Steven Melling

Assistant Teaching Professors:

Angela Elam

Lecturers:

Jean Dufresne, Michael Schaefer

The department offers courses leading to a Bachelor of Arts in Communication Studies and a Bachelor of Arts in Film & Media Arts.

The Bachelor of Arts in Communication Studies degree offers three areas of emphasis:

- Interpersonal and Public Communication
- Journalism and Mass Communication
- Film and Media Studies

Department Description

The Department of Communication Studies produces students who think creatively and critically and who have developed oral, written, and visual communication skills essential to professional and personal collaboration, media production and analysis, cultural awareness, and community engagement. The Department of Communication Studies offers a variety of program areas, including interpersonal communication, public communication, print and digital journalism, advertising, public relations, media theory and history, as well as radio, digital media, and film/video production.

Students graduating from the Department of Communication Studies Will:

- Demonstrate proficiency in formal writing, oral presentation and visual communication.
- Create messages and media works appropriate to their audience, purpose and context.
- Explain, synthesize and apply Communication research methods, theories, perspectives, principles and concepts.
- Articulate the connection between communication and culture.

The **Bachelor of Arts in Film & Media Arts** provides rigorous training in media production focused on individual creative development and cinematic storytelling. The degree integrates the study of film history with hands-on production in a variety of filmmaking practices including narrative, documentary, experimental and animation.

The **Interpersonal and Public Communication** emphasis offers study in the areas of public address and rhetoric, interpersonal and intercultural communication, organizational communication and areas associated with human communication behavior including advertising, public relations and strategic communication.

The **Journalism and Mass Communication** emphasis offers concentrated study in print and electronic journalism, radio, television, advertising and public relations.

The **Film and Media Studies** emphasis provides an interdisciplinary study of film and media, including the history and theory of global cinema culture, critical media studies and media production.

UMKC Debate

The UMKC debate program operates from the Department of Communication Studies. UMKC offers a great blend of quality education, extremely competitive debate program and a wonderful city to spend your college years in.

- UMKC Debate Team is open to all UMKC students including those with no previous debate experience. - Interested students can email the Director of Debate: vegam@umkc.edu.

- **Travel Schedule:** UMKC has a full travel schedule and travels the NDT/CEDA policy debate circuit. This includes tournaments throughout the region and across the country.
- **Squad Size:** UMKC has a medium-sized squad which has the benefit of allowing all debaters the ability to go to many tournaments throughout the year. Each debater will have the chance to flourish at regional and national tournaments.
- **Coaching:** UMKC currently has an excellent coaching staff. Our excellent student-to-coach ratio guarantees hands-on coaching and extensive focus for each debater.

Special Laboratories

The department has media classrooms and production spaces for student projects that include a video production studio soundstage with lighting grid and green-screen, sound recording facility with radio console and podcast capabilities, a multi-camera digital broadcast studio outfitted for newscast, interviews & webinars, in addition to iMac based post production media labs running the latest versions of video, audio and digital imaging software. An equipment check-out lab for film and journalism students, maintains an extensive inventory of portable production equipment including cameras, audio equipment, lights, tablets, stationary and mobile camera support. Our facilities foster the ability to light, shoot, record and edit professionally, allowing the students to tell compelling stories that make an impact on audiences.

K-ROO Radio is a student-run multimedia organization that aims to provide students, faculty, staff, and the Kansas City community with quality entertainment and information about UMKC events and organizations. Through Internet radio and live events, www.k-roo.org (<http://www.k-roo.org/>) provides a platform to reach a worldwide audience to promote and support student endeavors, as well as create programming in music, sports, news, and spoken word/comedy/drama productions. K-ROO Radio, which reports to the Office of Student Involvement, is open to all students of any major and is located on the third floor of the Student Union at 5100 Cherry St. in room 303B. Internships for production and promotions are available through the Communication Studies Department.

The nationally syndicated public radio program, *New Letters on the Air*, features creative writers from around the world and is produced in association with the internationally distributed *New Letters* magazine and the Communication Studies department. - Broadcast locally on KCUR-FM, the weekly program is also available via www.newletters.org/radio (<http://www.newletters.org/radio/>) and podcasts - KCUR-FM <http://kcur.org/> is the 100,000-watt public radio station licensed to UMKC. - Programming includes offerings from National Public Radio and Public Radio International, as well as local news from the award-winning news department. - Internships are available year round to Communication Studies students.

Special Awards and Scholarships

The Alex and Josephine B. Coleman Scholarship is awarded each year to an outstanding junior- or senior-level student. The award recognizes meritorious undergraduate work in communications and encourages program completion. The Suzanne Crispin Williams Scholarship is awarded annually to a non-traditional returning female student in Communication Studies or Women's Studies. A Film Finishing Fund provides grants to intermediate and advanced production students and the Student Film League holds showcases of student film and video projects. Cash prizes may be awarded for winning entries. The Faye Kircher Public Speaking Contest is held in the spring semester. Students enrolled in COMM-ST 110 courses are selected by their classmates for participation in the public speaking contest. Cash prizes are awarded. The Fred G. Andrews Jubilee Creative Cinema Fund will provide support for sponsored or co-sponsored workshops, programming for Film and Media Arts, as well as internships and scholarships for students majoring in Communication Studies with an emphasis in Film and Media Arts. The Carol Koehler Memorial Scholarship is awarded annually to a Communication Studies student enrolled in a three hour internship. Scholarship information can be found on the Communication Studies website at http://cas.umkc.edu/Communication_Studies/scholarships.cfm.

Career Implications

Communication students may find rewarding careers in the multifaceted communication industry. The program is excellent preparation for careers in media production, marketing, public relations, advertising, radio, nonprofit organizations and human resources.

Further Educational Opportunities

The B.A. in Communication Studies prepares students for advanced study in communication studies, film and media, as well as in graduate programs such as law, medicine, business, public administration and those associated with the applied and performing arts.

Internship Program

All students completing the B.A. in Film & Media Arts and emphasis in Journalism and Mass Communication are required to complete an internship. - Although an internship is not required for students completing an emphasis in Interpersonal and Public Communication or Film and Media Arts, the Communication Studies Department strongly recommends the internship experience as a means of linking theory to practice, and preparing students to work effectively in professional settings. - Internships provide students with on-the-job experience which is both practical and purposeful. The internship program allows opportunities for experience on a national and international level.

The Internship course number is COMM-ST 484. Each intern is required to enroll in at least one credit hour. One credit hour requires 75 hours of internship work. Two credit hours require 150 hours of internship work. Three credit hours require 225 hours of internship work. Four credit hours require 300 hours of internship work.

Information on Internship Opportunities is available in the department office and at <https://cas.umkc.edu/communication-studies/internships/>, and through the Career Service <https://career.umkc.edu/>. - The coordinator for the Internship Program is Linda Kurz (KurzL@umkc.edu)

Advising System

Current program requirements are available in the department office. Students must file a formal declaration of major with a departmental advisor. The department highly recommends that students meet with their major advisor before enrolling in classes each semester. At 90 hours or one year prior to graduation, students should file for a final degree audit with their major advisor and with the College of Arts and Sciences. Undergraduate advisors are Linda Kurz Contact Information (<https://cf1.umkc.edu/intapps/lookup/?LastName=kurz>) and Judith McCormick Contact Information (<https://cf1.umkc.edu/intapps/lookup/?LastName=mccormick>). Students in the Film and Media Studies Emphasis should contact Caitlin Horsmon Contact Information (<https://cf1.umkc.edu/intapps/lookup/?LastName=horsmon>); or Lyn Elliot Contact Information (<https://cf1.umkc.edu/intapps/lookup/?LastName=elliott>) for advising in that emphasis area.

Financial Aid

Students with University work-study assignments are welcomed as student assistants in various aspects of the department's activities.

Faculty

Joan E. Aitken; Retired Professor Emerita of Communication Studies; B.A. (Michigan State University); M.A., Ed.D. (University of Arkansas).

Gregory D. Black; Retired Professor Emeritus of Communication Studies; B.S. (Bowling Green State University); M.A. (California State); Ph.D. (University of Kansas).

Mitchell Brian; Associate Teaching Professor of Communication Studies; B.A. (California State University, Northridge); M.A. (University of Missouri-Kansas City).

Linda M. Collier; Retired Associate Professor of Communication Studies; B.A., J.D. (University of Missouri-Kansas City).

Jean Dufresne; Lecturer, Communication Studies; B.A. (Morningside College); M.A. (University of Iowa); Ph.D. (University of Nebraska-Lincoln).

Angela C. Elam; Assistant Teaching Professor of Communication Studies and Radio Producer; B.A. (Clemson University); M.F.A. (University of Georgia-Athens).

Lyn Elliot^{2,3}; Professor of Communication Studies; B.A. (Carleton College); M.A., Ph.D. (University of Iowa); M.F.A. (University of Iowa).

Gregory Gutenko; Associate Professor of Communication Studies; B.A., M.A. (University of Missouri-Kansas City); Ph.D. (University of Missouri-Columbia).

Caitlin M. Horsmon^{2,3}; Associate Professor of Communication Studies; B.A. (Oberlin College); M.A., M.F.A. (University of Iowa).

Steven Kraske; Associate Teaching Professor of Communication Studies; B.A. (University of Wisconsin-Madison).

Linda Kurz (kurzl@umkc.edu); Associate Teaching Professor of Communication Studies; BA (University of Texas-Austin); M.A. (Baylor University); Ph.D. (Baylor University).

Gaylord V. Marr; Retired Professor Emeritus of Communication Studies; B.A., M.A. (University of Nebraska).

Jason Martin^{2,3}; Assistant Professor of Communication Studies; B.B.A., B.S. (University of Kentucky); M.A. (The Ohio State University); Ph.D. (University of Kentucky).

Judith McCormick; Associate Teaching Professor of Communication Studies; B.A., M.A. (Texas Tech University); Ph.D. (Kansas State University).

Steven P. Melling²; Associate Teaching Professor of Communication Studies; B.S. (Northwestern Missouri State University); M.A., Ph.D. (University of Kansas).

Peter Morello²; Associate Professor of Communication Studies; B.A. (University of Wisconsin-Madison); M.S. (Columbia University).

Michael Neer; Retired, Professor Emeritus of Communication Studies; B.A., M.A., Ph.D. (University of Missouri-Columbia).

Michael W. Schaefer; Lecturer of Communication Studies; B.A., M.A. (University of Missouri-Kansas City).

Robert B. Unger; Retired, Professor Emeritus of Communication Studies and English; B.A. (University of Missouri-Columbia); M.P.A. (Harvard University).

Ye Wang^{2,3}; Assistant Professor of Communication Studies; B.A. (Beijing University of Posts and Telecommunications); M.A. Linguistics (Beijing Foreign Studies University); M.A., Ph.D. Journalism (University of Missouri).

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

⁴ Located at UM-St. Louis campus

Undergraduate Undergraduate Degrees:

- Bachelor of Arts: Communication Studies
 - Film and Media Studies Emphasis
 - Journalism and Mass Communication Emphasis
 - Interpersonal and Public Communications Emphasis
- Bachelor of Arts: Film and Media Arts (p. 641)
- Minor in Communication Studies
- Minor in Film Studies

Courses

COMM-ST 110 Fundamentals Of Effective Speaking And Listening Credits: 3

An introduction to the dimensions of effective platform speaking with special emphasis on developing critical listening skills. Lecture, performance, and discussion.

COMM-ST 110 - MOTR COMM 110: Fundamentals of Public Speaking



COMM-ST 140 Principles Of Communication Credits: 3

An interdisciplinary introduction to the study of contemporary communication studies including a consideration of intrapersonal, interpersonal and public communication.

COMM-ST 140 - MOTR COMM 100: Introduction to Communications



COMM-ST 203 Introduction to Journalism Credits: 3

Introduction to the styles and techniques of reporting and writing basic news through assignments in straight news, features and in-depth stories. Exposure to the history and principles of American journalism. Practical application in writing news and news feature articles.

COMM-ST 212 Argumentation And Debate Credits: 3

A study of the nature of logical discourse generated through the preparation and presentation of oral argument within the framework of the debate format. Lecture, performance and discussion.

COMM-ST 212 - MOTR COMM 220: Argumentation Debate



COMM-ST 220 Introduction: Modern Communications Media Credits: 3

A comprehensive survey of the content, structure and control of the communications media in American society--newspaper, motion pictures, radio and television; providing an informational frame of reference that will enable discerning students to formulate and apply useful critical concepts in evaluating America's media environment.

COMM-ST 220 - MOTR SBSC 100: Intro to Mass Communications



COMM-ST 230 Introduction to Film Studies Credits: 3

The course is an introduction to the study of film as an art form and industrial practice. Students will study the basics of film analysis, cinematic formal elements, genre, narrative structure and the cultural functions of cinema.

COMM-ST 230 - MOTR FILM 100: Introduction to Film Studies



COMM-ST 250 Introduction to Film and Video Production Credits: 3

This course teaches the fundamentals of media making using digital video. Students will learn techniques in pre-production planning, camera, sound, and editing by creating a series of short videos. Students will also learn to think analytically about film, and to apply insights about what gives an image impact and meaning to their own work. It is the foundation and prerequisite for all film and video production courses in the department.

COMM-ST 260P Introduction To Web Communications Credits: 4

This four credit hour web-based multimedia course will examine the process of critically evaluating information delivered on the Internet. It is designed as an introduction for adults and students who use Internet information for work and/or school. The process of critically evaluating Internet information will be described in four modules: traditional evaluation techniques; searching and researching strategies; Internet evaluation techniques and Internet evaluation resources.

COMM-ST 270 Introduction to Digital and Mobile Journalism Credits: 3

An introduction to the practices and principles of creating video, combined with audio, graphics, and data information, by newsgathering in the field, for both current and emerging mobile, non-broadcast, digital and social media platforms.

COMM-ST 277 Interpersonal Communication Credits: 3

An intensive analysis of the dimensions of intrapersonal and interpersonal communication designed to identify the philosophies and methods which underwrite effective human communication.

COMM-ST 277 - MOTR COMM 120: Interpersonal Communication**COMM-ST 300CY Ancient World in Cinema Credits: 3**

This course will explore the tradition of depicting the ancient Mediterranean world in film from the early silent era to the present. Topics to be covered include the ways that filmmakers respond to literary and historical sources from the ancient world, interact with the artistic tradition of films about the ancient world, the relation of these films to other works by the same creative personnel (directors, actors, writers, producers, etc.), and the political and cultural contexts in which the films were released.

COMM-ST 308 Introduction To The Study Of Human Communication Credits: 3

This course serves to introduce students to the basic theories, perspectives and methodologies used (historically and currently) in the study of speech, interpersonal and mass communication.

COMM-ST 311 Radio & Television Performance Credits: 3

A study of the specialized radio and television performing and operating situations and techniques simulated and evaluated in studio sessions. Lecture, discussion and performance.

COMM-ST 312 Advanced Public Speaking Credits: 3

Advanced study of rhetorical theory and its application to the presentation and criticism of public discourse.

Prerequisites: COMM-ST 110.

COMM-ST 317 Persuasion Credits: 3

A study of the rhetorical, psychological and ethical principles of influencing and controlling individuals and groups, and of the methods of adapting to various attitudes and audiences through the preparation, presentation and evaluation of persuasive speeches. Lecture, discussion and performance.

Prerequisites: COMM-ST 110.

COMM-ST 323 Concepts of the Hero in Ancient Literature and World Cinema Credits: 3

This course explores how concepts of heroism are related to the principles of values and civic duty in a wide range of ancient world cultures and contemporary world cinemas. Students will also demonstrate an understanding of how these values impact individual heroes and their interactions with others in their society.

COMM-ST 339 Introduction to Film Theory Credits: 3

A survey of the history of theoretical and critical approaches to film theory/philosophy. Students will be introduced to major foundational and contemporary theoretical approaches to cinema that may include but are not limited to formalism, realism, auteurism, psychoanalysis, genre studies, structuralism, feminism, semiotics, cultural studies, post-structuralism, queer theory and digital studies.

COMM-ST 341WI Rhetorical Theory And Criticism Credits: 3

Writing intensive. An analysis of significant public discourse within the context of social protest and political rhetoric with attention to applying methods of communication criticism in evaluating the effectiveness of persuasive advocacy aimed at social change.

COMM-ST 343 Group Dynamics Credits: 3

A study of strategies and communication relationships unique to non-dyadic situations, with an emphasis on the integral structure of leadership, roles, norms and task functions.

COMM-ST 344 Communication In Organizational Settings Credits: 3

An examination of the major elements of interpersonal, group, and oral communication competence essential to human interaction in organizational settings. The course focuses on developing communication competencies and increasing theoretical understanding of the communication process within the organizational context.

COMM-ST 344WI Communication In Organizational Settings Credits: 3

An examination of the major elements of interpersonal, group, and oral communication competence essential to human interaction in organizational settings. The course focuses on developing communication competencies and increasing theoretical understanding.

Prerequisites: COMM-ST 110 or COMM-ST 308.

COMM-ST 345 German Film Credits: 3

This course introduces students to the important contributions of German films to the development of movies as a unique literary art form. The class will cover important terms and concepts in film theory, the specifically German context of film, and important themes and periods in German film history. Taught in English with subtitled films.

COMM-ST 346 Art of the Short Film Credits: 3

Art of the Short Film examines the social, economic and aesthetic histories of narrative, documentary and experimental short form films from the birth of cinema to today.

COMM-ST 347 Topics in Film Genre Credits: 3

A topics course that examines the history and theory of film genres. Repeatable up to six hours when the topic changes.

COMM-ST 348 The Art of the Interview Credits: 3

This course will introduce students to the styles and techniques of conducting professional interviews with the goal of eliciting insightful, thoughtful answers fit for print or broadcast. Students will prepare QA interviews and articles for publication while gaining the confidence needed to work in professional newsrooms or office settings.

COMM-ST 351WI Fundamentals Of Writing For The Media Credits: 3

Analysis of individual differences and common characteristics of copy for eye and ear, with emphasis on the application of both verbal and visual imagery in the process of communicating the writer's ideas and intentions. Weekly written assignments and critical analysis of the student's work.

COMM-ST 353 Covering Urban Latinx Communities Credits: 3

This course focuses on journalistic methods of reporting Latinx communities in urban areas and bringing the voice of the Latinx communities into news stories. It covers topics on immigration, health care, policy, cultural diversity, race, legal issues, and education. Skills taught in this course will prepare students to cover the Latinx communities in urban areas and beyond.

COMM-ST 354 Introduction to Screenwriting Credits: 3

An introduction to the form and language of the motion picture screenplay. Students will learn to create a workable blueprint for a movie and undertake an in-depth examination of visual storytelling. This will include understanding the basics of dramatic structure, scene and sequence construction and the role of dialogue. Emphasis will be placed on students mastering the accepted movie industry format of the screenplay. They will also adapt a short story and revise it after giving and receiving feedback in small groups.

COMM-ST 355WI The New Feature Writing Credits: 3

An intensive practicum in the art of writing feature stories with a special emphasis on shorter stories that will grab reader interest in an era of short-attention spans.

Prerequisites: COMM-ST 203 or ENGLISH 203.

COMM-ST 356 U News Practicum Credits: 3

This course is workshop-based for students producing UMKC's weekly newspaper, U News. It also focuses on contemporary issues in American journalism and engaging with the university community.

Prerequisites: COMM-ST 203 or ENGLISH 203.

COMM-ST 363 Radio Production I Credits: 3

A study of the techniques of producing audio material for use in radio, in concerts, on film, on television and in the recording studio.

COMM-ST 373 Intermediate Media Production Credits: 3

An intermediate-level production course emphasizing hands-on skills in cinematography and lighting, sound, and editing.

Prerequisites: COMM-ST 250.

COMM-ST 376 History Of The Film Industry Credits: 3

A history of the development of the American film industry from 1900 to the end of the studio era. The course will stress such issues as studio production, censorship, the economics of production and the selling of mass culture through the film medium. Term paper required.

COMM-ST 380 Contemporary Media Topics Credits: 3**COMM-ST 381 Narrative Production Credits: 3**

This course covers the creative, technical, and practical aspects of short-form narrative film production.

Prerequisites: COMM-ST 250.

COMM-ST 383 Cross-Cultural Journalism & Mass Media Credits: 3

Cross-Cultural Journalism Mass Media provides journalistic tools for traditional and new media coverage of diverse ethnic, gender, ability and ideological groups inside and outside the United States. The critical role of diverse voices in a democracy will be discussed. Students at UMKC and the Missouri School of Journalism participate in joint lectures transmitted by UMKC and MU instructors from their respective campuses.

COMM-ST 384 Documentary Film History Credits: 3

Documentary Film History is an overview of the history and theory of documentary cinema. The course surveys the documentary tradition with special attention to the relationship between content and style and the issues central to documentary film making, including ethical and legal questions, the relationship between representation and power and the ways in which film speaks to notions of truth and truth telling.

COMM-ST 385 Documentary Production Credits: 3

This course is designed to familiarize students with the basics of documentary production from an artistic, ethical, and practical results-oriented perspective.

Prerequisites: COMM-ST 250.

COMM-ST 386 Animation Credits: 3

This course provides an introduction to animation production techniques and an overview of the history of American animation arts. We will address both stop-motion and computer animation using industry standard software.

Prerequisites: COMM-ST 250.

COMM-ST 387 Strategic Communication Research Credits: 3

This course will examine different research methods and research stages in advertising and public relations, including quantitative and qualitative research methods. Students will learn how to plan, conduct, and evaluate strategic communication research. Students are also expected to develop a greater appreciation for the role that research plays in effective campaigns.

COMM-ST 388 Media Ethics Credits: 3

This course is designed to sensitize the ethical considerations the underlie the conventions and practices of print, broadcast, and internet media. By placing traditional and new media in a wider intellectual context than is generally possible under the daily demands of producing news, information, and entertainment, it seeks to produce a larger sense of media as industry and as a career choice.

COMM-ST 390 Forensic Activities Credits: 1-4

Participation in the intercollegiate forensic program. A practicum in debate, discussion, oratory and other forensic activities.

COMM-ST 392 Topics in World Cinema Credits: 3

A variable topics course focused on the histories and theories of international cinemas. Repeatable up to 6 hours when the topic changes.

COMM-ST 393 Topics in Sound & Cinema Credits: 3

A variable topics course that focuses on the histories and aesthetics of sound in cinema. Repeatable up to 6 hours when the topic changes.

COMM-ST 394 Topics in Gender and Cinema Credits: 3

A course focused on the relationship between popular culture, film history and the construction of gender and sexuality. Repeatable up to 6 hours when the topic changes.

COMM-ST 400 Special Studies Credits: 1-3

(A-N) This is an upper-level course on a subject which is not a part of the regular department offering. The course results from one or more of the following: (1) the expressed desire of students (2) the broadened or refocused scholarship of a member of the communication studies faculty (3) the temporary presence of a scholar whose specialization is not reflected in the department's regular offerings (4) the conclusion by the department that the course meets a community need (5) the effort of the Communication Studies faculty to provide an interdisciplinary approach to an era or topic.

COMM-ST 406CD CC: Film Adaptation Credits: 3

The class will explore the process of adapting both fiction and non-fiction literary works into motion pictures. Students will examine the original literary source, then the interim screenplay and finally the completed motion picture.

COMM-ST 411 Seminar in Film and Media Arts Credit: 1

This course covers special topics and professional practices within Film and Media Arts. Course is repeatable. Required of B.A. in Film and Media Arts majors for every semester enrolled.

Prerequisites: B.A. in Film and Media Arts Major.

COMM-ST 415 Global Journalism: Cultures, Trends, & Conflicts Credits: 3

This course examines media coverage of international issues including the dissemination of news and information throughout the world. The course has both a practical and academic focus. It introduces students to best practices of global journalism and to the enormous challenges of covering world events and issues. Research on global media trends are applied to current reporting methods and include diverse international perspectives. The course assists students who plan to pursue careers in global journalism and allied fields like international non-profit agencies or non-governmental organizations. The course also prepares students to become effective communicators in global communities.

Prerequisites: COMM-ST 314.

COMM-ST 431 Colloquium In Interpersonal Dynamics Credits: 3

An examination of the practical application of communication principles and theories, with focus on one of the following: health, organizational, nonverbal, intrapersonal, conflict management, computer mediated, or intercultural communication.

COMM-ST 432 Press, Politics And Public Policy Credits: 3

An advanced course in the study of the press and political establishments in the formation of public policy.

COMM-ST 439 Egghead: Student Advertising Agency Credits: 3

This course operates as a faculty-supervised advertising/design agency that works with clients to produce visual marketing materials.

Prerequisites: ART 337.

COMM-ST 441 Applications of Interpersonal Communication Theory Credits: 3

This course examines interpersonal communication theory as it pertains to a variety of interpersonal relationships. The course employs class discussions of theory and assignments that apply those theories to real life interactions.

Prerequisites: COMM-ST 277.

COMM-ST 444WI Intercultural Communication Credits: 3

A consideration of communication phenomena in multicultural settings. A study of the public forum with an emphasis on the interpersonal aspects of international, intercultural, and co-cultural communication.

Prerequisites: Junior standing.

COMM-ST 446 Principles Of Advertising Credits: 3

A survey of advertising as an industry and a career field, examining its history and development in America, and its application in mass and special media. Specific procedures are studies for linking the development of advertising strategies, messages and campaigns to the marketing process, and for evaluation and selection of appropriate media to carry the advertising message.

COMM-ST 447 Interactive and Social Media Advertising Credits: 3

This course examines advertising on the Internet as a form of interactive communication, with a special focus on social media and search engines. It addresses basic concepts, current issues, and the development of interactive advertising strategies and plans. The coverage includes interactivity, pricing models, online targeting strategies, search engine optimization and advertising, social media advertising, and online video advertising.

COMM-ST 448 Principles Of Public Relations Credits: 3

An overview, presenting the function, purposes, procedures and practices of public relations, its role in society, industry, government and politics, and its potential as a career field. This is a survey course with primary emphasis on theory, supplemented with applied techniques.

COMM-ST 453 Urban Journalism Practicum Credits: 4

This course engages student journalists to produce stories with an urban focus across radio, online, and television platforms. By practicing convergence journalism, students gain practical story-telling experience for professional news organizations.

Prerequisites: COMM-ST 203 or ENGLISH 203.

COMM-ST 454 Advanced Screenwriting Credits: 3

This course provides students with advanced theory in narrative screenwriting, training in industry standard script analysis (called "coverage") and story editing. Students will be required to draft, revise and workshop a short film screenplay or will focus on a feature screenplay, delivering a draft and revision of the first act and a detailed outline for the rest of the script. Students will workshop feature screenplays in small groups, emphasizing the art of constructive story editing.

Prerequisites: COMM-ST 354.

COMM-ST 456 Electronic Journalism Credits: 3

A practical approach to the practices and principles of broadcasting news media, including preparing copy for microphone and camera, editing wire copy, reporting public affairs and public relations, and an intensive scrutiny of the concepts of freedom and responsibility as they apply to the press and current legislation.

COMM-ST 457 Client-Based Media Production Credits: 3

This course teaches the process of creating media for a professional client. Students will take on specialized crew positions and work together to plan, write, direct, shoot, edit, and distribute a short video for a local non-profit client.

Prerequisites: COMM-ST 250.

COMM-ST 466 Advanced Electronic Journalism Credits: 3

An advanced study of television and Internet news gathering, field production and performance for electronic media.

Prerequisites: COMM-ST 456.

COMM-ST 471 Advanced Media Production Credits: 3

An advanced course in media production techniques focused on the creation of a significant individual media work and professional development.

Prerequisites: COMM-ST 373.

COMM-ST 473 Directing Actors and Scenes Credits: 3

This intensive workshop class seeks to deepen the student director's understanding of the acting process and provide ways of clearly and creatively communicating with actors. The course will deepen students' understanding of blocking scenes and designing camera coverage. It will explore the role of the director as a guiding creative force in the making of a film through collaboration and provide techniques for scene analysis and preparation. Students will cast, rehearse and present a live performance for their final project and design appropriate camera coverage.

Prerequisites: COMM-ST 250.

COMM-ST 483 Research Seminar In Communication Studies Credits: 3

This is the departmental capstone course and is required for majors in their last semester of their senior year. The course summarizes and extends student's theoretical and applied understanding of the role of communication competence in the work place and beyond. The course also focuses on refining student's research competencies and their appreciation of the cultural role of modern communication methods.

Prerequisites: Senior standing.

COMM-ST 484 Communication Studies Activities Credits: 1-4

Internships opportunities for advanced students involved in community and campus activities. Student must receive approval of advising professor in semester prior to enrollment. No more than four hours with any one project.

COMM-ST 492 Advertising Campaigns Credits: 3

The course content focuses on branding, re-branding or development of an identity program, and combines advertising planning with creative execution. Students will learn how to develop advertising/marketing/creative campaign plans for a specific client(s), conceptualize, design and develop all creative aspects including but not limited to logo/identity, copy, advertising, website development, app design, etc., and complete a presentation of the plans/briefs and final creative developments of the plans/briefs and creative to the client(s).

Prerequisites: Sophomore standing.

COMM-ST 498 Special Problems In Communication Studies Credits: 1-3

Research and/or projects for advanced upper class students. Student must receive approval of advising professor in semester prior to enrollment. No more than three hours with any one instructor.

COMM-ST 5554 Graduate Seminar: Screenwriting Credits: 3

Students will complete their feature screenplay, focusing on acts two and three and then ready the script for submission to contests and industry contacts. We will focus on in-depth scene work, polishing dialogue and deepening theme.

Prerequisites: COMM-ST 454 or ENGLISH 429B.

COMM-ST 5597 Directed Graduate Studies: Readings Credits: 1-6

Special Projects on the graduate level.

COMM-ST 5598 Directed Graduate Studies: Non-Thesis Research Credits: 1-6

Special projects on the graduate level.

Bachelor of Arts: Communication Studies - Film and Media Studies

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Assess films, film culture and film history using film theory.
- Specify relationships between film form and meaning using close textual analysis.
- Identify social, political and aesthetic elements of cinema
- Research and formulate theoretical questions and synthesize original scholarship in appropriate written form.

- * Construct short films in a variety of modes possibly such as narrative, documentary, animated and promotional. (*media production courses are encouraged but not required.)

Program Requirements

The **Film and Media Studies** emphasis provides an interdisciplinary study of film and media, including the history and theory of global cinema culture, critical media studies and extensive training in media production. Our courses emphasize critical thinking, creative exploration and skill development by combining the study of film history and theory with the art and practice of film-making. Students write, produce, direct and edit several narrative, documentary and experimental shorts while studying histories and theories of the moving image. Internships and extracurricular activities prepare students for creative success, professional careers and advanced graduate studies. The program is aligned with UMKC's visual and performing arts mission.

The department has media classrooms and production spaces for student projects, that include a video production studio with multi-camera and "green-screen" capabilities, a sound recording facility with narration booth and radio console, and post production media labs. A student equipment checkout lab maintains an extensive inventory of production equipment providing the capabilities for professional cinematography, lighting and audio recording. Our facilities foster the ability to light, shoot and edit professionally, allowing the students to tell compelling stories that make an impact on audiences.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (Satisfied in program requirements below)		
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECERT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		10

Major Requirements

Film and Media Studies Emphasis

In addition to the 6 credit hours of the department's core courses (COMM-ST 110, COMM-ST 483 or COMM-ST 471), the Film and Media Studies emphasis requires COMM-ST 230, COMM-ST 339 and 21 hours of Film and Media Studies electives for a total of 33 credit hours. Students are required to take one writing intensive course in any department.

Students must maintain a 2.0 GPA in their major courses. Only major courses with a grade of C- or higher will be accepted for credit in the major, and counted toward the major GPA. With prior permission, three hours of elective credit from another department may be accepted as Communication Studies elective credit. Students must complete a minimum of 18 credit hours within the department.

Students must successfully complete the major requirements below with at least 18 credit hours taken in the department at UMKC with 12 of those hours at the 300-level or above.

Code	Title	Credits
Department's Core Courses		
COMM-ST 110	Fundamentals Of Effective Speaking And Listening (satisfies Oral Communication requirement)	3
COMM-ST 483	Research Seminar In Communication Studies	3
or COMM-ST 471	Advanced Media Production	
or COMM-ST 484	Communication Studies Activities	
Required Courses		
One Writing Intensive Course		3
COMM-ST 230	Introduction to Film Studies	3
COMM-ST 339	Introduction to Film Theory	3
Film and Media Studies Electives ¹		
Select seven of the following:		21
ANCH 303	Film Adaptation	
CLASSICS 300CY	Ancient World in Cinema	
COMM-ST 250	Introduction to Film and Video Production	
COMM-ST 323	Concepts of the Hero in Ancient Literature and World Cinema	
COMM-ST 341WI	Rhetorical Theory And Criticism	
COMM-ST 345	German Film (Focus A)	
COMM-ST 346	Art of the Short Film	
COMM-ST 347	Topics in Film Genre	
COMM-ST 351WI	Fundamentals Of Writing For The Media	
COMM-ST 354/ENGLISH 339	Introduction to Screenwriting	
COMM-ST 363	Radio Production I	
COMM-ST 373	Intermediate Media Production	
COMM-ST 376	History Of The Film Industry	

COMM-ST 381	Narrative Production	
COMM-ST 384	Documentary Film History	
COMM-ST 385	Documentary Production	
COMM-ST 386	Animation	
COMM-ST 392	Topics in World Cinema	
COMM-ST 393	Topics in Sound & Cinema	
COMM-ST 394	Topics in Gender and Cinema	
COMM-ST 400	Special Studies (Story Development)	
COMM-ST 454	Advanced Screenwriting	
COMM-ST 457	Client-Based Media Production	
COMM-ST 471	Advanced Media Production	
COMM-ST 473	Directing Actors and Scenes	
COMM-ST 484	Communication Studies Activities	
Total Credits		36

¹ Elective courses may be offered on a rotation basis. Please consult advisor for current availability.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		44

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
COMM-ST 110		3 ENGLISH 225	3
GEFSE 101		3 MATH 116	3
ENGLISH 110		3 HISTORY 101, 102, or POL-SCI 210	3
GECRT-AH 101		3 GECRT-SS 101	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
COMM-ST 230 ^{CC}		3 COMM-ST 339 ^{CC}	3
GECDV 201		3 2XX/3XX Film and Media Studies Elective	3
Foreign Language course (211)		3 GECUE 201	3
General Elective		3 GECRT-SC 101	3
General Elective		3 General Elective	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
3XX/4XX Film and Media Studies Elective		3 3XX/4XX Film and Media Studies Elective	3
3XX/4XX Film and Media Studies Elective		3 3XX/4XX Writing Intensive (WI) course	3
Lab Science ^{LO}		1 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3	
		16	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
3XX/4XX Film and Media Studies Elective		3 3XX/4XX Film and Media Studies Elective	3
3XX/4XX Film and Media Studies Elective		3 COMM-ST 483 or 471	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective (3XX/4XX if needed)	3
General Elective		3 General Elective	2
		15	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Arts: Communication Studies - Interpersonal and Public Communication Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate effective oral, written, and visual communication
- Conduct basic research through the identification, evaluation, application, and citation of appropriate scholarly sources.
- Identify key interpersonal communication theories and concepts as they pertain to relationships and interactions with others from diverse backgrounds and across different settings.
- Identify key rhetorical theories and concepts and how they relate to the design and evaluation of effective messages.
- Explain how cultural diversity presents challenges and opportunities in interpersonal and public communication.

Program Requirements

The **Interpersonal and Public Communication** emphasis offers study in the areas of public address and rhetoric, interpersonal and intercultural communication, organizational communication and areas associated with human communication behavior including advertising, public relations and strategic communication.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (Satisfied in program requirements below)		
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECERT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		10

Major Requirements

Students must maintain a 2.0 GPA in their major courses. Only major courses with a grade of C- or higher will be accepted for credit in the major, and counted toward the major GPA. With prior permission, three hours of elective credit from another department may be accepted as Communication Studies elective credit.

Students must successfully complete the major requirements below with at least 18 credit hours taken in the department at UMKC with 12 of those hours at the 300-level or above.

Code	Title	Credits
Department's Core Courses		
COMM-ST 110	Fundamentals Of Effective Speaking And Listening (satisfies Oral Communications requirement)	3
COMM-ST 483 or COMM-ST 484	Research Seminar In Communication Studies (or SEARCH Project in the major) Communication Studies Activities	3
Required Courses		
COMM-ST 277	Interpersonal Communication	3
COMM-ST 308	Introduction To The Study Of Human Communication	3
COMM-ST 341WI	Rhetorical Theory And Criticism	3
Interpersonal Communication		
Select one of the following not already completed in another area:		3
COMM-ST 343	Group Dynamics	
COMM-ST 344	Communication In Organizational Settings	
COMM-ST 387	Strategic Communication Research	
COMM-ST 431	Colloquium In Interpersonal Dynamics	
COMM-ST 441	Applications of Interpersonal Communication Theory	
COMM-ST 444WI	Intercultural Communication	
Public Communication		
Select one of the following not already completed in another area:		3
COMM-ST 312	Advanced Public Speaking	
COMM-ST 317	Persuasion	
COMM-ST 348	The Art of the Interview	
COMM-ST 446	Principles Of Advertising	
COMM-ST 447	Interactive and Social Media Advertising	
COMM-ST 484	Communication Studies Activities	
COMM-ST 492	Advertising Campaigns	
Interpersonal and Public Electives		
Select four of the following not already completed in another area:		12
COMM-ST 312	Advanced Public Speaking	
COMM-ST 317	Persuasion	
COMM-ST 343	Group Dynamics	
COMM-ST 344	Communication In Organizational Settings	
COMM-ST 348	The Art of the Interview	
COMM-ST 387	Strategic Communication Research	
COMM-ST 431	Colloquium In Interpersonal Dynamics	
COMM-ST 441	Applications of Interpersonal Communication Theory	
COMM-ST 444WI	Intercultural Communication	
COMM-ST 446	Principles Of Advertising	
COMM-ST 447	Interactive and Social Media Advertising	
COMM-ST 484	Communication Studies Activities	

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		47

Minimum GPA: 2.0

Total Credit Hours: 120

Please see an advisor for details about how to complete this program online.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
COMM-ST 110 ^{CC}		3 ENGLISH 225	3
GEFSE 101		3 MATH 116	3
ENGLISH 110		3 GECRT-SS 101	3
GECRT-AH 101		3 HISTORY 101, 102, or POL-SCI 210	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
COMM-ST 277 ^{CC}		3 COMM-ST 308	3
GECRT-SC 101		3 COMM-ST 3XX/4XX Interpersonal or Public Communications course	3
GECUE 201		3 GECDV 201	3
Foreign Language course (211)		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
COMM-ST 341WI		3 COMM-ST 3XX/4XX Interpersonal/ Public Elective	3
COMM-ST 3XX/4XX Public or Interpersonal Communication course (whichever not yet completed)		3 COMM-ST 3XX/4XX Interpersonal/ Public Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
Lab Science ^{LO}		1	
		16	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
COMM-ST 3XX/4XX Interpersonal/ Public Elective		3 COMM-ST 483 or 484	3
COMM-ST 3XX/4XX Interpersonal/ Public Elective		3 3XX/4XX General Elective	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	2
		15	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Arts: Communication Studies - Journalism and Mass Communications Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Produce work applying best practices in short- and long-form news, feature and investigative reporting for print, broadcast and digital journalism
- Research and develop methods in data collection.
- Produce writing that meets or exceeds professional standards.
- Demonstrate reporting skill that meets or exceeds professional standards.
- Adapt the dissemination of information appropriate to cross-cultural audiences.
- Identify and express ethical news writing and reporting in the best traditions of American journalism and mass communication.

Program Requirements

The **Journalism and Mass Communication** emphasis offers concentrated study in select areas including print and electronic journalism, radio, television, journalism, advertising and public relations.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (Satisfied in program requirements below)		
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	

STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECERT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		10

Major Requirements

Journalism and Mass Communication Emphasis

Students must maintain a 2.0 GPA in their major courses. Only major courses with a grade of C- or higher will be accepted for credit in the major, and counted toward the major GPA. With prior permission, three hours of elective credit from another department may be accepted as Communication Studies elective credit.

Students must successfully complete the major requirements below with at least 18 credit hours taken in the department at UMKC with 12 of those hours at the 300-level or above.

Code	Title	Credits
Department's Core Courses		
COMM-ST 110	Fundamentals Of Effective Speaking And Listening (satisfies Oral Communication requirement)	3
COMM-ST 483	Research Seminar In Communication Studies	3
or COMM-ST 484	Communication Studies Activities	
or COMM-ST 447	Interactive and Social Media Advertising	
Required Courses		
COMM-ST 203	Introduction to Journalism	3
COMM-ST 220	Introduction: Modern Communications Media	3
COMM-ST 484	Communication Studies Activities	3
Journalism and Mass Communication Electives		
Select six of the following courses including at least one WI course:		18
COMM-ST 260P	Introduction To Web Communications	
COMM-ST 270	Introduction to Digital and Mobile Journalism	
COMM-ST 308	Introduction To The Study Of Human Communication	
COMM-ST 311	Radio & Television Performance	
COMM-ST 341WI	Rhetorical Theory And Criticism	
COMM-ST 348	The Art of the Interview	
COMM-ST 351WI	Fundamentals Of Writing For The Media	
COMM-ST 355WI	The New Feature Writing	
COMM-ST 356	U News Practicum	
COMM-ST 363	Radio Production I	
COMM-ST 383	Cross-Cultural Journalism & Mass Media	
COMM-ST 384	Documentary Film History	
COMM-ST 387	Strategic Communication Research	
COMM-ST 388	Media Ethics	
COMM-ST 432	Press, Politics And Public Policy	
COMM-ST/ART 439	Egghead: Student Advertising Agency	
COMM-ST 446	Principles Of Advertising	
COMM-ST 447	Interactive and Social Media Advertising	
COMM-ST 453	Urban Journalism Practicum	
COMM-ST 456	Electronic Journalism	
COMM-ST 484	Communication Studies Activities	
COMM-ST 492	Advertising Campaigns	
Total Credits		33

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		47

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
COMM-ST 110 ^{CC}		3 ENGLISH 225	3
GEFSE 101		3 MATH 116	3
ENGLISH 110		3 GECRT-SS 101	3
GECRT-AH 101		3 HISTORY 101, 102, or POL-SCI 210	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
COMM-ST 220 ^{CC}		3 COMM-ST 203 ^{CC}	3
GECRT-SC 101		3 COMM-ST 2XX/3XX/4XX Journalism/Mass Communication Elective	3
GECUE 201		3 GECDV 201	3
Foreign Language course (211)		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
COMM-ST 3XX/4XX Journalism/Mass Comm Elective		3 COMM-ST 341WI, 351WI, or 355WI	3
3XX/4XX General Elective		3 COMM-ST 483	3
General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	2
Lab Science ^{LO}		1	
		16	14

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
COMM-ST 3XX/4XX Journalism/ Mass Comm Elective		3 COMM-ST 484 or 447	3
COMM-ST 3XX/4XX Journalism/ Mass Comm Elective		3 COMM-ST 3XX/4XX Journalism/ Mass Comm Elective	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective (3XX/4XX if needed)	3
General Elective		3 General Elective	3
	15		15

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Arts: Film and Media Arts

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Analyze the complex social, political, economic and aesthetic history of the cinema in critical writing.
- Assess films and film culture in relationship to a variety of theoretical traditions.
- Identify and describe key terms and concepts and major trends and periods related to film history and theory.
- Apply film theory concepts to film texts in written form and in their creative work.
- Demonstrate knowledge of media making craft as a collaborative and creative process applying theoretical historical and aesthetic concepts.
- Demonstrate the ability to create quality media productions including skills in audio, cinematography, editing and producing.

Program Requirements

The Film and Media Arts B.A. offers undergraduate students a rigorous course of study in film and video production, with supporting courses in film studies and art. Students in the program practice all aspects of filmmaking: screenwriting, pre-production planning, cinematography, lighting, audio recording, editing, and sound design. The program emphasizes individual creative development, with each student building their own portfolio of original film and media work. Professional preparation for careers in film and media arts is also a strong component of the degree. In our production classes, we teach a small-crew, independent-artist approach to filmmaking. Students gain experience in all phases of film production, including idea development, writing, pre-production planning, producing, directing, cinematography, sound design and editing.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above)		3
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		13

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

The B.A. in Film and Media Arts requires 48 credit hours of coursework, plus the one-credit Film and Media Arts Seminar each semester that a student is enrolled in the Film and Media Arts major. Students must maintain a 2.0 GPA in their major courses. Only major courses with a grade of C- or higher will be accepted for credit in the major, and counted toward the major GPA.

Code	Title	Credits
Required Coursework		
ART 114	Foundation Digital Design	3
ART 206	Photography I	3
COMM-ST 230	Introduction to Film Studies	3
COMM-ST 250	Introduction to Film and Video Production	3
COMM-ST 339	Introduction to Film Theory	3
COMM-ST 346	Art of the Short Film	3
COMM-ST 354/ENGLISH 339	Introduction to Screenwriting	3
COMM-ST 373	Intermediate Media Production	3
COMM-ST 471	Advanced Media Production	3
COMM-ST 484	Communication Studies Activities (Internship)	3
Film Production Electives - Choose 4 of the following: ¹		12
ART 310	Digital Video and Motion Design	
COMM-ST 363	Radio Production I	
COMM-ST 381	Narrative Production	
COMM-ST 385	Documentary Production	
COMM-ST 386	Animation	

COMM-ST 454	Advanced Screenwriting	
COMM-ST 457	Client-Based Media Production	
COMM-ST 473	Directing Actors and Scenes	
COMM-ST 484	Communication Studies Activities	
Film Studies Electives - Choose 2 of the following: ¹		6
CLASSICS 300CY	Ancient World in Cinema	
COMM-ST 323	Concepts of the Hero in Ancient Literature and World Cinema	
COMM-ST 345	German Film	
COMM-ST 347	Topics in Film Genre	
COMM-ST 376	History Of The Film Industry	
COMM-ST 384	Documentary Film History	
COMM-ST 392	Topics in World Cinema	
COMM-ST 393	Topics in Sound & Cinema	
COMM-ST 394	Topics in Gender and Cinema	
Total Credits		48

¹ Elective courses may be offered on a rotation basis. Please consult with advisor for current availability.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		26

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110		3 MATH 116 or STAT 115	3
GECRT-AH 101		3 GECRT-SC 101	3
COMM-ST 230 ^{CC}		3 ART 206	3
ART 114		3 Foreign Language Requirement (110 or higher)	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
COMM-ST 110		3 COMM-ST 339	3
COMM-ST 250		3 COMM-ST 354	3
COMM-ST 346		3 COMM-ST 373	3
GECRT-SS 101		3 Foreign Language course (211)	3
Foreign Language course (120 or higher)		3 General Elective	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
COMM-ST 3XX/4XX Film Production elective		3 COMM-ST 3XX/4XX Film Production elective	3
GECDV 201		3 COMM-ST 3XX/4XX Film Studies elective	3
HISTORY 101, 102, or POL-SCI 210		3 GECUE 201	3
Lab Science ^{LO}		1 General Elective	3
General Elective		3 General Elective	3
General Elective		3	
		16	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
COMM-ST 484		3 COMM-ST 471	3
COMM-ST 3XX/4XX Film Production elective		3 COMM-ST 3XX/4XX Film Production elective	3
COMM-ST 3XX/4XX Film Studies elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	2
		15	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.

- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Minor in Communication Studies

Student Learning Outcomes

Students graduating from this program will:

- Oral and written communication competence.
- The development of critical thinking skills.
- The development of both social and professional skills.

The Department of Communication Studies offers a variety of program areas, including interpersonal communication, public communication, print and electronic journalism, advertising, public relations, media theory and history, as well as radio, television, and film/video production. While each of these program areas have distinct outcomes in regard to professional competence, the faculty makes a strong effort to work collaboratively to assure that the measure of success in earning a degree in Communication Studies is defined in three departmental outcome goals which we seek to make one in the learning process:

1. Oral and written communication competence.
2. The development of critical thinking skills.
3. The development of both social and professional skills.

We recognize that the development of "professional skills" involve both general and specific outcomes. General outcomes include producing students who display professional standards in regard to interpersonal, intercultural, and organizational communication skills, as well as professional work habits (punctuality, reliability, ethical discernment, teambuilding, etc.). Specific professional skills taught in the Department prepare students to succeed in the professional areas of business communication, health communication, advertising, public relations, film, broadcasting, and journalism.

The Department makes a conscious effort to assess our curricula, teaching, as well as learning processes, and student/faculty competence, on the basis of student learning outcomes. We take pride in our reputation as a "teaching" department.

These outcome goals must equally serve students who will be immediately entering the workplace following the attainment of their undergraduate degree, as well as those who will be entering graduate school programs in a wide variety of academic areas (law, business, interpersonal and public communication, journalism, film, among others).

In every departmental course/lab, we consciously seek to employ specific learning process options that reinforce the three goals above.

A minor in communication studies may be earned by completing two required courses (COMM-ST 110 and COMM-ST 308), plus another 12 credit hours in any 300- or 400-level courses within the department, with the exception of those courses listed below. Students may declare their minor by meeting with the undergraduate advisor and filing a completed Declaration of Major Form (available in 202 Haag Hall) with a current copy of their transcript. Only minor courses with a grade of C- or higher will be accepted for credit in the minor.

Code	Title	Credits
Required Courses		
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	3
COMM-ST 308	Introduction To The Study Of Human Communication	3

Additional 300 or 400 level courses within the department except for those listed below. ¹	12
Total Credits	18

COMM-ST 390 does not count toward the minor in Communication Studies.

¹ Courses may be offered on a rotation basis. Please consult advisor for current availability.

Minimum GPA: 2.0

Minor in Film Studies

Student Learning Outcomes

Students graduating from this program will:

- Assess films, film culture and film history using film theory.
- Specify relationships between film form and meaning using close textual analysis.
- Analyze the relevance of global cinema history to film production.
- Identify social, political and aesthetic elements of cinema.
- Research and formulate theoretical questions and synthesize original scholarship in appropriate written form.
- * Construct short films in a variety of modes possibly including narrative, documentary, animated and promotional.

The Film Studies minor emphasizes an interdisciplinary study of film and media, critical thinking, creative exploration and skill development by combining the study of film history and theory with the art and practice of filmmaking. Students may write, produce, direct and edit narrative, documentary and experimental shorts while studying histories and theories of the moving image.

Only minor courses with a grade of C- or higher will be accepted for credit in the minor.

Code	Title	Credits
Required Courses		
COMM-ST 230	Introduction to Film Studies	3
COMM-ST 339	Introduction to Film Theory	3
Electives ¹		
Select four of the following:		12
ANCH 303	Film Adaptation	
COMM-ST 250	Introduction to Film and Video Production	
COMM-ST 320	Mass Media, Culture And Society	
COMM-ST 323	Concepts of the Hero in Ancient Literature and World Cinema	
COMM-ST 341WI	Rhetorical Theory And Criticism	
COMM-ST 345	German Film (Focus A)	
COMM-ST 346	Art of the Short Film	
COMM-ST 351WI	Fundamentals Of Writing For The Media	
COMM-ST 354/ENGLISH 339	Introduction to Screenwriting	
COMM-ST 363	Radio Production I	
COMM-ST 373	Intermediate Media Production	
COMM-ST 376	History Of The Film Industry	
COMM-ST 381	Narrative Production	
COMM-ST 384	Documentary Film History	
COMM-ST 385	Documentary Production	
COMM-ST 386	Animation	
COMM-ST 391	The World(s) Of Alfred Hitchcock	
COMM-ST 392	Topics in World Cinema	
COMM-ST 393	Topics in Sound & Cinema	
COMM-ST 394	Topics in Gender and Cinema	
COMM-ST 454	Advanced Screenwriting	
COMM-ST 457	Client-Based Media Production	
COMM-ST 471	Advanced Media Production	

COMM-ST 473	Directing Actors and Scenes
COMM-ST 478	Media Law
COMM-ST 484	Communication Studies Activities

Total Credits

18

¹ Elective courses may be offered on a rotation basis. Please consult advisor for current availability.

Department of Criminal Justice and Criminology

5030 Cherry Street, 434 Cherry Hall
 (816) 235-2751
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<http://cas.umkc.edu/cjc> (<http://cas.umkc.edu/cjc/>)

Mailing Address

University of Missouri-Kansas City
 Department of Criminal Justice and Criminology
 5030 Cherry Street, 434 Cherry Hall
 Kansas City, MO 64110-2499

Department Chair:

Lori Sexton

Professor Emeritus:

Wayne Lucas

Professor Emerita:

Cathleen Burnett

Professors:

Alexander Holsinger, Kristi Holsinger, Kenneth Novak

Associate Professors:

Toya Like, Jennifer Owens (principal graduate advisor), Lori Sexton (chair)

Assistant Professors:

Janet Garcia-Hallett

Assistant Teaching Professor:

Lindsey Arbuthnot Clancey

Administrative Assistant:

Kaylea Jones

Department Description

The Department of Criminal Justice and Criminology offers programs of study leading to the following degrees:

- Bachelor of Arts in Criminal Justice and Criminology
- Master of Science in Criminal Justice and Criminology

A program minor is available in Criminal Justice and Criminology.

The mission of the department is to extend knowledge about the nature of crime and criminal justice. This mission includes continuing participation by faculty in significant criminological research; other scholarly endeavors; and inviting students to join in that activity by:

- Learning the core materials of the discipline.
- Acquiring research skills.
- Assisting in faculty research.
- Becoming involved in student activities that supplement coursework and research.

Within the context of a liberal arts education, the program offers an interdisciplinary approach to study the criminal justice system. The program is designed to develop the intellectual skills required to function effectively as a field practitioner and to provide the knowledge base for careers as planners, administrators and researchers. The course offerings emphasize issues and problems relevant to policy considerations in criminal justice.

Department Activities

Undergraduate Academic Advising

Student academic advising is a continuous process in the department. Undergraduate advisors are available for consultation throughout the academic year. The department recommends that students check the program requirements in the department office before filing the declaration of major form. Undergraduate majors are encouraged to consult with the department to establish a tentative plan of study. Students should leave their mail and email addresses with the department office so that they can receive notifications concerning class time tables, new classes, and other departmental information of interest to majors.

Financial Assistance

Students can receive financial assistance through various campus scholarships, loan programs, grants and the work-study program. Students who are interested should contact the Financial Aid and Scholarships Office (<http://www.sfa.umkc.edu/site2/>).

Alvin Brooks Scholarship

Award Amount: Varies

Qualifications: Full-time undergraduate student majoring in Criminal Justice & Criminology, who is in good academic standing with a minimum GPA of 2.0. Preference given to students who are a first generation college student, who graduated from an accredited Kansas City, Missouri high school or transferred from a Kansas City area community college. The student must demonstrate financial need.

How to Apply: The College of Arts and Sciences' Scholarship Application.

Clarence Kelley Memorial Scholarship

Award Amount: Varies

Qualifications: Full-time undergraduate student majoring in Criminal Justice & Criminology, who is in good academic standing. Preference will be given to students who have demonstrated a commitment to high academic achievement.

How to Apply: The College of Arts and Sciences' Scholarship Application

Criminal Justice Club and Honor Society

The Criminal Justice and Criminology Club is open to all students interested in criminal justice topics; students do not have to be a Criminal Justice and Criminology Major. Club activities include service projects in the community, sponsorship of community speakers on campus, participation in local and regional professional meetings, and learning about internships and research opportunities. The department also has a chapter of Alpha Phi Sigma, a national honor society for Criminal Justice students. Students must meet certain academic qualifications and pay an initiation fee to join this national honor society.

Cooperative Programs

The department cooperates with several other programs on the campus by jointly listing courses at the undergraduate level. Students may benefit from combining one of these areas of study with their major:

- Honors College
- Women's and Gender Studies
- Black Studies

Graduate Academic Advising

Student academic advising is a continuous process in the department. The principal graduate advisor is available for consultation throughout the academic year. Graduate students are required to consult with the department to establish a tentative plan of study. A master's degree program of study form, and a form appointing a supervisory committee, should be submitted by the end of the student's first semester in the program. Students should leave their mail and e-mail addresses with the department so they can receive notifications concerning class time tables, new classes and other departmental news and opportunities.

Faculty

Lindsey Arbuthnot Clancey; assistant teaching professor of criminal justice and criminology; B.A. (University of Missouri); M.S. (University of Missouri-Kansas City).

Cathleen Burnett professor emerita of sociology/criminal justice and criminology; B.A. (St. Lawrence University); M.S., Ph.D. (Vanderbilt University).

Janet Garcia-Hallett^{2,3}; assistant professor of criminal justice and criminology; B.A. (City University of New York Hunter College); M.A., Ph.D. (Rutgers University).

Alexander Holsinger^{2,3}; professor of criminal justice and criminology; B.A. (Aquinas College); M.S. (Illinois State University); Ph.D. (University of Cincinnati).

Kristi Holsinger^{2,3}; professor of criminal justice and criminology; B.A. (Aquinas College); M.S., Ph.D. (University of Cincinnati).

Toya Z. Like^{2,3}; associate professor of criminal justice and criminology; B.S., M.A., Ph.D. (University of Missouri-St. Louis).

Wayne L. Lucas; professor emeritus of criminal justice and criminology; B.S., M.S. (Illinois State University); Ph.D. (Iowa State University).

Ken Novak^{2,3}; professor of criminal justice and criminology; B.S. (Bowling Green State University); M.S., Ph.D. (University of Cincinnati).

Jennifer Lynn Owens^{2,3}; associate professor of criminal justice and criminology; B.S. (University of Nebraska at Lincoln); M.A. (University of Nebraska at Omaha); Ph.D. (University of Missouri-St. Louis).

Lori Sexton^{2,3}; associate professor of criminal justice and criminology; B.S. (Cornell University); M.A. (University of Pennsylvania); Ph.D. (University of California, Irvine).

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

Undergraduate Undergraduate Degrees:

- Bachelor of Arts: Criminal Justice and Criminology (p. 655)
- Minor in Criminal Justice and Criminology (p. 654)

Graduate Graduate Degrees:

- Master of Science in Criminal Justice and Criminology (p. 660)

Courses

CJC 101 Introduction To Criminal Justice Credits: 3

This introductory overview course is designed to familiarize students with the three main components of the adult criminal justice system: police, courts, and corrections. The course will investigate the viewpoints of offenders, victims, social scientists, the general public, and workers in the system on diverse issues of social control, criminal behavior, treatment and punishment.

CJC 101 - MOTR CRJS 101: Introduction to Criminal Justice



CJC 280 Gangs and Crime Credits: 3

This course will provide students with an overview of what is known about street gangs. Specifically, the course will cover definitional issues, gang organization and structure, gang culture, gang member onset and desistance, among other issues related to criminal street gangs. This course will also encourage students to think critically about communities, crime, and group formation.

CJC 282 Criminal Justice & Criminology in Popular Media Credits: 3

This course examines criminology and criminal justice as it is represented in popular film to explore critically the impact media has on the public's perception of the criminal justice system, the origin of criminal behavior, and the broad sociological constructs of criminology. A key focus is the media's power to shape criminal justice policy and practice.

CJC 301 Theoretical Criminology Credits: 3

A comprehensive examination of the major criminology theories, their philosophical assumptions, and the socio-historical context in which they were articulated.

CJC 302 Methods of Criminological Research Credits: 3

A seminar which explores the interrelationships between sociology theory, research methods, and statistics. May focus on major contemporary issues building on and integrating knowledge obtained in previous courses.

CJC 303 Introduction to Statistics in Sociology and Criminal Justice Credits: 3

A first course in the statistical analysis of quantitative data. Course emphasizes descriptive statistics, probability theory, parameter estimation, bivariate hypothesis testing, and computer applications.

Prerequisites: MATH 110 or MATH 116 or STAT 115 or MOTRMATH 110 or higher level math (with a grade of C- or higher); or ALEKS Score of 61 or higher.

CJC 332 Race, Class and Justice Credits: 3

This course examines the intersection of race and class as it relates to crime and justice. Specifically, the course focuses on race and class in relation to criminological theory and the application of justice system practices and policies.

CJC 335 Blackness as Threat Credits: 3

This course examines from a criminological and socio-legal perspective the historical and contemporary influence of race on perceptions of threat/danger, violence, and justice. The class focuses particularly on the experiences of African Americans in these regards, using recent high-profile cases as empirical lenses through which to discuss this topic.

CJC 338 Immigration and Crime Credits: 3

This course examines concerns regarding a purported connection between immigration and crime in the United States. We will begin through an examination of how immigrants have become increasingly criminalized, shaping an overlap between immigration and criminalization. This class explores the threat narrative regarding the Latinx population, generally, and explore gender disparities in these depictions of Latina women compared to Latino men. Discussions will incorporate details about the immigrant population in the Kansas City metropolitan area and look at examples of how local community agencies and activists are working to address human rights issues.

CJC 351 Policing In The Community Credits: 3

The purpose of this class is to introduce the student to police operations and the effectiveness of different police programs. The material discussed in class focuses on empirical evaluations of police effectiveness, and the role of the police in today's society. This class is divided into four broad areas: the nature and effectiveness of patrol; criminal investigations; special operations including crackdowns, responses to domestic assaults, and hot spot policing; and the latest crime prevention strategies, such as community oriented policing and problem solving.

CJC 354 Policing in America Credits: 3

A comparison of law enforcement and peace-keeping functions of the police provides a basic theme for the course, with examination of several topics related to police accomplishing these functions. Some of the topics covered include police discretion, police professionalism, the police officer as a bureaucratic agent, and police-community relations.

CJC 357 Crime Scene Investigation Credits: 3

This course will examine contemporary issues in crime scene investigation and its relevance to the criminal justice system. It will include an overview of legal issues, proper evidence collection techniques, and the preservation of evidence. Several different types of crime scenes will be explored.

CJC 361 Principles & Practices of Criminal Courts Credits: 3

The course examines the American criminal judicial system, including the history, philosophy, and changing nature of criminal courts. The activities of lawyers, judges, and related professionals are emphasized, and current topics involving the criminal court are discussed.

CJC 364 The Supreme Court And The Criminal Process Credits: 3

Course examines recent Supreme Court decisions on the constitutional aspects of the administration of justice. Topics include the nationalization of the Bill of Rights and jurisdiction with an emphasis on problems involving the Fourth, Fifth, Sixth, Eighth, and 14th Amendments.

CJC 370 Principles Of Corrections Credits: 3

This course explores adult institutional and community-based corrections in the United States. Major areas examined include the evolution of corrections, the process of correctional reform, adult offenders and prison culture, treatment and rehabilitation of offenders, intermediate sanctions, and correctional workers.

CJC 371 Community Corrections Credits: 3

This course will examine intermediate sanctions in the United States, such as probation, halfway houses, boot camps, among others. Specifically, the origin and proliferation of the use of corrections in the community will be explored in depth. The effectiveness of several major community correctional strategies will be explored through a review of the research literature base. Several issues will be highlighted including (but not limited to) ethical constraints, political problems, and treatment effectiveness in light of the use of community sanctions.

CJC 381 Advocacy and Crisis Intervention Credits: 3

This course focuses on the dynamics of sexual violence, advocacy skills, and how communities respond. The course will examine sexual violence in America, dynamics and trauma response to sexual violence, advocacy skills, and the role of community responders, including new strategies for response.

CJC 382 Human Trafficking Credits: 3

This course is designed to equip prospective Criminal Justice professionals with a comprehensive, trauma informed understanding of the issue of human trafficking, as it exists within the context of a modern, developed society. Students will learn the elements of a comprehensive strategy to address this crime; identification, exit, restoration, legal reforms, and prevention.

CJC 385 Victimology Credits: 3

This course addresses the study of crime, criminals and victims. It examines the relationship between victims and offenders. Special treatment is given to criminological as well as victimological theories. A segment of the course will address the sporadic nature of juvenile crime. The course will examine viable strategies to reduce levels of victimization. In the final analysis the course will offer crime prevention strategies.

CJC 390 New Dimensions In Criminal Justice Credits: 3

Examination of contemporary topics, issues or problems related to the development of justice and/or operations in response to criminal and related behaviors addressed by the justice system. May be repeated for credit when the topic changes.

CJC 395 Criminal Justice and Criminology Career Exploration Credits: 3

The course examines opportunities in US Criminal Justice and Criminology within law enforcement, courts, and corrections, local, state, federal, private sector and academia. Students will learn ethics and professionalism, securing internships, preparing for interviews, effective networking and career-building.

CJC 430 Women, Crime And Criminal Justice Credits: 3

This course will focus on the experiences of women and girls with crime in America. The primary areas studied will be females as victims, offenders, and professionals in the criminal justice system. Various criminological theories and research will also be examined in light of gender.

CJC 431 Hate & Bias Crimes Credits: 3

The purpose of this course is to examine the development and enforcement of hate crime law within our legal system. Discussion focuses on the causes and consequences of hate crimes, the constitutional issues associated with bias crime statutes, and the effectiveness of formal and informal social controls for eliminating hate and bias crimes.

CJC 481 Restorative Justice Credits: 3

This course is an introduction to the concept of restorative justice. The course examines the roots of the concept, its theoretical perspective, and its applications in juvenile justice, mediation and correctional settings.

CJC 488 Mentoring Juvenile Justice System-Involved Youth Credits: 3

Youth mentoring experience in a juvenile justice setting with required training and classroom study. Requires successful background check completion.

CJC 490 Directed Studies In Criminal Justice And Criminology Credits: 1-5

Individual research and study in the student's field of interest as approved and directed by major professors. The work involves examination and reporting of selected problems affecting the various agencies of our legal system. Only two of the 490 sequence courses and up to 3 credit hours can be applied to the major. A. Law Enforcement B. Court Operations and Administration C. Corrections D. Legal Theory and Philosophy E. Criminological Theory F. Sociology of Law.

CJC 491 Internship In Criminal Justice Credits: 3-6

Intern experience under faculty supervision in local, state, federal or private agencies working with justice system involved offenders.

Prerequisites: Junior or Senior CJC student.

CJC 492 Topics In Criminal Justice Credit: 1

Specialized, short courses with focused examination of particular topics germane to the study of the justice system. May be repeated for credit.

CJC 495WI Capstone: Criminal Justice And Criminology Credits: 3

This course is designed to integrate student's program of study in the major of criminal justice and criminology. The class examines current conditions of the justice system with respect of race, gender and social class.

Prerequisites: Senior CJC student.

CJC 5500 Sociology Of Law Credits: 3

A sociological study of the legal system with focus on organizational analyses of the legal profession, courts as a social system, the bureaucratization of the legal process, stratification and the allocation of legal services and careers.

CJC 5511 Sociological Methods II Credits: 3

Quantitative research is the primary focus of the course; emphasis is placed on problem formulation; research design; sampling procedures, questionnaire construction and interviewing techniques; data collection; problems of scaling, computer statistical programs; linking appropriate statistical analyses with data analysis; and report writing.

Prerequisites: CJC 483.

CJC 5515 Qualitative Research Methods in Criminal Justice Credits: 3

This course focuses on qualitative research methods, such as interviewing techniques, focus groups, content analysis, and field observation. Emphasis is placed on research design, data collection, and data analysis.

Prerequisites: CJC 483.

CJC 5516 Intermediate Statistics Credits: 3

A systematic development of the logic and practice of selected statistical methods used in sociological research. Included are analysis of variance and covariance, regression analysis, multiple contingency, and non-parametric tests.

Prerequisites: CJC 363.

CJC 5518 Advanced Criminological Theory Credits: 3

This course provides an understanding of past as well as present criminological theories by examining each criminological tradition (beginning in the 18th century and continuing into the present.) The primary aim of the course is to determine the root causes of deviant and criminal behaviors. Moreover, this course offers special attention to how society has historically reacted and responded to crime and deviant behavior. Furthermore, by examining crime and deviant behavior from a historical context, the students are able to determine how criminological theories have influenced public policies designed to reduce and control criminal behavior. In the final analysis, students will examine the rationales that society use to justify efforts toward punishment and treatment.

Prerequisites: CJC 319.

CJC 5520 Juvenile Justice Credits: 3

This course provides a historical and contemporary overview of the juvenile justice system via a critical examination of the function of this system and theories explaining delinquency in adolescence. We will explore special topics within juvenile justice and proposals for juvenile justice reform.

CJC 5551 Seminar In Policing Credits: 3

This course addresses the important topics related to the institution of policing. Through readings and class discussions, students will gain a better understanding of both historical aspects of policing as well as the future of policing. Topics include selection, training and socialization, police management, deviance and corruption, use of force, community oriented policing.

CJC 5565 Seminar In Crime Prevention Credits: 3

This seminar examines variations in methods to reduce crime in America, including strategies from the criminal justice system as well as other institutions. Building on established criminological theory, this seminar will evaluate the best practices to prevent crime across a variety of social contexts.

CJC 5570 Contemporary Corrections And Correctional Policy Credits: 3

Present-day correctional alternatives are considered regarding the correctional policy that is, or potentially can be, carried out within the various programs. Prisons, probation, parole community-based programs are evaluated as to the theory of punishment demonstrated within these programs. Emphasis is placed on what constitutes a rational and workable corrections policy and the form of correctional programs needed to realize such policy.

CJC 5575 Correctional Rehabilitation And Treatment Credits: 3

This course will begin with a thorough examination of the rise, fall, and recent resurrection of "rehabilitation and treatment" in American correctional strategies. Both past and current treatment strategies will be studied regarding their effectiveness in reducing recidivism. This will be done through a survey of the quantitative literature base. There will be some emphasis on treating special needs offenders (e.g., sex offenders, juvenile offenders, offenders with developmental disabilities or mental illnesses.)

CJC 5576 Seminar In Criminal Justice And Criminology Issues Credits: 3

This course is an advanced exploration of the relationship between the criminal justice system and criminal behavior from at least one of the following perspectives: psychological, sociological, economic, legal, political or administration/ management. Will include discussions and analysis of contemporary readings and on-going research in the selected perspective.

CJC 5580 Seminar: Policy And Decision Making In Criminal Justice Credits: 3

The focus of the course is assessment of the character and recent crime trends in the United States, with attention to identifying elements that shape justice system policies in response to crime. Consideration is given to the nature and scope of policy and decision-making processes in legal institutions and law enforcement bureaucracies, how such policies have impacted crime, and alternative policies address the problem of crime.

CJC 5590 Directed Studies In Criminal Justice And Criminology Credits: 1-3

Individual research and study in the student's field of interest as approved and directed by major professors. The work involves examination and reporting of selected problems affecting the various agencies of our legal system. A. Law Enforcement B. Court Operations and Administration C. Corrections D. Legal Theory and Philosophy E. Criminological Theory F. Sociology of Law.

CJC 5592 Advanced GIS For Crime Analysis Credits: 3

This course provides an overview of crime mapping as it relates to the spatial and temporal analysis of crime. Utilizing theory related to criminal offending, this course will provide students with hands-on experience in geographic profiling and crime prevention strategies.

Prerequisites: GEOG 203.

CJC 5595 Crime Analysis Internship Credits: 3

This experience involves working with crime analysts in the field. Students will learn and hone practical skills while being supervised by department faculty or staff.

Prerequisites: CJC 5592.

CJC 5599 Research And Thesis Credits: 1-6

Directed specialized research. Before writing a thesis, the student must clear the topic and research design with the Supervisory Committee.

CJC 5699 Dissertation Research Credits: 1-12

Individual directed research leading to preparation and completion of doctoral dissertation.

Prerequisites: Ph.D. course requirements completed.

CJC 5899 Required Graduate Enrollment Credit: 1

Minor in Criminal Justice and Criminology

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate knowledge of the Criminal Justice System, its subsystems (the institutions and structures of police, courts, and corrections) and their interactions (processes).
- Demonstrate knowledge of the major theoretical explanations for individual motivations to commit crime as well as the nature/occurrence of crime which includes the prominent schools of criminological thoughts - the Positivist, Classical and Chicago Schools of Criminology - and emergent theories.
- Demonstrate the ability to analyze criminal justice literature, through reading comprehension and interpretation.

Program Requirements

Undergraduate students can obtain a CJC minor. A minimum of 18 credit hours is required, including the introductory course CJC 101. At least 9 of the 18 credit hours must be in courses at the 300 or 400 level, and at least 9 of the 18 credit hours must be taken at UMKC. Only 6 credit hours from the major field of study may be applied toward a CJC minor, and only 3 credit hours may overlap between two minors. Students should receive a grade no lower than a C- in the required course and should have an overall 2.0 GPA for the minor.

Code	Title	Credits
CJC 101	Introduction To Criminal Justice	3
CJC Electives		15
CJC 240	Delinquency And Juvenile Justice	
CJC 280	Gangs and Crime	
CJC 282	Criminal Justice & Criminology in Popular Media	
CJC 301	Theoretical Criminology	
CJC 302	Methods of Criminological Research	
CJC 303	Introduction to Statistics in Sociology and Criminal Justice	
CJC 332	Race, Class and Justice	
CJC 335	Blackness as Threat	
CJC 338	Immigration and Crime	
CJC 351	Policing In The Community	
CJC 354	Policing in America	
CJC 357	Crime Scene Investigation	
CJC 361	Principles & Practices of Criminal Courts	
CJC 381	Advocacy and Crisis Intervention	
CJC 364	The Supreme Court And The Criminal Process	
CJC 370	Principles Of Corrections	
CJC 371	Community Corrections	
CJC 381	Advocacy and Crisis Intervention	
CJC 382	Human Trafficking	
CJC 385	Victimology	
CJC 390	New Dimensions In Criminal Justice	
CJC 395	Criminal Justice and Criminology Career Exploration	
CJC 430	Women, Crime And Criminal Justice	
CJC 431	Hate & Bias Crimes	
CJC 481	Restorative Justice	
CJC 482	The Death Penalty In America	
CJC 495WI	Capstone: Criminal Justice And Criminology	
Total Credits		18

Bachelor of Arts: Criminal Justice and Criminology

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- be able to communicate professionally and effectively orally and in writing for the identified audience.
- identify the diverse skills needed to succeed in this field and utilize these skills to address real-world problems.
- evaluate different careers paths resulting from their CJC undergraduate degree.
- demonstrate the ability to link theory, research and policy.
- demonstrate the ability to engage with and address existing social problems.

The mission of the Bachelor of Arts in Criminal Justice and Criminology is to offer students the opportunity to learn how to analyze and interpret the systems of social control that are applied through the criminal justice system and throughout society, as well as how to explain the causes and consequences of these social structures. This major focuses on crime, criminals, and professionals who handle these concerns through arrest, court processing and punishments. As such, the major emphasizes community engagement and service so to prepare students for the jobs and leadership opportunities that will be necessary for their role as future change agents. The major offers skills in critical thinking and in conducting and evaluating research which promote evidence-based decision-making and effective communication. Always striving for best practices, this major is especially relevant to the urban engagement mission of the university, and its domain is always situated within inclusive learning environments which demand students become culturally competent individuals in order to understand and thrive in society.

Career Implications

The B.A. curriculum is designed to prepare students for entry-level positions and middle-management careers in the public and private sectors of police and security services, adult and juvenile justice systems and post-adjudicatory services such as probation, parole and related private organizations, as well as federal, state and local administrative agencies. The program is intended to augment skills that are developed in the training programs and academies of service agencies and to develop new talent for the wide variety of agencies and organizations that administer our legal institutions. In addition to the foregoing variety of career roles, CJC majors can exercise career options in consulting, government, human services, journalism and urban planning, and with the appropriate graduate training, in teaching social work, criminology and law.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3

COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		10

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
Foundation Courses		
CJC 101	Introduction To Criminal Justice	3
CJC 301	Theoretical Criminology	3
CJC 302	Methods of Criminological Research	3
CJC 303	Introduction to Statistics in Sociology and Criminal Justice	3
Systems Courses		
Select one course each from two different systems:		6
Policing:		
CJC 351	Policing In The Community	
CJC 354	Policing in America	
Courts:		
CJC 361	Principles & Practices of Criminal Courts	
CJC 364	The Supreme Court And The Criminal Process	
Corrections:		
CJC 370	Principles Of Corrections	
CJC 371	Community Corrections	
Capstone Course		
CJC 495WI	Capstone: Criminal Justice And Criminology	3
Major Electives (see restrictions below)		15
CJC 240		
CJC 280	Gangs and Crime	
CJC 282	Criminal Justice & Criminology in Popular Media	
CJC 332	Race, Class and Justice	
CJC 335	Blackness as Threat	
CJC 338	Immigration and Crime	
CJC 357	Crime Scene Investigation	
CJC 381	Advocacy and Crisis Intervention	
CJC 382	Human Trafficking	
CJC 385	Victimology	
CJC 390	New Dimensions In Criminal Justice	
CJC 395	Criminal Justice and Criminology Career Exploration	
CJC 430	Women, Crime And Criminal Justice	
CJC 431	Hate & Bias Crimes	
CJC 481	Restorative Justice	
CJC 482		
CJC 491	Internship In Criminal Justice	
Total Credits		36

Students must receive a grade of no lower than C- in the core required courses (CJC 101, CJC 301, CJC 302, CJC 303, and CJC 495WI) and achieve an overall GPA of 2.0 in the major. Students with more than one academic major may apply only 9 credit hours from another degree program toward the CJC major.

It is suggested that students broaden their course choices by selecting related offerings in English (especially those courses that stress writing skills), philosophy, history, geography, political science, psychology, sociology and public administration.

CJC Elective Restrictions

In selecting courses to fulfill the 15 credit hours of CJC electives, CJC majors and minors should be aware of the following restrictions:

- No more than 3 credit hours of CJC 490 may be used to fulfill CJC elective requirements.
- No more than 3 credit hours of CJC 491 may be used to fulfill CJC elective requirements.
- No more than 3 credit hours of CJC 492 may be used to fulfill CJC elective requirements.

Students who are pursuing the CJC major or minor are strongly encouraged to meet with a CJC advisor each semester to review their progress toward degree completion, as well as to determine the appropriateness of coursework selected.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		41

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC’s Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student’s evaluation of progress and major “fit”. In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC’s Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC’s PlanMyDegree ‘Audit’ (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students’ officially recorded (Office of Registration and Records) and “what if” exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC’s PlanMyDegree ‘Plans’ (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student’s officially recorded (Office of Registration and Records) and “what if” exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC’s Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program’s individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student’s responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year			
Fall Semester	Credits	Spring Semester	Credits
CJC 101 ^{CC}		3 CJC 301 ^{CC}	3
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110		3 STAT 115, MATH 110, or MATH 116	3
GECRT-SS 101		3 GECRT-AH 101	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3

Second Year

Fall Semester	Credits	Spring Semester	Credits
CJC 302 ^{CC}		3 CJC 303 ^{CC}	3
COMM-ST 110, 140, or 277		3 CJC 3XX/4XX Systems Course 1	3
HISTORY 101, 102, or POL-SCI 210		3 GECUE 201	3
GECDV 201		3 GECRT-SC 101	3
Foreign Language course (211)		3 Lab Science ^{LO}	1
		General Elective	3
	15		16

Third Year

Fall Semester	Credits	Spring Semester	Credits
CJC 3XX/4XX Systems Course 2		3 CJC 2XX/3XX/4XX Major Elective	3
CJC 2XX/3XX/4XX Major Elective		3 CJC 3XX/4XX Major Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
	15		15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
CJC 495WI		3 CJC 3XX/4XX Major Elective	3
CJC 3XX/4XX Major Elective		3 General Elective (3XX/4XX if needed)	3
General Elective (3XX/4XX if needed)		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	2
	15		14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Master of Science: Criminal Justice and Criminology

Student Learning Outcomes

Students graduating from this program will:

- demonstrate broad and deep knowledge of the prevailing explanations for criminal behavior (both macro/social causes, as well as micro/individualistic causes). Students will understand the historical origins of the prevailing theoretical explanations for criminal behavior, and will become fluent in the empirical literature that has served to test and further develop those theories.
- demonstrate the ability to design and execute research. Specifically, students will learn how to fully develop and execute a research proposals/projects of both a qualitative and quantitative nature. Students will also demonstrate the ability to analyze data, interpret findings, and communicate those findings in an accessible way to a general audience.
- demonstrate comprehensive knowledge regarding trends in crime, including crime trends throughout American history, and reasons for shifts in crime trends. Likewise students will demonstrate how and why policy develops within the Criminal Justice System, as well as what impact major policy shifts have had on the Criminal Justice System.

Program Description

The M.S. degree in Criminal Justice and Criminology (CJC) offers coursework that emphasizes policy analysis of criminal justice and criminology issues. The M.S. in CJC prepares those seeking appropriate study and academic credentials to qualify for management and administrative positions in justice-related agencies. The degree may also serve as preparation for advanced study in criminology and criminal justice at the doctoral level.

Application Procedures

Applicants must submit an application for admission to UMKC and transcripts of their undergraduate work (and other graduate work if applicable) to the university Office of Admissions. We use a rolling admission process but the priority deadline for spring is November 1st. For fall and for graduate teaching assistantships (GTAs), the priority deadline is April 1st. The department strongly recommends that application materials be submitted well in advance of the posted due date to ensure all materials will be on hand in time for review. Decisions regarding admission to the graduate program are made by the graduate faculty of the program. Materials are reviewed with attention to past academic performance and substantive areas of study that would prepare students for CJC graduate study.

Admission Requirements

The minimum admission requirements for entrance into the M.S. in CJC program include the following:

1. Completed an undergraduate degree, from an accredited university or college, preferably with coursework in the socio-behavioral sciences sufficient to prepare for graduate-level study in the criminal justice and criminology field.
2. Achieved a minimum cumulative GPA of 3.0 in all undergraduate work.
3. Additionally, applicants must upload a personal statement. This statement should be two to three pages in length (double-spaced) and should identify how the applicant's undergraduate education and their work or personal experience has prepared them for graduate study. Applicants are also encouraged to express how they view study in our graduate program as fitting with their future career or educational goals. It is recommended that students review the M.S. in CJC program's course offerings as well as the concentration areas of the faculty in order to glean additional information about what the academic programming has to offer.
4. Two letters of recommendation: Applicants should provide contact info for at least two individuals who have agreed to provide references on their behalf. Letter writers will be asked to submit these electronically. References should be provided by individuals who are not related to the applicant, ideally will come from individuals who have direct knowledge of the applicant's academic credentials and preparedness, and describe the applicant's scholastic aptitude and their level of preparation for graduate-level education.

The application process is competitive. Satisfaction of the minimum criteria stated above does not guarantee admission to the graduate program of study. Students are admitted according to their rank in the applicant pool and consideration of the adequacy of departmental resources. Students who do not meet admission requirements, but who otherwise may show promise for graduate work, may be admitted provisionally to the program. Provisional admission means deficiencies must be corrected before a student is fully admitted as a degree-seeking student in the M.S. in CJC program. Typical deficiencies include a need to take undergraduate coursework to prepare for graduate study in this program, or to demonstrate scholastic ability in graduate-level courses.

The Department of Criminal Justice and Criminology's mission is to lead in graduate education within the area of Criminal Justice and Criminology; to deepen and expand scientific understanding of America's justice systems; to develop a graduate-educated workforce and collaborate in urban issues and education; to create a vibrant learning and campus life experience for our master's students.

The M.S. in CJC degree requires successful completion of 30 credit hours of graduate work. Within these 30 hours, students may elect to complete a thesis or pursue the Demonstration Project.

A core of five courses is required of all students. The required courses include:

Code	Title	Credits
CJC 5511	Sociological Methods II	3
CJC 5515	Qualitative Research Methods in Criminal Justice	3
CJC 5516	Intermediate Statistics	3
CJC 5518	Advanced Criminological Theory	3
CJC 5580	Seminar: Policy And Decision Making In Criminal Justice	3
Total Credits		15

The required graduate courses in statistics, research methods and theory demand completion of prerequisite courses in these areas from the student's undergraduate work. Those who have not had such courses may be required to take the prerequisite course(s) prior to enrolling in the graduate course. Beyond the required courses, students must complete an additional 15 hours of academic work. This work should include the available M.S. in CJC electives (which include the three courses listed above, of which at least one must be taken), other graduate-level courses from other departments that have been approved by the student's Thesis Committee or the Graduate Committee prior to enrollment, and other coursework from the CJC curriculum that has been approved by the Graduate Committee prior to enrollment. These hours may also include Thesis hours, or Directed Study hours per the Demonstration Project depending on the desires of the student. The content of the 15 hours of study will reflect the student's choices after consultation with their Thesis advisor, and/or the Graduate Committee, as well as the student's decision regarding the Thesis or the Demonstration Project option.

In sum, the following generally reflects the two options - Thesis Option and Demonstration Project Option:

- Thesis Option: 15 credit hours of required courses + 9 hours of M.S. CJC graduate elective coursework + 6 hours of Thesis = 30.0 credit hours.
- Demonstration Project Option: 15 credit hours of required courses + 12 hours of M.S. CJC graduate elective coursework + 3 hours of Directed Studies = 30.0 credit hours.

Thesis Option

Those electing to write a thesis as part of their graduate work can receive up to 6 hours credit (CJC 5599) for preparation of the thesis. In addition to writing the thesis students must successfully complete an oral defense of that thesis before their supervisory committee. Thesis defenses are also open to the public. The research topic of the thesis will address some issue of specific interest to the student under the advisement of their thesis chair. Through courses, literature review, and analyses conducted in developing the thesis, students are expected to become proficient in their specific thesis topic area.

Demonstration Project Option

Students electing the Demonstration Project Option will take 3.0 credit hours of CJC 5590: Directed Studies, during their final semester of coursework. In addition, students conducting Demonstration Projects will take one additional 3.0 credit hour elective. These 6.0 credit hours (CJC 5590 - Directed Studies for the Demonstration Project along with one additional 3.0 credit hour elective) are in lieu of the 6.0 credit hours of CJC 5599 that a student electing to conduct a Thesis would take.

The demonstration project will require the student to write an independent research paper that outlines solutions to a given scenario. The process is designed to reflect the academic peer-reviewed protocol and will involve two stages of blind review. Please see the Graduate Guidebook and/or the graduate director for more detail regarding the Demonstration Project.

Dual BA/MS Degree

Student Learning Outcomes

Students graduating from this program will:

- Students will be able to communicate professionally and effectively orally and in writing for the identified audience.
- Students will identify the diverse skills needed to succeed in this field and utilize these skills to address real-world problems.
- Students will evaluate different careers paths resulting from their CJC undergraduate degree.
- Students will demonstrate the ability to link theory, research, and policy.
- Students will demonstrate the ability to engage with and address existing social problems.
- Student will be able to analyze research on criminal justice topics.
- Student will be able to communicate professionally and effectively orally and in writing for the identified audience.
- Students will be able to design and execute research on a criminal justice topic.

- Students will apply a broad and deep knowledge of the prevailing explanations for criminal behavior to understand criminal justice problems.
- Students will be able to identify and evaluate the most appropriate policy or program to address criminal justice issues.

Student Learning Outcomes BA CJC

- Students will be able to communicate professionally and effectively orally and in writing for the identified audience.
- Students will identify the diverse skills needed to succeed in this field and utilize these skills to address real-world problems.
- Students will evaluate different careers paths resulting from their CJC undergraduate degree.
- Students will demonstrate the ability to link theory, research, and policy.
- Students will demonstrate the ability to engage with and address existing social problems.

The mission of the Bachelor of Arts in Criminal Justice and Criminology is to offer students the opportunity to learn how to analyze and interpret the systems of social control that are applied through the criminal justice system and throughout society, as well as how to explain the causes and consequences of these social structures. This major focuses on crime, criminals, and professionals who handle these concerns through arrest, court processing and punishments. As such, the major emphasizes community engagement and service so to prepare students for the jobs and leadership opportunities that will be necessary for their role as future change agents. The major offers skills in critical thinking and in conducting and evaluating research which promote evidence-based decision-making and effective communication. Always striving for best practices, this major is especially relevant to the urban engagement mission of the university, and its domain is always situated within inclusive learning environments which demand students become culturally competent individuals in order to understand and thrive in society.

Student Learning Outcomes MS CJC

- Student will be able to analyze research on criminal justice topics.
- Student will be able to communicate professionally and effectively orally and in writing for the identified audience.
- Students will apply a broad and deep knowledge of the prevailing explanations for criminal behavior to understand criminal justice problems.
- Students will be able to identify and evaluate the most appropriate policy or program to address criminal justice issues.
- Students will be able to design and execute research on a criminal justice topic.

The Department of Criminal Justice and Criminology's mission is to lead in graduate education within the area of Criminal Justice and Criminology; to deepen and expand scientific understanding of America's justice systems; to develop a graduate-educated workforce and collaborate in urban issues and education; to create a vibrant learning and campus life experience for our master's students.

The M.S. in CJC degree requires successful completion of 30 credit hours of graduate work. Within these 30 hours, students may elect to complete a thesis or pursue the Demonstration Project.

Proposed Curriculum Requirements

Dual BA/MS Program

Department of Criminal Justice and Criminology

BA Requirements

The undergraduate major in criminal justice and criminology (CJC) requires 36 credit hours. Students must achieve a grade of no lower than a C# in the core requirement courses and achieve an overall GPA of 2.0 in the major. Students with more than one academic major may apply only 9 credit hours from another degree program toward the CJC major. Students must complete 21 hours at UMKC. It is suggested that students broaden their program of study by selecting related offerings in English (especially those courses that stress writing skills), philosophy, history, geography, political science, psychology, sociology public administration, urban planning, and Black, Latinx and Latin American, Women's, Gender, and Sexuality Studies.

Code	Title	Credits
Foundation Courses		
CJC 101	Introduction To Criminal Justice	3
CJC 301	Theoretical Criminology	3
CJC 302	Methods of Criminological Research	3
CJC 303	Introduction to Statistics in Sociology and Criminal Justice	3
Systems Courses		
Select one course from two different systems:		6
Policing:		
CJC 351	Policing In The Community	

CJC 354	Policing in America	
Courts:		
CJC 361	Principles & Practices of Criminal Courts	
CJC 364	The Supreme Court And The Criminal Process	
Corrections:		
CJC 370	Principles Of Corrections	
CJC 371	Community Corrections	
Capstone Course		
CJC 495WI	Capstone: Criminal Justice And Criminology	3
Major Electives (see restrictions below)		15
Total Credits		36

Remaining Coursework: CJC Electives (15 hours)

In selecting courses to fulfill the 15 credit hours of CJC electives, CJC majors and minors should be aware of the following restrictions.

- No more than 3 credit hours of CJC 490 may be used to fulfill CJC elective requirements.
- No more than 3 credit hours of CJC 491 may be used to fulfill CJC elective requirements.
- No more than 3 credit hours of CJC 492 may be used to fulfill CJC elective requirements.

Students who are pursuing the CJC major or minor are strongly encouraged to meet with a CJC advisor each semester to review their progress toward degree completion, as well as to determine the appropriateness of coursework selected.

MS Requirements

The M.S. in CJC degree requires successful completion of 30 credit hours of graduate work. Within these 30 hours, students may elect to complete a thesis or pursue the Demonstration Project.

Code	Title	Credits
Required Courses		
CJC 5511	Sociological Methods II	3
CJC 5515	Qualitative Research Methods in Criminal Justice	3
CJC 5516	Intermediate Statistics	3
CJC 5518	Advanced Criminological Theory	3
CJC 5580	Seminar: Policy And Decision Making In Criminal Justice	3
Thesis or Demonstration Project Option (see below)		15
Total Credits		30
Code	Title	Credits
Thesis Option		
CJC Electives		9
CJC 5599	Research And Thesis	6
Total Credits		15
Code	Title	Credits
Demonstration Project Option		
CJC Electives		12
CJC 5590	Directed Studies In Criminal Justice And Criminology	3
Total Credits		15

The required graduate courses in statistics, research methods and theory demand completion of prerequisite courses in these areas from the student's undergraduate work. Those who have not had such courses may be required to take the prerequisite course(s) prior to enrolling in the graduate course. Beyond the required courses, students must complete an additional 15 hours of academic work. This work should include CJC graduate electives, other graduate-level courses from other departments that have been approved by the student's Advisor prior to enrollment, and other coursework from the CJC curriculum that has been approved by the Graduate Committee prior to enrollment. These hours may also include Thesis hours, or Directed Study hours per the Demonstration Project depending on the desires of the student. The content of the 15 hours of study will

reflect the student's choices after consultation with their Advisor, as well as the student's decision regarding the Thesis or the Demonstration Project option.

In sum, the following generally reflects the two options - Thesis Option and Demonstration Project Option:

- Thesis Option: 15 credit hours of required courses + 9 hours of M.S. CJC graduate elective coursework + 6 hours of Thesis = 30.0 credit hours.
- Demonstration Project Option: 15 credit hours of required courses + 12 hours of M.S. CJC graduate elective coursework + 3 hours of Directed Studies = 30.0 credit hours.

Thesis Option

Those electing to write a thesis as part of their graduate work can receive up to 6 hours credit (CJC 5599 (<https://catalog.umkc.edu/search/?P=CJC%205599>)) for preparation of the thesis. In addition to writing the thesis students must successfully complete an oral defense of that thesis before their supervisory committee. Thesis defenses are also open to the public. The research topic of the thesis will address some issue of specific interest to the student under the advisement of their thesis chair. Through courses, literature review, and analyses conducted in developing the thesis, students are expected to become proficient in their specific thesis topic area.

Demonstration Project Option

Students electing the Demonstration Project Option will take 3.0 credit hours of CJC 5590 (<https://catalog.umkc.edu/search/?P=CJC%205590>): Directed Studies, during their final semester of coursework. In addition, students conducting Demonstration Projects will take one additional 3.0 credit hour elective. These 6.0 credit hours (CJC 5590 (<https://catalog.umkc.edu/search/?P=CJC%205590>) - Directed Studies for the Demonstration Project along with one additional 3.0 credit hour elective) are in lieu of the 6.0 credit hours of CJC 5599 (<https://catalog.umkc.edu/search/?P=CJC%205599>) that a student electing to conduct a Thesis would take.

The demonstration project will require the student to write an independent research paper that outlines solutions to a given scenario. The process is designed to reflect the academic peer-reviewed protocol and will involve two stages of blind review. Please see the Graduate Guidebook and/or the graduate director for more detail regarding the Demonstration Project.

Revised

Criminal justice and criminology (CJC) majors may apply for admission to the combined program no earlier than the end of the sophomore year, but must apply to the combined program prior to applying for graduation from the BA program. Applicants must have a minimum 3.0 overall GPA and a minimum 3.0 major GPA; have completed 12 credit hours of criminal justice and criminology coursework, including CJC 101 (or equivalent).

Applicants must provide a letter of application to the Graduate Director expressing personal plans and interest in graduate work in criminal justice. The application process is competitive, and satisfying minimum requirements does not guarantee admission to the program. Admission to the combined program is provisional pending the award of the Bachelor's degree.

Students must apply after completion of 60 hours toward their BA degree and prior to the start of the anticipated undergraduate graduation term. Student applications will be reviewed and approved or denied at the discretion of the Graduate Committee. **The deadline for decision is December 1 for a May Graduation and May 1 for a December graduation.**

Admission to the combined program does not guarantee retention in the program. A student whose GPA falls below 3.0 for more than two semesters or who is found guilty of academic dishonesty will be dropped from the combined program. A student who has been dropped from the combined BA/MS program will not automatically be dropped from the criminal justice and criminology BA. Students enrolled in the BA/MS combined program may choose to leave the program before completing the requirements for the MS degree and still receive their BA, conditional upon completing the requirements for that degree.

To apply, students must submit an application (Application form) and a completed Declaration of Major form to the Department of Criminal Justice and Criminology (Declaration forms).

Department of Earth and Environmental Science

Department of Earth and Environmental Science
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(816) 235-1334, (816)-235-6081
Fax: (816) 235-5535
geosciences@umkc.edu
<http://cas.umkc.edu/geo> (<http://cas.umkc.edu/geo/>)

Department Chair:

Wei Ji

Professors:

Jimmy O. Adegoke (undergraduate Geography advisor), Wei Ji (graduate Geography advisor and GIS Certificate Program Director), Tina M. Niemi (principal undergraduate Geology advisor); Jejung Lee (undergraduate Environmental Science co-advisor).

Associate Professors:

Caroline P. Davies (undergraduate Environmental Science co-advisor; Director, Environmental Studies program).

Assistant Professors:

Alison Graettinger, Fengpeng Sun

Professors Emeriti:

Raymond M. Coveney, Jr., Steven L. Driever, Richard J. Gentile, Syed E. Hasan, Daniel P. Hopkins, James B. Murowchick

Department Description

The Department of Earth and Environmental Sciences offers programs of study leading to bachelor of science degrees in Earth and Environmental Sciences with emphases in Environmental Science, Geography, and Geology and bachelor of arts degrees in Environmental Studies. The department offers a master of science degree in Environmental and Urban Geosciences and participates in the Interdisciplinary Ph.D. program. The department also offers an undergraduate and graduate certificate in Geographic Information Systems (GIS). Students who designate Earth and Environmental Sciences on their application for admission to the doctoral program must meet admission and other requirements available from the department. See the School of Graduate Studies section in the Graduate Catalog for more information about doctoral programs. The department takes a leading role in the undergraduate interdisciplinary Environmental Studies program. Courses offered by the department can be used to fulfill the requirements of the Missouri Department of Education for earth science, science-math, and social science teaching specialties.

Students majoring in Earth and Environmental Sciences obtain a broad liberal arts education during their undergraduate career and at the same time receive sound fundamental training in the geosciences. Departmental faculty members are committed to educating non-majors about the earth and environmental sciences as well as those students who plan to pursue careers in the geosciences.

All undergraduate majors in the Department of Earth and Environmental Sciences must maintain a minimum grade point average above 2.0 in all courses taken to fulfill departmental degree requirements. This minimum GPA also applies to all credit hours transferred from other institutions.

Students in the Earth and Environmental Sciences address earth-related questions and problems facing society today. Environmental studies focuses on environmental processes and policy. Geography deals with place and the relationships between people and the environment. Geology explores the materials and processes of the earth and its evolution and history.

We offer unique university experiences such as field courses and excursions. The Earth and Environmental Sciences' faculty and students have conducted research in many countries such as Jordan, Mexico, Chad, China, Korea, Cameroon, the Bahamas, Denmark, Spain, India and Turkey.

Special Resources and Services

Geosciences Museum

The Geosciences Museum, founded by Richard L. Sutton, M.D., is located in Room 271, R.H. Flarsheim Hall. It contains relief models and interactive displays, along with a full range of 2,500 spectacular mineral and fossil specimens from all over the world. Hours of operation are 8:30 a.m. to 4:30 p.m. Monday through Friday. Admission is free.

Center for Applied Environmental Research (CAER)

The Center for Applied Environmental Research <http://cas.umkc.edu/caer> (<http://cas.umkc.edu/caer/>) is administered by the Geosciences Department and directed by Professor Jimmy O. Adegoke. The center is a resource for governmental agencies, private firms, and the general public in matters of the environment. Its programs address such matters as environmental geophysics, geochemistry, underground space, foundation stability, waste management, geologic hazards, environmental justice, natural resource assessment, and land-use planning.

Undergraduate Admission Requirements

Prospective students desiring to major in the Earth and Environmental Sciences programs should enroll in as much work as possible in mathematics, English composition and sciences during their high school years.

Students transferring from other colleges or universities should have taken required non-departmental 100- and 200-level courses listed under degree programs in this catalog prior to arriving at UMKC. For example, geology students should take mineralogy during their first fall semester after transferring and should have already completed the chemistry prerequisite by that time. In addition, it would be desirable for B.S. majors to have completed a semester of calculus. To assure that students transferring from other institutions of higher education can continue in an uninterrupted

plan of study in the fields of geology, geography or environmental studies, it is advisable that they acquaint themselves with the departmental degree requirements listed in this catalog as well as the two-year timetable of course offerings available from the department advisors, prior to registration.

Careers for Geography, Geology and Environmental Studies/Science Graduates

Geography

Students of geography at UMKC are offered a well-rounded education leading to promising career prospects; the market for geographers is global. Geography is centrally concerned with the whole range of interrelations between human beings and the natural and built environments. Geography graduates find work in commerce; government and public administration; city and regional planning; natural resource management and environmental conservation; historic preservation; landscape design; pollution control; weather-forecasting; climatological and agricultural analysis; statistical analysis; government and commercial map-making; transportation; the travel and tourism industry; market analysis and development; diplomacy; and national and international economic development programs. Experience with geographic information science (GIS) and remote sensing technologies is a great advantage in all these fields. Well-educated geographers are often involved in the crafting of policy and legislation, in the practice of law, in consulting, in publishing and in education.

Geology

Geology graduates have numerous employment opportunities, especially in areas relating to the environment, to engineering and to applied geology. Training in urban and environmental geology will prepare graduates to develop and evaluate environmental impacts, deal with waste management issues; model groundwater flow; handle laboratory and field instrumentation; and assess natural hazards. Geologic studies of soils, energy, mineral and water resources, and the environment are essential for private industry, as well as for governmental agencies. Graduates may also join state and federal geological surveys. The petroleum industry was for many years the principal employer of geologists. However, currently the best employment opportunities are in the area of the environment.

Environmental Studies

Environmental issues such as climate variation, atmospheric pollutants and non-point-source water pollution are complex issues. The general public is ill-equipped to evaluate these issues and must rely on experts. The need for environmental education and professionals in the field of the environment has never been greater. Given these needs, employment opportunities are unlimited and are likely to remain so for decades. Specific careers available to those who hold an environmental studies degree lie with companies and agencies that deal with engineering, environmental geology, environmental law, environmental health and safety, emergency response, environmental training, environmental chemistry, politics and social issues.

Departmental Activities

Advising System

Students who wish to major in Geology, Geography or Environmental Studies should seek advice from the department at the earliest possible time. Transfer students, including those from local community colleges, should see faculty advisors in the department prior to admission to UMKC. All full-time faculty members serve as department advisors, but lead roles are designated to particular faculty for each discipline. Individuals may inquire about advising appointments at any time during the semester by phone at (816) 235-1334 or by email at geosciences@umkc.edu.

Practicums and Internships

The nature of the fields of atmospheric science, environmental studies, geology, and geography necessitates practical in-class and laboratory exercises; field trips and fieldwork; working seminars and independent projects of a practical nature. More explanation of specific courses can be found in the individual course descriptions. Internships are available with local organizations.

Financial Aid and Transportation Costs

A variety of scholarships and student financial aid alternatives are available to students accepted for regular enrollment. (See the Financial Aid website <http://www.umkc.edu/finaid> (<http://www.umkc.edu/finaid/>) for more information.) Scholarships available solely to Geosciences students include the ASCE-AEG Scholarship Fund, Association of Earth Sciences Clubs Fund, Richard J. Gentile Scholarship, The Geosciences Scholarship, the Truman Stauffer Memorial Scholarship, and the Denis Ward Scholarship. Please note that certain field courses and field trips necessitate that some travel costs are at the expense of the individual student.

Teacher Certification in Earth Science or Social Science

Certification as a middle school (grades 5-9) or secondary (grades 9-12) Earth Science teacher in either Kansas or Missouri requires that a student complete specific requirements in Biology, Chemistry, Environmental Studies, Geology, Physics and in the School of Education. Certification as a middle school (grades 5-9) or secondary (grades 9-12) Social Science teacher in either Kansas or Missouri requires that a student complete specific requirements in History, Political Science, Economics, Geography, Behavioral Sciences and in the School of Education. A separate application for teacher education is required. For further information about the program, consult the School of Education (p. 1430) section of this catalog or contact the Education Student Services Office at (816) 235-2234.

Faculty

Jimmy O. Adegoke^{2,3}; Professor of Geosciences; B.S. (Ahmadu Bello University); M.S. (University of Ibadan); Ph.D. (Pennsylvania State University).

Raymond M. Coveney, Jr.; Professor Emeritus of Geosciences; B.S. (Tufts University); M.S., Ph.D. (University of Michigan).

Caroline P. Davies; Associate Professor of Geosciences; B.A. (College of William-Smith); M.S. (University of Maine); Ph.D. (Arizona State University).

Steven L. Driever; Professor Emeritus of Geosciences; B.A. (University of Virginia); M.S. (Northwestern University); Ph.D. (University of Georgia).

Richard J. Gentile; Professor Emeritus of Geosciences; B.A., M.A. (University of Missouri-Columbia); Ph.D. (University of Missouri-Rolla).

Alison Graettinger; Assistant Professor of Geosciences.

Syed E. Hasan^{2,3}; Professor Emeritus of Geosciences; B.S. (Patna University); M.S. (Indian Institute of Technology, formerly Roorkee University); Ph.D. (Purdue University).

Daniel P. Hopkins Professor Emeritus of Geosciences; B.A. (Tulane University); Ph.D. (Louisiana State University)

Paul L. Hilpman Professor Emeritus of Geosciences; A.B. (Brown University); M.A., Ph.D. (University of Kansas).

Wei Ji^{2,3}; Professor of Geosciences; B.S., M.S. (Peking University); Ph.D. (University of Connecticut).

Jejung Lee^{2,3}; Professor of Geosciences; B.S., M.S. (Seoul National University); Ph.D. (Northwestern University).

Tina M. Niemi^{2,3}; Professor of Geosciences; B.A. (College of Wooster); M.S., Ph.D. (Stanford University).

Fengpeng Sun^{2,3}; Assistant Professor of Geosciences; B.S. (Nanjing University); M.S., Ph.D. (University of California-Irvine).

¹Associate or Adjunct Graduate Faculty

²Members of UMKC Graduate Faculty

³Members of UMKC Doctoral Faculty

Environmental Science Courses

ENV-SCI 110L Understanding the Earth Laboratory Credits: 2

Laboratory and field demonstration and exercises in environmental science. Weekly exercises or field trips.

ENV-SCI 110L - MOTR PHYS 110LES: Essent. Physical Sciences w/Lab



ENV-SCI 110R Understanding the Earth: Introduction to Environmental Science and Laboratory Credits: 3

This introductory course surveys the processes that shape our planet. Topics include: plate tectonics and mountain-building, rivers and oceans, atmospheric circulation, weather and climate, and the amazingly complex relationships between life on Earth and the physical environment.

ENV-SCI 110R - MOTR PHYS 110ES: Essentials in Physical Sciences



ENV-SCI 210 Issues in Environmental Science Credits: 3

Explores important environmental issues such as air and water pollution, water supply, climate change, agriculture and food supply, environmental health, ecosystem disruption, environmental management, environmental ethics, and energy resources. Topics may vary depending on current events.

ENV-SCI 220 Ecosystem Science for Decision Makers Credits: 3

This course addresses the fundamentals of ecosystem science with an emphasis on human-induced change in natural systems. Course content characterizes the biological patterns found in nature emphasizing application of underlying principles. Scientific tools are provided to evaluate ecosystem concerns and make informed decisions.

ENV-SCI 303 Weather and Climate Credits: 4

Overview of weather processes and the main components of the climate system. Emphasis is on the physical basis of daily weather patterns, seasonal climate variability and longer-term climate change at local, regional, and global scales. The theme throughout the course will be the importance of weather and climate as major drivers of environmental change.

Prerequisites: ENV-SCI 110R or GEOLOGY 220.

ENV-SCI 321 Climate Change Impact Assessment and Policy Response Credits: 3

This course introduces how scientists assess observed climate change and predict future climate change. Lectures, discussions, problem sets, and term papers help students explore interactions among climate change, human activities and policy responses. It helps students achieve an appreciation for the role of accurate scientific information as foundation for shaping political agreements and policies on climate change.

Prerequisites: ENV-SCI 110R.

ENV-SCI 332CZ Environmental Sustainability Credits: 3

This course will introduce the concept of sustainability and review how sustainability might work at the individual, neighborhood, state, nation and global scales. Students will participate in some form of community engagement on sustainability as well as reflect upon how their own practices impact the environment.

ENV-SCI 416 Understanding and Living with Volcanoes Credits: 3

This course will examine the distribution, tectonic setting, and morphology of a range of volcano types on Earth and a few examples from other planets. Students will study volcanic processes including explosive and passive processes and how we investigate them. This will involve discussion of volcanic hazards and hazard assessment, risk communication, and the challenges of volcanic crises response. The course will also cover how volcanoes impact the local and global economy and Earth's climate. Recommended preparation: GEOG 314 / GEOLOGY 314 or GEOLOGY 325 or GEOLOGY 342.

Prerequisites: GEOLOGY 220 or ENV-SCI 110R/ENV-SCI 110L, and GEOG 203 or GEOG 402.

ENV-SCI 449 Global Water and Sustainability Credits: 3

This course examines the physical characteristics of water and its role in Earth systems. The challenges facing societies in an era of rapidly-changing climate are explored.

ENV-SCI 496 Environmental Internship Credits: 1-4

Students obtain practical experience working for local engineering and environmental firms, or governmental agencies. Specific duties and application requirements will vary depending on the funding organization's needs. Junior or senior standing required for undergraduates.

ENV-SCI 5550 Ecotoxicology Credits: 3

This course addresses the fundamentals of ecotoxicology, integrating the sciences of ecology and toxicology. Students will learn the biological basis for pollutant effects on individuals and populations of plants and animals, how pollutant intensity varies as a function of bioavailability, the basics of risk assessment, and how pollutant effects are modified by ecological interactions within communities and ecosystems. The ultimate goal of ecotoxicology is to predict the effects of pollution within an ecological context.

Prerequisites: BIOLOGY 108, CHEM 211, CHEM 212R.

Environmental Studies Courses

ENV-STDY 325 Cultural Perspectives on the Environment Credits: 3

This course explores the history of conservation practices in American agriculture from the 1700s through the present. Additionally, the course examines the past and present legal implications of environmental statutes for minority farmers from a social and environmental justice perspective.

ENV-STDY 412 Global Tourism Credits: 3

This course is a regional survey of world tourism. Topics include the uniqueness of place, the marketing of tourist destinations, and the cultural, economic, and environmental impacts on host societies.

Prerequisites: GEOG 105 or GEOG 200 or GEOG 202.

ENV-STDY 450 Ecotoxicology Credits: 3

This course addresses the fundamentals of ecotoxicology, integrating the sciences of ecology and toxicology. Students will learn the biological basis for pollutant effects on individuals and populations of plants and animals, how pollutant intensity varies as a function of bioavailability, the basics of risk assessment, and how pollutant effects are modified by ecological interactions within communities and ecosystems. The ultimate goal of ecotoxicology is to predict the effects of pollution within an ecological context.

Prerequisites: BIOLOGY 108, CHEM 211, CHEM 212R.

ENV-STDY 499WI Environmental Studies Practicum Credits: 3

Students conduct research, participate in discussions, and prepare written reports on selected topics concerning the environment.

Prerequisites: Senior standing, RooWriter.

Geography Courses

GEOG 105 Introduction to the Elements of Geography Credits: 3

A survey of major elements of physical and human geography, with a concise overview of the world's regions. Emphasis on global relationships and distributions, both environmental and cultural. Climates, natural vegetation, land forms, cultural origins and diffusions, economic patterns.

GEOG 105 - MOTR GEOG 101: World Regional Geography



GEOG 150 Introduction to Physical Geography Credits: 3

This course is an introduction to the study of the natural environmental systems of earth—the atmosphere, the hydrosphere, the biosphere, and the lithosphere. The primary objective of the course is to provide a broad overview of these systems at a global scale. This overview will entail descriptions of natural systems and the variations they exhibit both from place to place and through time. It will also entail explaining how natural systems operate and interact with each other, thereby providing a necessary foundation for understanding the tremendously diverse physical geography of earth. Applies to natural science requirement.

GEOG 150 - MOTR GEOG 100: Physical Geography

**GEOG 200 World Geography I Credits: 3**

A survey of the physical and human geography of the regions and nations of Europe and the Americas, with Australia and New Zealand. The approach is strongly historical, emphasizing interconnections, shared colonial backgrounds and broader global contexts in the modern world. The course is aimed at non-specialists.

GEOG 202 World Geography II Credits: 3

A survey of the physical and human geography of the regions and nations of Russia and the other former Soviet republics, the Middle East, Africa, South Asia, East Asia Southeast Asia and the Pacific Realm. The approach is strongly historical emphasizing interconnections shared colonial backgrounds, and broader global contexts in the modern world. The course is aimed at non-specialists.

GEOG 203 Introduction to Geographic Information Systems Credits: 4

An introductory course covering the basic principles of geographic information systems focusing on such software programs as ARC-INFO and ARC-VIEW.

GEOG 210 Human Geography Credits: 3

A study of the geographical underpinnings and distribution of the main elements of culture, including population patterns, language, religion, political territorial organization, settlement, and economic livelihood. The environmental settings, geographic origins, diffusion, and geographic interrelationships of these culture traits are emphasized.

GEOG 215 Weather and Climate Credits: 4

Overview of weather processes and the main components of the climate system. Emphasis is on the physical basis of daily weather patterns, seasonal climate variability, and longer-term climate change at local, regional, and global scales. The theme throughout the course will be the importance of weather and climate as major drivers of environmental change.

GEOG 309 Urban Geography Credits: 3

Historical development, morphology and functions of urban places, including intercity relationships and the relationship between cities and their hinterlands; emphasis on American cities.

GEOG 311 Economic Geography Credits: 3

A systematic study of the modern world economy that includes discussion of the location of production and consumption, the nature and role of multinational enterprises in trade, resource limitations to growth, and cultural responses to globalization.

GEOG 314 Principles of Geomorphology Credits: 4

Explores the processes that shape the earth's surface. Focuses on the development and description of fluvial, glacial, eolian, and coastal landforms. Studies the influence of tectonic and climatic factors. Field trip.

Prerequisites: ENV-SCI 110R (or GEOLOGY 220).

GEOG 321 Climate Change Impact Assessment and Policy Response Credits: 3

This course introduces how scientists assess observed climate change and predict future climate change. Lectures, discussions, problem sets, and term papers help students explore interactions among climate change, human activities and policy responses. It helps students achieve an appreciation for the role of accurate scientific information as foundation for shaping political agreements and policies on climate change.

Prerequisites: ENV-SCI 110R.

GEOG 325 Cultural Perspectives on the Environment Credits: 3

This course explores the history of conservation practices in American agriculture from the 1700s through the present. Additionally, the course examines the past and present legal implications of environmental statutes for minority farmers from a social and environmental justice perspective.

GEOG 329 World Political Geography Credits: 3

An analysis of the influence of geographic factors (both physical and human) on the economic and political relationships of the nations of the world. Emphasis will be placed on population size and political viability of states, boundaries and frontiers as limits of national space, problems related to the spatial integration of states, and the independence and interdependence of states within the larger world political system.

GEOG 332 Cultural Geography Credits: 3

A study of the distribution and interpretation of cultural patterns throughout the world. Examined are material and non-material elements of culture such as settlement, land use, technology and belief systems. The geographic origins and diffusion of culture traits are emphasized.

GEOG 333 Geographic Elements of Urban Planning Credits: 3

Analysis of the changing form and structure of urban places from a planning viewpoint. The focus will be on land-use trends on both the intraurban and interurban levels. Covered will be such topics as planning for urban transportation, new towns, land-use planning, urban renewal, and environmental planning.

GEOG 340 Geography of the United States and Canada Credits: 3

A survey of the physical and human geography of the United States and Canada. The approach is strongly historical emphasizing interconnections, shared colonial backgrounds, and broader international contexts in the Americas and around the globe. This course is aimed at non-specialists.

GEOG 341 Geography of South America Credits: 3

A study of the physical and human geography of South America, with an emphasis on cultural processes and the historical record. Contemporary issues such as economic development, trade, urbanization, and geopolitical conflicts are discussed.

GEOG 342 Geography of Mexico, Central America and the Caribbean Credits: 3

A study of the physical and human geography of Middle America, with an emphasis on cultural processes and the historical record. Contemporary issues such as economic development, trade urbanization, and geopolitical conflicts are discussed.

GEOG 350 Geography of Europe Credits: 3

A survey of the physical and human geography of the regions and nations of Europe. The approach is strongly historical, emphasizing international interconnections and broad global contexts. The course is aimed at non-specialists.

GEOG 351 Regional Geography of the Middle East Credits: 3

A study of human imprint upon the land through settlement patterns, institutions of land organization, and types of economy. Strategies for the economic development of various regions in the Middle East are discussed.

GEOG 360 Principles of Biogeography Credits: 4

This course is an introduction to biogeography that explores the patterns of plant and animal distributions from both ecological and historical perspectives. We examine past geologic and climatic conditions, as well as interactions between organisms and their environment to explain modern distributions of flora and fauna. Human interactions with plants and animals have increasingly profound consequences on distributions of flora and fauna from destruction to management. We explore the increasing importance of issues and strategies in conservation. The laboratory portion of the course builds on core ecological concepts and provides experiences of field observation, data collecting and data analysis.

Prerequisites: ENV-SCI 110R.

GEOG 398 Field Trip Credit: 1

Three-day field trip in March or April (at student's expense) for department majors. An opportunity to observe and study physical and cultural features and collect materials. Brief descriptive report of trip required. Recommended preparation: 6-9 hours of upper-level geography.

GEOG 401 Advanced Geographic Information Science Credits: 4

This course is designed for the students knowledgeable in the fundamentals of geographic information systems, who wish to gain expertise in advanced topics and applications in geographic information systems, remote sensing, and related environmental informatics. Classes are organized to encourage active learning. Students are encouraged and guided to develop their research projects by integrating related techniques of geographic information science.

Prerequisites: GEOG 203 or GEOG 450.

GEOG 402 Environmental Remote Sensing and Digital Image Analysis Credits: 4

This course will provide students with innovative techniques for landscape-level environmental analysis, geographic and geological studies, earth science research, and environmental resources management using remotely sensed data including satellite images. Students will be taught basic remote sensing concepts and technical skills, including energy radiative transfer processes in remote sensing, sensors and resolutions, computer-based image processing and classification, and remote sensing/GIS integration.

Prerequisites: GEOG 203 or GEOG 450.

GEOG 403WI History and Philosophy of Geoscience Credits: 3

A survey of geoscientific thought since antiquity. The substance of geography, geology, and environmental studies will be sought primarily in scholarly treatise and formal analytical systems including cartography, but the course also addresses geoscientific principles emerging from the history of environment, government, law, economy, religion, literature, and material culture. Readings, lectures, discussions, research, writing.

GEOG 406 Global Environmental Change Credits: 3

This course will examine the current rates of global environmental change and potential causes in the context of Earth's natural climate variability. The course will follow a seminar format. Students will read and discuss published articles on current and emerging theories of forcing mechanisms in the Earth's systems.

GEOG 412 Global Tourism Credits: 3

This course is a regional survey of world tourism. Topics include the uniqueness of place, the marketing of tourist destinations, and the cultural, economic, and environmental impacts on host societies. Recommended preparation: GEOG 105 or GEOG 200 or GEOG 202.

GEOG 416 Understanding and Living with Volcanoes Credits: 3

This course will examine the distribution, tectonic setting, and morphology of a range of volcano types on Earth and a few examples from other planets. Students will study volcanic processes including explosive and passive processes and how we investigate them. This will involve discussion of volcanic hazards and hazard assessment, risk communication, and the challenges of volcanic crises response. The course will also cover how volcanoes impact the local and global economy and Earth's climate.

Prerequisites: GEOLOGY 220 or ENV-SCI 110R/110L, and GEOG 203 or GEOG 402.

GEOG 417 Special Topics Credits: 1-3

Individual research and study of a selected topic in geography, meteorology or earth science.

GEOG 426 Paleoecology: Microfossils and Climate Change Credits: 3

Paleoecology will focus on questions addressing past environments and past climates based on the ecology of microfossils. Micro-organisms are very sensitive to a wide variety of environmental conditions including temperature, precipitation, hydrology, water chemistry, salinity, habitat, and pollution. The fossil remains of these organisms are used as proxy indicators for reconstructing past environmental conditions, climate change, vegetation dynamics, and human impacts. Students will have the opportunity to process microfossils and make interpretations based on analysis data.

GEOG 437 Population Geography Credits: 3

This course analyzes human populations: how they grow, how their compositions change, and how and why people migrate from one place to another. Students will study basic demographic processes- mortality, fertility, and migration- and underline theory and techniques. Students will also examine relationships between population growth and population planning, immigration, urbanization and cities, and the environment.

GEOG 444 Spatial Data Analysis Credits: 4

Quantitative techniques and applications of spatial data analysis. The course will cover basic geospatial analysis techniques including hypothesis testing, kriging, variogram analysis, multivariate analysis and reliability analysis. Emphasis is on practical applications rather than theories. Intended for Geology, Geography, Environmental Studies, and relevant fields. Three hours lecture and one hour computer lab per week.

GEOG 448 Satellite Climatology Credits: 4

Use of satellite observations to study the climate system. Discussions consider the development of satellite climatology, sensors, platforms and methodologies used to estimate climate variables from radiance measurements. Aspects of climate that are emphasized include cloud climatologies, cloud systems, atmospheric moisture, radiation budget, and land-surface conditions. Three hours lecture and one hour lab per week.

Prerequisites: GEOG 303.

GEOG 449 Global Water and Sustainability Credits: 3

This course examines the physical characteristics of water and its role in Earth systems. The challenges facing societies in an era of rapidly changing climate are explored.

GEOG 450 Gis Fundamentals for Research Applications Credits: 4

This course will address the needs of upper level undergraduate and graduate students who desire to learn and apply fundamental Geographic Information Systems concepts and techniques for their research projects. This course will draw on the content of the Introductory GIS course offered by the department but will also be flexible such that the individual needs or interest of students can be met through guided reading and/or tailored laboratory sessions. The Department of Geosciences GIS computer laboratory, with a variety of GIS and Remote Sensing software, will be available for this course. Only for upper-level undergraduate and graduate students.

GEOG 460 Transportation Geography Credits: 3

Relation between transportation and spatial organization, selected analytical models dealing with traffic demand, network configuration, and allocation of transport facilities; application to specific problem areas including commuting. Seminar with discussions of briefs and term paper.

GEOG 496 Geography Internship Credits: 1-6

Students obtain directed practical experience working with non-profits, governments, or private enterprises. Duties will vary based on contractual agreement between the student, host organization, and the professor.

Prerequisites: Junior standing or higher.

GEOG 499WI Geography Seminar Credits: 3

Students critique geographic research and prepare a paper and an oral presentation on an approved topic.

Prerequisites: Senior standing.

GEOG 5502 Environmental Remote Sensing and Digital Image Analysis Credits: 4

This course will provide students with innovative techniques for landscape-level environmental analysis, geographic and geological studies, earth science research, and environmental resources management using remotely sensed data including satellite images. Students will be taught basic remote sensing concepts and technical skills, including energy radiative transfer processes, in remote sensing, sensors and resolutions, computer-based image processing and classification, and remote sensing/GIS integration.

Prerequisites: GEOG 203.

GEOG 5503WI History and Philosophy of Geoscience Credits: 3

A survey of geoscientific thought since antiquity. The substance of geography will be sought primarily in scholarly treatises, formal analytical systems, and cartography, but the course also addresses geographical principles emerging from the history of such matters as government, law economy, religion, and material culture. Readings, lectures, discussions, research, writing.

GEOG 5504 Biogeography and Landscape Ecology Credits: 3

Principles and applications of biogeography and landscape ecology, emphasizing distribution of major ecosystems and related plants and animal species on earth, biodiversity, landscape patterns and processes, and physical, biological, and human interactions. The course explores ecosystem and landscape analyses using advanced GIS, remote sensing, and spatial modeling methods for real problem solving in environmental and biological research, ecosystem conservation, and urban planning and studies.

Prerequisites: GEOG 203, GEOG 402 (or GEOG 5502).

GEOG 5506 Global Environmental Change Credits: 3

This course will examine the current rates of global environmental change and potential causes in the context of Earth's natural climate variability. The course will follow a seminar format. Students will read and discuss published articles on current and emerging theories of forcing mechanisms in the Earth's systems. Additional in-depth research and written evaluation are required for graduate credit.

GEOG 5507 Advanced Geographic Information Science Credits: 4

Prerequisites: GEOG 203.

GEOG 5509 Urban Geography Credits: 3

Historical development, morphology and functions of urban places, including intercity relationships and the relationship between cities and their hinterlands; emphasis on American cities. Students will complete a series of reports and a term paper.

GEOG 5510 Landscape, Language, Literature, and Law Credits: 3

An examination of the geographic underpinnings and implications of languages, literatures, and jurisprudence. The course explores languages' historic rootedness in the interactions between human beings and their surroundings; the varying geographic expressiveness and discrimination of languages; the effect and significance of literary evocations of landscapes; and the cultural and environmental geographic content of the language of law. Readings, lectures, discussions, writing.

GEOG 5512 Global Tourism Credits: 3

This course is a regional survey of world tourism. Topics include the uniqueness of place, the marketing of tourist destinations, and the cultural, economic, and environmental impacts on host societies.

Prerequisites: GEOG 105 (or GEOG 200, or GEOG 202).

GEOG 5526 Paleocology: Microfossils and Climate Change Credits: 3

Paleocology will focus on questions addressing past environments and past climates based on the ecology of microfossils. Micro-organisms are very sensitive to a wide variety of environmental conditions including temperature, precipitation, hydrology, water chemistry, salinity, habitat, and pollution. The fossil remains of these organisms are used as proxy indicators for reconstructing past environmental conditions, climate change, vegetation dynamics, and human impacts. Students will have the opportunity to process microfossils and make interpretations based on analysis of data.

GEOG 5530 Location Theory Credits: 3

An analysis and evaluation of the basic theories that have been developed to account for the spatial arrangements of economic activity. Emphasis on urban areas as nodes of economic interaction. Three hours lecture and discussion per week.

Prerequisites: GEOG 311, six hours in economics or urban studies.

GEOG 5537 Population Geography Credits: 3

An analysis of human population: how they grow, their changing compositions, and how and why people migrate from one place to another. Basic demographic processes-mortality, fertility, and migrate- and theory and techniques for their study are discussed. The relationships between population growth and population planning, immigration, urbanization and cities, and the environment.

GEOG 5544 Advanced Spatial Data Analysis Credits: 4

This course will focus on advanced computation methods for the analysis and modeling of complex and often non-deterministic processes in the spatial and environmental sciences. Students will be introduced to innovative techniques for analyzing large datasets with attribute spaces of very high dimensionality, including hyper-spectral remote sensing data. Three hours lecture and one hour computer lab per week.

Prerequisites: GEOG 444, elementary statistics, or permission of instructor.

GEOG 5546 Global Water and Sustainability Credits: 3

This course examines the physical characteristics of water and its role in Earth systems. The challenges facing societies in an era of rapidly changing climate are explored.

GEOG 5548 Satellite Climatology Credits: 4

Use of satellite observations to study the climate system. Discussions consider the development of satellite climatology, sensors, platforms and methodologies use to estimate climate variables from radiance measurements. Aspects of climate that are emphasized include cloud climatologies, cloud systems, atmospheric moisture, radiation budget, and land-surface conditions. Three hours of lecture and one hour of lab per week.

GEOG 5597 Graduate Seminar in Geosciences Credits: 3

This graduate seminar examines emerging and current issues in Environmental and Urban Geosciences. Most environmental issues and their solutions are inherently multidisciplinary and are characterized by significant interactions between oceans, atmosphere, land, and society. In addition to examining these issues, this seminar engages students in the process of critically evaluating Earth and human systems studies. The course provides students with a fundamental background of today's important environmental challenges and experience doing the craft of science through critically reading, thinking, writing, and speaking.

GEOG 5598 Special Topics in Geography Credits: 1-3

Advanced independent research in Cultural or Physical Geography.

Prerequisites: Baccalaureate degree.

GEOG 5598A Special Topics in Cultural Geography Credits: 1-3

Advanced independent research in Cultural Geography.

Prerequisites: Baccalaureate degree.

GEOG 5598B Special Topics in Physical Geography Credits: 1-3

Advanced independent research in Physical Geography.

Prerequisites: Baccalaureate degree.

GEOG 5598D Special Topics in Advanced GIS and Remote Sensing Credits: 1-3

Advanced independent research in geographic information science (GIS) and remote sensing.

GEOG 5598F Special Topics: Geostatistics and Modeling Credits: 1-3

Advanced independent research in geostatistics and modeling techniques.

GEOG 5599 Research and Thesis Geography Credits: 1-9

Students will conduct research and writing in support of a thesis topic, which will have been approved in advance by the appropriate graduate advisory committee. Credit load will also be approved in advance by the student's graduate advisor.

Prerequisites: Baccalaureate degree.

GEOG 5690 Special Research Topics Credits: 1-3

Student will produce a major research paper suitable for publication under the direction of their instructor.

GEOG 5699R Research And Dissertation Credits: 1-10

Research for dissertation in partial fulfillment of the Geosciences requirements for the Ph.D. degree.

Geology Courses

GEOLOGY 220 General Geology Credits: 3

Geology is the study of Earth, the materials that make up the Earth, and the forces and processes that build and shape the continents, oceans, and life on Earth. The goal of this course is for students to gain an understanding of the fundamental concepts and scientific principles that underlie the physical, chemical, and biological processes that shape our Earth and to learn to think critically about scientific information and how geologic processes affect us every day.

GEOLOGY 220 - MOTR GEOL 100: Geology



GEOLOGY 220L General Geology Laboratory Credits: 2

Laboratory and field investigations of principles of the geology designed to complement the topics covered in GEOLOGY 220 through the use of inquiry-based investigations in the laboratory and field.

GEOLOGY 220L - MOTR GEOL 100L: Geology with Lab



GEOLOGY 250L Field Methods in Earth and Environmental Science Credits: 3

A field-based course covering basic methods used by earth scientists for environmental, geographic, and geologic investigations. Students will collect field data at off-campus sites, conduct periodic monitoring, and analyze samples using departmental and personal instrumentation. Students will work on collaborative projects and will present their results. Class will meet weekly for four hours in the field.

GEOLOGY 250L - MOTR PHYS 110LES: Essent. Physical Sciences w/Lab



GEOLOGY 251L Field Methods in Earth and Environmental Science: Off-Campus Credits: 3

This course will provide students with an introductory, inquiry-based learning experience that focuses on the application of field methods for understanding surface and subsurface earth processes and environmental issues. Students will collect field data at off-campus sites, conduct periodic monitoring, and analyze samples using departmental Instrumentation. Students will work on collaborative projects and will present their results. Class will meet at an off campus location during break (added cost) plus have four on campus meetings.

GEOLOGY 313 Evolution and the Geologic Record Credits: 4

An introduction to the history of life by studying the geologic record. Students will examine major features of the fossil record including: invertebrates, vertebrates, and plants. Students explore what the fossil record tells us about geologic time, evolution, past environments and distributions of organisms. Three hours of lecture and two hours of laboratory a week. The course will include field trips to collect and interpret fossils and paleoenvironments.

GEOLOGY 314 Principles of Geomorphology Credits: 4

Explores the processes that shape the earth's surface. Focuses on the development and description of fluvial, glacial, eolian, and coastal landforms. Studies the influence of tectonic and climatic factors. Three hours lecture and two hours lab per week. Field trip.

Prerequisites: ENV-SCI 110R (or GEOLOGY 220).

GEOLOGY 321 Climate Change Impact Assessment and Policy Response Credits: 3

This course introduces how scientists assess observed climate change and predict future climate change. Lectures, discussions, problem sets, and term papers help students explore interactions among climate change, human activities and policy responses. It helps students achieve an appreciation for the role of accurate scientific information as foundation for shaping political agreements and policies on climate change.

Prerequisites: ENV-SCI 110R.

GEOLOGY 322 Earth Materials Credits: 4

Introduction to the formation, occurrence, and classification of minerals and igneous and metamorphic rocks. Three hours lecture and discussion with two hours laboratory a week.

Prerequisites: CHEM 212R, GEOLOGY 220 OR ENV-SCI 110.

GEOLOGY 325 Sedimentology/Stratigraphy Credits: 4

Study of sedimentary rocks with special emphasis given to hand specimen identification based on mineral composition and textural features. Characteristics of sediments, transportation and environment of sediment deposition. Principles of stratigraphy, facies analysis and interpretation. Measurement and description of stratified rocks. Three hours lecture and two hours lab per week. Field trips.

Prerequisites: GEOLOGY 220.

GEOLOGY 326CZ Archaeology of Ancient Disasters Credits: 3

Remarkable human achievements are revealed by archaeological research, but the human past was frequently shaped as well by disasters of natural and human origin. Drawing on case studies that include data from the geosciences, archaeological excavations, and historical sources, this class examines how earth processes, the biosphere, and human cultural behavior were all sources of catastrophe. The study of ancient disasters not only gives us a wider understanding of human history, it may offer lessons for coping with future catastrophes.

GEOLOGY 335 Introduction to Waste Management Credits: 3

Overview of issues in waste management. Nature and classification of waste. Municipal solid waste: disposal methods, design, construction and maintenance of sanitary landfills. Nature and sources of hazardous waste, storage, transportation, treatment and disposal of hazardous waste. Types and sources of nuclear waste; disposal of high level and low level nuclear wastes. Sources, nature, handling and disposal of biologic waste. Pollution prevention, recycling and resource conservation.

Prerequisites: ENV-SCI 110R, GEOG 150, GEOLOGY 220.

GEOLOGY 350 Earth Structures and Tectonics Credits: 4

This course is designed to teach students the basic techniques and approaches for problem solving in structural geology. The course will cover the fundamentals of crustal deformation and discuss joints, faulted and folded rocks in their plate tectonic context. Two hours of lectures and three hours of laboratory a week. Course will include local field trips and one weekend field trip.

Prerequisites: GEOLOGY 220, PHYSICS 210 (or PHYSICS 240).

GEOLOGY 370R Hydrogeology Credits: 3

Geology and hydrologic factors controlling the occurrence, movement, quality, recovery and development of water supply and distribution. Problems relating to urbanization of flood plains.

GEOLOGY 398 Geology Midcontinent Field Trip Credit: 1

A study of a selected area of the midcontinent U.S. with emphasis on locations to be visited during a three-day field trip (at the student's expense). An opportunity to observe and study physical features and collect materials. Several scheduled one-hour meetings in addition to field trip. Lectures, discussion and reading assignments provide a background to place the area covered by the field trip into the overall geologic framework of the Midcontinent U.S. Descriptive report or written examination. Limited enrollment.

Prerequisites: Junior or senior level.

GEOLOGY 411 Mineral Deposits Credits: 3

Distribution, origin and environmental implications of extractable resources including non-metallic deposits, ores, and selected energy resources.

GEOLOGY 416 Understanding and Living with Volcanoes Credits: 3

This course will examine the distribution, tectonic setting, and morphology of a range of volcano types on Earth and a few examples from other planets. Students will study volcanic processes including explosive and passive processes and how we investigate them. This will involve discussion of volcanic hazards and hazard assessment, risk communication, and the challenges of volcanic crises response. The course will also cover how volcanoes impact the local and global economy and Earth's climate. Recommended preparation: GEOG 314 / GEOLOGY 314 or GEOLOGY 325 or GEOLOGY 342.

Prerequisites: GEOLOGY 220 or ENV-SCI 110R/110L, and GEOG 203 or GEOG 402.

GEOLOGY 434 Hazardous Waste Operations Management Credits: 2

Overview of federal regulations dealing with hazardous waste management, toxicology, hazard communication, site management, air monitoring, operating procedures, and health and safety. The course includes hands-on training on spill control, equipment use and emergency response. Practical training involves physical stress and participants must be in good physical health. This course satisfies OSHA's 40 hour training requirement for hazardous waste personnel.

GEOLOGY 441 Environmental Geophysics Credits: 3

Fundamental theory and near-surface applications of the geophysical methods; (1) seismic refraction, (2) seismic reflection, (3) gravity, and (4) magnetics. Emphasis will be placed on the use of these methods in environmental and engineering investigations, addressing such issues as water resources, contaminant transport, geotechnical properties and archaeological protection. Course will include a field component illustrating application of selected techniques to local environmental problem.

GEOLOGY 446 Petroleum Geology Credits: 3

Study of the origin, concentration, exploration for and recovery of petroleum.

Prerequisites: GEOLOGY 220.

GEOLOGY 456 Field Methods in 3D Imaging of the Environment Credits: 3

This course is designed to teach students techniques to create high-resolution, 3D images of the environment and detailed topographic maps using digital technologies. The class will include instruction on various aerial systems and hand-held photography and the software required for data acquisition, processing, and interpretation.

GEOLOGY 460 Introduction to Geochemistry Credits: 3

Basic principles governing the origin, distribution and migration of the elements and the geochemical cycles operating in the earth's atmosphere, hydrosphere and lithosphere.

Prerequisites: CHEM 212R, GEOLOGY 312.

GEOLOGY 471 Tectonics Credits: 3

A detailed inquiry into plate tectonics and the geophysical and geological data that define the motion of lithospheric plates. Global examples of divergent, convergent, and transform plate boundaries will be studied through lectures, discussions, problem sets, and term papers.

Prerequisites: GEOLOGY 325, GEOLOGY 350.

GEOLOGY 472 Earthquake Geology Credits: 3

A detailed inquiry into the study of present and past earthquakes as they are preserved in the seismological, geophysical, and geologic record. Global examples of earthquakes will be studied through lectures, discussions, problem sets, term papers, field trips and field projects.

GEOLOGY 490 Geology Field Camp Credits: 6

Study and practical involvement in the methods of geological mapping. The six-week course is conducted during the summer, partially in a field camp away from the Kansas City area. Students pay their own travel expenses to and from the field. Participation in the course involves individual mapping in the field area and field reports.

GEOLOGY 498 Undergraduate Field Research Credits: 1-5

The student will collaborate with fellow students and instructors in collection of original field geologic data at a location remote from campus. Field research will be carried out during semester intersessions or summer semesters.

GEOLOGY 499WI Geology Seminar Credits: 3

Students participate in discussions; present formal talks; and prepare written papers on selected topics.

Prerequisites: Senior standing.

GEOLOGY 5507 Archeological Resources Management Credits: 3

This class examines contemporary issues managing archaeological resources. This class is intended for students seeking work in Cultural Resources Management (CRM); those already working CRM, or student anthropology, environmental studies, geology, geography, public administration and other fields likely to deal with archaeological and historical research or employment setting. This class does not require a background in archaeology.

GEOLOGY 5508 Archaeological Field Survey Methods Credits: 3

this class offers instruction in the basic skills required to conduct field surveys in archaeology and other geosciences disciplines. In the classroom, students learn about the development of archaeology as a scientific discipline and how to recognize some of the basic field data sought by archaeologists. Students learn about mapping and land navigation techniques. The field phase of instruction includes visits to archaeological sites in the region.

GEOLOGY 5509 Field Study in Archaeology Credits: 1-5

This class offers students an opportunity to attend a field school in archaeology. Students will be taught how to: design archaeological research, set-up excavation, keep a wide range of excavation records, make maps and drawings, take photographs related to excavation problems, identify and recover a broad spectrum of artifact and faunal remains, collect samples for specialized analyses and use a wide range of excavation tools. This course will also introduce students to recording and analyzing excavated materials in the archaeological laboratory.

GEOLOGY 5512 Geology and Hazardous Waste Management Credits: 3

Nature, sources and characterization of hazardous waste; collection, transportation and disposal of hazardous wastes. Fundamentals of toxicology and risk assessment. Application of geologic principles and methods in the assessments and remediation of abandoned hazardous waste sites and contaminated aquifers. Review of selected case histories. Experts from government and private organizations will be invited to deliver guest lectures. An out-of-town field trip to a hazardous waste site is required. A term paper based on library research or an approved experimental project is required for graduate credit.

Prerequisites: GEOLOGY 325, GEOLOGY 342, GEOLOGY 350.

GEOLOGY 5513 Advanced Mineral Deposits Credits: 3

Distribution, origin and environmental implications of extractable resources including non-metallic deposits, ores, and selected energy resources.

Prerequisites: GEOLOGY 312, GEOLOGY 325, graduate standing.

GEOLOGY 5516 Understanding and Living with Volcanoes Credits: 3

This course will examine the distribution, tectonic setting, and morphology of a range of volcano types on Earth and a few examples from other planets. Students will study volcanic processes including explosive and passive processes and how we investigate them. This will involve discussion of volcanic hazards and hazard assessment, risk communication, and the challenges of volcanic crises response. The course will also cover how volcanoes impact the local and global economy and Earth's climate.

GEOLOGY 5521 Advanced Methods for Earth and Environmental Science Credits: 3

This course will provide students with an inquiry-based learning experience that focuses on the application of field methods for understanding surface and subsurface earth processes and environmental issues. Students will collect field data at off campus site, conduct periodic monitoring, and analyze samples using departmental instrumentation.

Prerequisites: GEOLOGY 220 (or ENV-SCI 110R), GEOLOGY 220L (or ENV-SCI 110L).

GEOLOGY 5525 Quaternary Geology Credits: 3

The study of Quaternary processes, surficial deposits, and land forms. Course content will cover both the glaciated and nonglaciated portions of the United States as well as the interrelations between Quaternary geology and urbanization. Three hour lecture. Field trips.

Prerequisites: GEOLOGY 314, baccalaureate degree in geology.

GEOLOGY 5531 X-Ray Diffraction and Fluorescence Methods: X-Ray Mthds Geol/Anly Credits: 2

Theory and practical application of x-ray diffraction and fluorescence methods in characterizing geologic materials. Two hours lecture and one 2-hour lab per week for 8 weeks.

GEOLOGY 5532 Icpms Applications in Geology Credits: 2

Theory and practical application of Inductively-Coupled Plasma Mass Spectrometry in the geosciences and environmental sciences. Two hours lecture and discussion, and one 2-hour lab per week for 8 weeks.

GEOLOGY 5534 Hazardous Waste Operation Management Credits: 2

Overview of federal regulations dealing with hazardous waste management, toxicology, hazard communication, site management, air monitoring, operating procedures, and health and safety. The course includes hands-on training on spill control, equipment use and emergency use and emergency response. Practical training involves physical stress and participants must be in good physical health. This course satisfies OSHA's 40 hour training requirement for hazardous waste personnel.

GEOLOGY 5535 Aqueous Geochemistry Credits: 3

This course is directed to two objectives. First it will equip the students with a basic understanding of the geochemical principles and calculations which are directly related to environmental problems and second, it will provide the student with a basic understanding of specific problem areas in environmental geochemistry.

Prerequisites: CHEM 211, CHEM 212R, Baccalaureate degree in geology.

GEOLOGY 5536 Introduction to Scanning Electron Microscopy Methods Credits: 2

Practical introduction to the use of the scanning electron microscope and its accessories, including image production, elemental analysis, and elemental mapping of solid materials. Geological applications will be emphasized, but the methods presented will be useful for microscopic examination of solid materials in any discipline. 2 hours of lecture and lab per week for 8 weeks.

Prerequisites: Permission of the instructor.

GEOLOGY 5541 Environmental Geophysics Credits: 3

Fundamental theory and near-surface applications of the geophysical methods including seismic methods, potential methods, and electrical methods. Emphasis will be placed on the use of these methods in environmental and engineering investigations, addressing such issues as water resources, contaminant transport, geotechnical properties, and archaeological protection. Course will include a field component illustrating application of selected techniques to a local environmental problem.

Prerequisites: Baccalaureate degree in Geology.

GEOLOGY 5542 Electrical Methods in Environmental Geophysics Credits: 3

Fundamental theory and near-surface applications of the electrical geophysical methods; (1) electrical resistivity, (2) electromagnetics, (3) ground penetrating radar, and (4) induced polarization. Emphasis will be placed on the use of these methods in environmental and engineering investigations, addressing such issues as water resources, contaminant transport, geotechnical properties and archaeological protection. Course will include a field component illustrating application of selected techniques to a local environmental problem.

Prerequisites: Baccalaureate degree in Geology.

GEOLOGY 5546 Petroleum Geology Credits: 3

This course addresses the geological habitat of oil and natural gas, the impacts of petroleum on society, subsurface mapping techniques, and the acquisition and interpretation of subsurface and production data.

Prerequisites: GEOLOGY 220, baccalaureate degree in geology.

GEOLOGY 5551 Geotechnics Credits: 4

Integration of the basic principles and concepts from material sciences, rock and soil mechanics, and civil engineering. Mechanical properties, geologic aspects and engineering classifications of earth materials and the effects of physical forces on their engineering behavior will be emphasized. Three hours of lecture and two hours of laboratory each week. Field trips.

Prerequisites: PHYSICS 210, PHYSICS 220, GEOLOGY 350.

GEOLOGY 5555 Environmental Impact Analysis Credits: 3

A systematic analysis of the spectrum of environmental changes related to human use and occupancy in urban settings. Study of the nature of activities such as industrialization, mining, urbanization and transportation, and their effect on the specific site and general region. Methods of measuring aesthetic and economic quality of the urban areas will be explored in an attempt to facilitate writing environmental impact statements.

Prerequisites: Baccalaureate degree in geology.

GEOLOGY 5559 Inquiry-Based Field Studies for Teachers Credits: 3-6

Inquiry-based studies in environmental science, environmental chemistry and geology involving collaborations between course participants, practicing scientists and professional educators. The course is designed especially for pre- and in-service teachers of all levels and contact areas to enhance critical thinking, problem solving and process skills as defined by state and national standards. Projects will balance field and lab studies with analysis and presentation of results through electronic, oral and written means.

GEOLOGY 5561 Geologic Mapping Credits: 3

Analysis of the stratigraphic section in the greater Kansas City area by field investigation. Compilation of descriptive data and the construction of detailed geologic maps. Practical problems to determine the most beneficial use of the land in an area that is rapidly becoming urbanized. Previous field mapping experience highly recommended.

Prerequisites: Baccalaureate degree in geology.

GEOLOGY 5570 Advanced Hydrogeology Credits: 3

This course will focus on advanced groundwater hydrology with emphasis on flow equations and computational modeling in various geologic settings. Students will be introduced to basic analytical skills to derive dynamics of groundwater flow, comprehensive understanding of aquifer characteristics, and interpretation of field based groundwater data using computational simulations.

Prerequisites: Baccalaureate degree in Geosciences, GEOL 370R, or permission of instructor.

GEOLOGY 5571 Tectonics Credits: 3

A detailed inquiry into plate tectonics and the geophysical and geological data that define the motion of lithospheric plates. Global examples of divergent, convergent, and transform plate boundaries will be studied through lectures, discussions, problem sets, and term papers.

Prerequisites: GEOLOGY 325, GEOLOGY 350.

GEOLOGY 5572 Earthquake Geology Credits: 3

This course is detailed inquiry into the study of present and past earthquakes as they are preserved in the seismological, geophysical, and geological record. Global examples of earthquakes will be studied through lectures, discussions, problem sets, term papers, field trips and field projects.

Prerequisites: GEOLOGY 350.

GEOLOGY 5597 Graduate Seminar in Geosciences Credits: 3

This graduate seminar examines emerging and current issues in Environmental and Urban Geosciences. Most environmental issues and their solutions are inherently multidisciplinary and are characterized by significant interactions between oceans, atmosphere, land, and society. In addition to examining these issues, this seminar engages students in the process of critically evaluating Earth and human systems studies. The course provides students with a fundamental background of today's important environmental challenges and experience doing the craft of science through critically reading, thinking, writing, and speaking.

GEOLOGY 5598 Special Topics in Urban Environmental Geology Credits: 1-3

Individual research into practical geoscience problems in the urban environment. Provides opportunity for individual research in applied geology. Topic and method to be established by student and academic supervisor prior to enrollment.

GEOLOGY 5598A Special Topics In Urban Environmental Geology: Petroleum Geology Credits: 1-3

GEOLOGY 5598B Spec Topics In Urban Environmental Geology: Soil/Rock Mechanics Credits: 1-3

GEOLOGY 5598C Sp Topics In Urban Environmental Geol: Stratigraphy/Paleontology Credits: 1-3

GEOLOGY 5598D Spec Topics In Urban Environmental Geology-Environmental Geology Credits: 1-3

GEOLOGY 5598E Special Topics in Energy and Mineral Resources Credits: 1-3

This course provides students an opportunity for advanced independent research in energy and mineral resources.

GEOLOGY 5598H Special Topics in Urban Environmental Geology - Geochemistry and Mineralogy Credits: 1-3

Special Topics In Urban Environmental Geology - Geochemistry and Mineralogy

GEOLOGY 5598I Special Topics In Urban Environmental Geology Credits: 1-3

GEOLOGY 5598J Special Topics In Urban Environmental Geology: Environmental Sci Credits: 1-3

GEOLOGY 5598K Issues in Waste Management Credit: 1

This course focuses on the critical problems of managing the waste materials generated in our society. The course includes discussion of various types of waste-municipal solid waste, hazardous (industrial) waste, nuclear and medical wastes. Sources, handling, storage, transportation, treatment and disposal of these wastes are reviewed. Experts from government and the waste management industry give guest lectures.

GEOLOGY 5598M Special Topics in Geostatistics and Modeling Credits: 1-3

Advanced independent research in geostatistics and modeling techniques.

GEOLOGY 5599 Research and Thesis: Geology Credits: 1-9

Individual directed research by the student leading to the preparation of a formal written thesis and oral defense.

GEOLOGY 5690 Special Research Topics Credits: 1-3

Student will produce a major research paper suitable for publication under the direction of their instructor.

GEOLOGY 5699R Research And Dissertation Credits: 1-10

Research for dissertation in partial fulfillment of the Geosciences requirements for the Ph.D. degree.

GEOLOGY 5899 Required Graduate Enrollment Credit: 1

Bachelor of Arts: Environmental Studies

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- interpret human & environmental patterns using spatial analysis.
- describe the components and functions of socio-ecological systems.
- analyze the complex relationships between humans and the natural environment.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; satisfied in program requirements below)		
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience (Satisfied in program requirements below)		
Total Credits		9

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
Required Courses		
One of the following course sets:		5
ENV-SCI 110L & ENV-SCI 110R or MOTRGEOG 100L	Understanding the Earth Laboratory and Understanding the Earth: Introduction to Environmental Science and Laboratory MOTR Physical Geography with Lab	
GEOLOGY 220 & 220L	General Geology and General Geology Laboratory	
GEOG/UPD 203	Introduction to Geographic Information Systems	4
GEOLOGY 250L or GEOLOGY 251L	Field Methods in Earth and Environmental Science Field Methods in Earth and Environmental Science: Off-Campus	3
GEOG 215	Weather and Climate	4
ENV-STDY/GEOG 325	Cultural Perspectives on the Environment	3
GEOG 444	Spatial Data Analysis	4
GEOG/URBAN ST 499WI or ENV-STDY 499WI or GEOLOGY 499WI or GEOG 403WI	Geography Seminar Environmental Studies Practicum Geology Seminar History and Philosophy of Geoscience	3
B.A. Supporting Requisites		
Mathematics		
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
STAT 235 or CJC 303 or SOCIOL 363	Elementary Statistics Introduction to Statistics in Sociology and Criminal Justice Introduction To Statistics In Sociology/Criminal Justice	3
Supporting Social Sciences - Choose 4 Courses In 3 Different Subject Areas		12
ECON 420	Environment, Resources And Economic Growth	
ENV-SCI 332CZ	Environmental Sustainability	
ENV-SCI/GEOG/GEOLOGY 321 or GEOG 406 or ENV-SCI/GEOG 449	Climate Change Impact Assessment and Policy Response Global Environmental Change Global Water and Sustainability	
HISTORY 365A	American Environmental History	
POL-SCI 304	Politics of Developing Countries	
SOCIOL 441 or SOCIOL 431	Globalization and Development Social Organization Of The City	
UPD 432	Urban Environment Planning And Design	
Environmental Electives - Choose one from each category		9
Natural Sciences (NS)		
BIOLOGY 108 & 108L or MOTRBIOL 100LB or MOTRBIOL 150LB	General Biology I and General Biology I Laboratory MOTR Essentials in Biology w/ Lab - Botany MOTR Biology with Lab	
BIOLOGY 109 & 109L or MOTRBIOL 100LZ or MOTRBIOL 150LZ	General Biology II and General Biology II Laboratory MOTR Essentials in Biology with Lab MOTR Biology w/Lab	
BIOLOGY 302	General Ecology	
BIOLOGY 305	Marine and Freshwater Biology	
BIOLOGY 308	Vertebrate Zoology	
BIOLOGY 346	Plant Biology	

CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I
CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II
Any 300- or 400-level ENV-SCI, GEOG, or GEOLOGY course except those listed under Social Sciences (SS)	
Social Sciences (SS)	
ANTHRO 331	Urban Anthropology
ECON 420	Environment, Resources And Economic Growth
GEOG 309	Urban Geography
HISTORY 406	Modern Latin America
SOCIOL 313R	Sociology Of Gender
SOCIOL 322	Race And Ethnic Relations
SOCIOL 348	Latinx Immigrants, Migrants, and Refugees in the U.S
UPD 280	Land Use Planning
UPD 340	Neighborhood And Community Development
UPD 420	Transportation Planning
Ethics, Jurisprudence, and Culture (EJC)	
ANTHRO 326	Consumer Society
LAW 8725	Water Law (with permission)
LAW 8728	Law And The American Indian (with permission)
LAW 8729	Preservation Law (with permission)
LAW 8773	Environmental Law (with permission)
LAW 8782	Environmental Law Seminar (with permission)
LAW 8782R	U.S. Environment Protection Agency Law Internship:National Agricultural Compliance Assistance Center (with permission)
PHILOS 370	Environmental Ethics And Policy
SOCIOL 358	Culture and Society
UPD 260	History Of Planning And Urban Design
UPD 320	Planning Theory And Practice
UPD 450	Planning Law And Practice

Total Credits

53

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		28

Total Credits: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ENV-SCI 110R & ENV-SCI 110L (or GEOLOGY 220 & GEOLOGY 220L) ^{CC}		5 GEOG 203 ^{CC}	4
MATH 120		5 MATH 210, STAT 235, or CJC 303 ^{CC}	4
GEFSE 101		3 ENGLISH 110	3
GECRT-SC 101		3 GECRT-SS 101	3
		Foreign Language Requirement (110 or higher)	3
		16	17

Second Year

Fall Semester	Credits	Spring Semester	Credits
GEOLOGY 250L ^{CC}		3 GEOG 215 ^{CC}	4
ENGLISH 225		3 ENV-STDY 325	3
COMM-ST 110, 277, or 140		3 GECRT-AH 101	3
HISTORY 101, 102, or POL-SCI 210		3 GECUE 201	3
Foreign Language course (120 or higher)		3 Foreign Language requirement (211)	3
		15	16

Third Year

Fall Semester	Credits	Spring Semester	Credits
Major Elective (SS, NS, or EJC area course)		3 3XX/4XX Major Elective (SS, NS, or EJC area course)	3
3XX/4XX Supporting Social Science Major Elective		3 3XX/4XX Supporting Social Science Major Elective	3
GECDV 201		3 3XX/4XX Supporting Social Science Major Elective	3
3XXX/4XX General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
GEOG 444		4 ENV-STDY 499WI, GEOG 499WI, GEOLOGY 499WI, or GEOG 403WI	3

3XX/4XX Major Elective (SS, NS, or EJC area course)	3 3XXX/4XX General Elective	3
3XX/4XX Supporting Social Science Major Elective	3 3XXX/4XX General Elective	3
General Elective	3 General Elective	4
	13	13

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Science: Earth and Environmental Science

Emphasis Areas:

- Environmental Science (p. 683)
- Geology (p. 688)
- Physical Geography (p. 693)

Bachelor of Science: Earth and Environmental Science - Environmental Science Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Interpret spatial patterns using mapping concepts.
- Describe the components and function of environmental systems.
- Analyze natural phenomena using quantitative data, critical thinking, and problem-solving skills.
- Explain the complex relationships between humans and the natural environment (Environmental Science Emphasis).
- Analyze data to quantify geologic features and structures (Geology Emphasis).
- Extract new geospatial information using remote sensing imagery and digital analyses (Physical Geography Emphasis).

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Laboratory Science Experience (Satisfied in program requirements below)		
Total Credits		0

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
Mathematics Coursework		
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
STAT 235	Elementary Statistics	3
or CJC 303	Introduction to Statistics in Sociology and Criminal Justice	
or SOCIOL 363	Introduction To Statistics In Sociology/Criminal Justice	
Science Coursework		
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II	5
Pick one of the two following sequences (total of 8 credits):		8
BIOLOGY 108 & 108L	General Biology I and General Biology I Laboratory	
or MOTRBIOL 100LB	MOTR Essentials in Biology w/ Lab - Botany	
or MOTRBIOL 150LB	MOTR Biology with Lab	
BIOLOGY 109 & 109L	General Biology II and General Biology II Laboratory	
or MOTRBIOL 100LZ	MOTR Essentials in Biology with Lab	
or MOTRBIOL 150LZ	MOTR Biology w/Lab	
OR		
PHYSICS 210	General Physics I	
PHYSICS 220	General Physics II	
Earth and Environmental Science Coursework		
ENV-SCI 110R & ENV-SCI 110L	Understanding the Earth: Introduction to Environmental Science and Laboratory and Understanding the Earth Laboratory	5
or GEOLOGY 220 & 220L	General Geology and General Geology Laboratory	
or MOTRGEOL 100L	MOTR Physical Geography with Lab	
Coursework common to all emphasis areas:		
GEOG 203	Introduction to Geographic Information Systems	4
GEOLOGY 250L	Field Methods in Earth and Environmental Science	3
or GEOLOGY 251L	Field Methods in Earth and Environmental Science: Off-Campus	
GEOG 215	Weather and Climate	4
ENV-STDY 325	Cultural Perspectives on the Environment	3

GEOG 444	Spatial Data Analysis	4
GEOG 499WI	Geography Seminar	3
or ENV-STDY 499WI	Environmental Studies Practicum	
or GEOLOGY 499WI	Geology Seminar	
or GEOG 403WI	History and Philosophy of Geoscience	
Environmental Science Coursework		
ENV-SCI 321	Climate Change Impact Assessment and Policy Response	3
GEOG 360	Principles of Biogeography	4
or GEOLOGY 314	Principles of Geomorphology	
GEOLOGY 370R	Hydrogeology	3
ENV-SCI 416	Understanding and Living with Volcanoes	3
or GEOLOGY 472	Earthquake Geology	
Environmental Science Electives (choose 11 hours from the following):		11
BIOLOGY 305	Marine and Freshwater Biology	
ENV-STDY 450	Ecotoxicology	
GEOLOGY 313	Evolution and the Geologic Record	
GEOG 402	Environmental Remote Sensing and Digital Image Analysis	
GEOG 406	Global Environmental Change	
GEOLOGY 322	Earth Materials	
GEOLOGY 325	Sedimentology/Stratigraphy	
GEOG 448	Satellite Climatology	
ENV-SCI 449	Global Water and Sustainability	
For the pairs listed below, students may only take courses for elective credit if not already taken for major requirements:		
GEOG 314	Principles of Geomorphology	
or GEOG 360	Principles of Biogeography	
GEOLOGY 472	Earthquake Geology	
or ENV-SCI 416	Understanding and Living with Volcanoes	
Total Credits		74

Math and Science Requirements

The Bachelor of Science degree requires a minimum of 60 hours in math and science coursework. The number of credit hours needed to meet this minimum requirement are listed below.

Code	Title	Credits
Additional Math and Science Coursework		0

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		16

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ENV-SCI 110R & ENV-SCI 110L (or GEOLOGY 220 & 220L) ^{CC}		5 STAT 235, 263, or CJC 303 ^{CC}	3
MATH 110		3 COMM-ST 110 or 277	3
GEFSE 101		3 ENGLISH 110	3
GECRT-SC 101		3 GECRT-SS 101	3
		HISTORY 101, 102, or POL-SCI 210	3
		14	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
GEOG 203 ^{CC}		4 GEOG 215 ^{CC}	4
GEOLOGY 250L		3 ENV-SCI 321	3
PHYSICS 210 or BIOLOGY 108 <i>and</i> BIOLOGY 108L (Complete Physics or Biology 2-semester course sequence))		4 PHYSICS 220 or BIOLOGY 109 <i>and</i> BIOLOGY 109L	4
ENGLISH 225		3 GECRT-AH 101	3
GECUE 201		3 GECDV 201	3
		17	17

Third Year

Fall Semester	Credits	Spring Semester	Credits
GEOG 360 or 314		4 ENV-STDY 325	3
GEOLOGY 416 or 472		3 3XX/4XX Environmental Science Major Elective	3
3XX/4XX Environmental Science Major Elective		3 3XX/4XX Environmental Science Major Elective	3

CHEM 211 & 211L	5	CHEM 212R & CHEM 212LR	5
	15		14
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
GEOG 444		4 ENV-STDY 499WI, GEOG 499WI, GEOLOGY 499WI, or GEOG 403WI	3
GEOLOGY 370R		3 3XX/4XX General Elective	3
3XX/4XX Environmental Science Major Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3	
	16		12

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Science: Earth and Environmental Science - Geology Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Interpret spatial patterns using mapping concepts.
- Describe the components and function of environmental systems.
- Analyze natural phenomena using quantitative data, critical thinking, and problem-solving skills.
- Explain the complex relationships between humans and the natural environment (Environmental Science Emphasis).
- Analyze data to quantify geologic features and structures (Geology Emphasis).
- Extract new geospatial information using remote sensing imagery and digital analyses (Physical Geography Emphasis).

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Laboratory Science Experience (Satisfied in program requirements below)		
Total Credits		0

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
Mathematics Coursework		
Choose one of the following sequences (satisfies Math Pathway):		9
MATH 110 & MATH 125 & MATH 210	Precalculus Algebra and Trigonometry and Calculus I	
MATH 120 & MATH 210	Precalculus and Calculus I	
Science Coursework		
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II	5
PHYSICS 210	General Physics I ¹	4
PHYSICS 220	General Physics II ¹	4
Earth and Environmental Science Coursework		
GEOLOGY 220 & 220L	General Geology and General Geology Laboratory	5
Coursework common to all emphasis areas:		
GEOG 203	Introduction to Geographic Information Systems	4
GEOG 215	Weather and Climate	4
GEOLOGY 250L or GEOLOGY 251L	Field Methods in Earth and Environmental Science Field Methods in Earth and Environmental Science: Off-Campus	3
ENV-STDY 325	Cultural Perspectives on the Environment	3
GEOG 444	Spatial Data Analysis	4
GEOG 499WI or ENV-STDY 499WI or GEOLOGY 499WI or GEOG 403WI	Geography Seminar Environmental Studies Practicum Geology Seminar History and Philosophy of Geoscience	3
Geology Coursework		
GEOLOGY 322	Earth Materials	4
GEOLOGY 325	Sedimentology/Stratigraphy	4
GEOLOGY 350	Earth Structures and Tectonics	4
GEOLOGY 490	Geology Field Camp	6
Geology Electives (choose 3 hours from the following):		3

ENV-SCI 416	Understanding and Living with Volcanoes	
GEOLOGY 313	Evolution and the Geologic Record	
GEOLOGY 314	Principles of Geomorphology	
GEOLOGY 370R	Hydrogeology	
GEOLOGY 441	Environmental Geophysics	
GEOLOGY 456	Field Methods in 3D Imaging of the Environment	
GEOLOGY 460	Introduction to Geochemistry	
GEOLOGY 472	Earthquake Geology	
Total Credits		74

- ¹ Students interested in continuing their studies in a graduate program should consider taking Physics For Scientists and Engineers I (PHYSICS 240, 5 s.h.) and Physics For Scientists and Engineers II (PHYSICS 250, 5 s.h.). and the required corequisite Calculus I (MATH 210) and Calculus II (MATH 220).

Math and Science Requirements

The Bachelor of Science degree requires a minimum of 60 hours in math and science coursework. The number of credit hours needed to meet this minimum requirement are listed below.

Code	Title	Credits
Additional Math and Science Coursework		0

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		16

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
GEOLOGY 220 & 220L ^{CC}	5	MATH 210	4
MATH 120	5	PHYSICS 210 (or CHEM 211 & CHEM 211L)	4
GEFSE 101	3	ENGLISH 110	3
GECRT-SC 101	3	GECRT-SS 101	3
	16		14

Second Year

Fall Semester	Credits	Spring Semester	Credits
GEOG 203 ^{CC}	4	GEOLOGY 350	4
GEOLOGY 250L ^{CC}	3	CHEM 211 & 211L (OR PHYSICS 210)	5
PHYSICS 220 (or CHEM 212R & CHEM 212LR)	4	ENGLISH 225	3
COMM-ST 110, 277, or 140	3	GECRT-AH 101	3
	14		15

Third Year

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
GEOLOGY 322	4	GEOG 215	4	GEOLOGY 490	6
GEOLOGY 325	4	ENV-STDY 325	3		
CHEM 212R & CHEM 212LR (or PHYSICS 220)	5	GEOLOGY 3XX/4XX Major Elective	3		
GECDV 201	3	GECUE 201	3		
		HISTORY 101, 102, or POL-SCI 210	3		
	16		16		6

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
GEOG 444	4	ENV-STDY 499WI, GEOG 499WI, GEOLOGY 499WI, or GEOG 403WI	3
3XX/4XX General Elective	3	3XX/4XX General Elective	3
General Elective	3	General Elective	3
General Elective	2	General Elective	3
	12		12

Total Credits: 121

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*

- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Science: Earth and Environmental Science - Physical Geography Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Interpret spatial patterns using mapping concepts.
- Describe the components and function of environmental systems.
- Analyze natural phenomena using quantitative data, critical thinking, and problem-solving skills.
- Explain the complex relationships between humans and the natural environment (Environmental Science Emphasis).
- Analyze data to quantify geologic features and structures (Geology Emphasis).
- Extract new geospatial information using remote sensing imagery and digital analyses (Physical Geography Emphasis).

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3

COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Laboratory Science Experience (Satisfied in program requirements below)		
Total Credits		0

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
Mathematics Coursework		
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
STAT 235	Elementary Statistics	3
or CJC 303	Introduction to Statistics in Sociology and Criminal Justice	
or SOCIOL 363	Introduction To Statistics In Sociology/Criminal Justice	

Science Coursework ¹

CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
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CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II	5
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Pick one of the two following sequences (total of 8 credits):		8
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BIOLOGY 108 & 108L or MOTRBIOL 100LB or MOTRBIOL 150LB	General Biology I and General Biology I Laboratory MOTR Essentials in Biology w/ Lab - Botany MOTR Biology with Lab	
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BIOLOGY 109 & 109L or MOTRBIOL 100LZ or MOTRBIOL 150LZ	General Biology II and General Biology II Laboratory MOTR Essentials in Biology with Lab MOTR Biology w/Lab	
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OR		
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PHYSICS 210	General Physics I	
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PHYSICS 220	General Physics II	
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Earth and Environmental Science Coursework

ENV-SCI 110R & ENV-SCI 110L or GEOLOGY 220 & 220L or MOTRGEOL 100L	Understanding the Earth: Introduction to Environmental Science and Laboratory and Understanding the Earth Laboratory General Geology and General Geology Laboratory MOTR Physical Geography with Lab	5
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Coursework common to all emphasis areas:		
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GEOG 203	Introduction to Geographic Information Systems	4
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GEOLOGY 250L or GEOLOGY 251L	Field Methods in Earth and Environmental Science Field Methods in Earth and Environmental Science: Off-Campus	3
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GEOG 215	Weather and Climate	4
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ENV-STDY 325	Cultural Perspectives on the Environment	3
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GEOG 444	Spatial Data Analysis	4
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GEOG 499WI	Geography Seminar	3
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or ENV-STDY 499WI	Environmental Studies Practicum	
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or GEOLOGY 499WI	Geology Seminar	
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or GEOG 403WI	History and Philosophy of Geoscience	
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Physical Geography Coursework

GEOG 314 or GEOG 360	Principles of Geomorphology Principles of Biogeography	4
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GEOG 401	Advanced Geographic Information Science	4
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GEOG 402	Environmental Remote Sensing and Digital Image Analysis	4
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GEOG 406	Global Environmental Change	3
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Physical Geography Electives (choose 9 hours from the following):		9
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ENV-SCI 321	Climate Change Impact Assessment and Policy Response	
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ENV-SCI 416	Understanding and Living with Volcanoes	
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GEOG 309	Urban Geography	
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GEOG 340	Geography of the United States and Canada (or any regional geography course)	
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GEOG 352	Geography of Southeast Asia	
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GEOG 448	Satellite Climatology	
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GEOLOGY 456	Field Methods in 3D Imaging of the Environment	
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For the pairs listed below, students may only take courses for elective credit not already taken for major requirements:		
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GEOG 360 or GEOG 314	Principles of Biogeography Principles of Geomorphology	
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Total Credits		74
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¹ Students may choose to complete alternative science sequences if prerequisite requirements are met: PHYSICS 210 or PHYSICS 240 and PHYSICS 220 or PHYSICS 250

Math and Science Requirements

The Bachelor of Science degree requires a minimum of 60 hours in math and science coursework. The number of credit hours needed to meet this minimum requirement are listed below.

Code	Title	Credits
Additional Math and Science Coursework		0

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		16

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC’s Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student’s evaluation of progress and major “fit”. In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC’s Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC’s PlanMyDegree ‘Audit’ (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students’ officially recorded (Office of Registration and Records) and “what if” exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC’s PlanMyDegree ‘Plans’ (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student’s officially recorded (Office of Registration and Records) and “what if” exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC’s Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program’s individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student’s responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year			
Fall Semester	Credits	Spring Semester	Credits
ENV-SCI 110R & ENV-SCI 110L (or GEOLOGY 220 & GEOLOGY 220L) ^{CC}		5 GEOG 203 ^{CC}	4
MATH 110		3 STAT 235, 263, or CJC 303	3
GEFSE 101		3 COMM-ST 110 or 277	3
GECRT-SC 101		3 ENGLISH 110	3

		GECRT-SS 101	3
	14		16
Second Year			
Fall Semester	Credits	Spring Semester	Credits
GEOLOGY 250L ^{CC}		3 GEOG 215 ^{CC}	4
CHEM 211 & 211L		5 CHEM 212R & CHEM 212LR	5
ENGLISH 225		3 GECRT-AH 101	3
HISTORY 101, 102, or POL-SCI 210		3 GECUE 201	3
	14		15
Third Year			
Fall Semester	Credits	Spring Semester	Credits
GEOG 401		4 GEOG 402	4
GEOG 3XX/4XX Major Elective		3 GEOG 3XX/4XX Major Elective	3
PHYSICS 210 or BIOLOGY 108 <i>and</i> BIOLOGY 108L (Complete Physics or Biology 2-semester course sequence))		4 PHYSICS 220 or BIOLOGY 109 <i>and</i> BIOLOGY 109L	4
GECDV 201		3 ENV-STDY 325	3
General Elective		3 General Elective	3
	17		17
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
GEOG 314 or 360		4 GEOG 406	3
GEOG 444		4 ENV-STDY 499WI, GEOG 499WI, GEOLOGY 499WI, or GEOG 403WI	3
3XX/4XX General Elective		3 GEOG 3XX/4XX Major Elective	3
General Elective		4 General Elective	3
	15		12

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Graduate Certificate: Geographic Information Systems (GIS)

Student Learning Outcomes

- Students will be able to identify geospatial issues and technical needs in problem-solving in relation to relevant academic disciplines, industrial production, or public services
- Students will be able to design geospatial technical approaches for problem-solving
- Students will be able to analyze geospatial data and produce maps using relevant GIS software
- Students will be able to present geospatial study findings with oral presentation and written reports

Geographic Information Systems (GIS) and related geospatial techniques are fast-growing and increasingly applied to almost all sectors of our society. Examples include environmental mapping, urban planning, and public resource management. This Missouri State-approved, transcribed graduate certificate program offers GIS-related multidisciplinary courses through several academic programs of the College of Arts & Sciences, such as Geosciences, Urban Planning and Design, Sociology, Economics, and Criminal Justice and Criminology. The curriculum is designed to prepare students for a variety of careers in the rapidly growing job market.

This graduate certificate program is open to any students with a bachelor's or a graduate degree and appropriate academic backgrounds, such as degree-seeking graduate students and working professionals.

For completion of the certificate program, the student is required to finish the coursework of 17-20 credit hours with a 3.0 GPA or higher.

Code	Title	Credits
Required Core Courses		
GEOG 450	Gis Fundamentals for Research Applications	4
GEOG 5507	Advanced Geographic Information Science	4
Electives		
Select three of the following:		9-12
GEOG 5502	Environmental Remote Sensing and Digital Image Analysis	4
GEOG 5504	Biogeography and Landscape Ecology	3
GEOG 5544	Advanced Spatial Data Analysis	4
GEOG 5548	Satellite Climatology	4
GEOG 5598D	Special Topics in Advanced GIS and Remote Sensing	3
CJC 5592	Advanced GIS For Crime Analysis	3
ECON 5511	Geographic Information Systems (GIS) for Urban Economic Development	3
UPD 5740	Advanced GIS for Urban Planning	3
SOCIOL 5534	Spatial Thinking in Social Science	3

Master of Science: Environmental and Urban Geosciences

Student Learning Outcomes

Students graduating from this program will:

- be able to conduct an independent geospatial research project.
- be able to analyze and interpret environmental data.
- review ethics in research and career goals, conduct literature searches, and critically evaluate scholarly information.
- assess and defend research findings through oral and written communication.

The Department of Earth and Environmental Science offers a Master of Science degree in Environmental and Urban Geosciences (M.S. EUG). This program prepares students for advanced study in natural hazards, paleoseismology, geology, geochemistry, climate variability, water resources, wetland dynamics, air and water pollution, geoarchaeology, paleoenvironments, geography, urban and human systems, GIS, and environmental remote sensing. The program provides students with either a thesis or non-thesis option. All students must complete the core curriculum and additional coursework.

Admissions Requirements

For full admission to the graduate degree program in environmental and urban geosciences, the following requirements must be met:

1. Completion of an undergraduate degree with a major in a geosciences field (such as Environmental Sciences or Studies, Geography, and/or Geology) and a grade-point average of at least 3.0 (A = 4.0) overall, as well as in the major.
2. Submission of scores on the Graduate Record Examination (GRE) is not required but highly recommended. GRE scores may be used to award assistantships.
3. Two letters of recommendation from academic and/or professional references.
4. The student must declare either a thesis or non-thesis degree option in his or her application. If you are declaring a thesis option admission, you must secure a thesis advisor in the Geosciences Department before admission and declare this in your application. For assistance, contact the Graduate Advisor.
5. All application materials must be submitted to the Admissions Office by March 31 for fall semester and October 1 for spring semester for final consideration.
6. All admitted M.S. EUG students must take a mandatory assessment during "Orientation" before the first day of class each semester.

With department approval, students with non-geoscience undergraduate degrees may be provisionally admitted on a non-regular degree-seeking basis. After successfully completing recommended courses for the appropriate undergraduate geoscience degree, provisionally-admitted students may be granted degree-seeking status.

Graduate Assistantships

Teaching assistantships are awarded on a competitive basis only to incoming fully-admitted, graduate students in the thesis option degree program. Assistantship applications and all supporting materials should be submitted by March 31 for fall enrollment and October 1 for spring enrollment. International Graduate Teaching Assistants (GTA) must be certified by the School of Graduate Studies (<http://sgs.umkc.edu/>) prior to serving in any GTA position. Interested international students should contact the School of Graduate Studies for more information.

Core Curriculum

Hours (Total 11 Credit Hours)

Code	Title	Credits
GEOG 5507	Advanced Geographic Information Science	4
GEOG 5544	Advanced Spatial Data Analysis	4
GEOG/GEOLOGY 5597	Graduate Seminar in Geosciences	3

Thesis Option Program

An additional 19 credit hours of graduate-level geosciences courses must be taken, of which 3-6 credit hours must be GEOG 5599 or GEOLOGY 5599. These courses will be selected in consultation with your thesis advisor.

Non-Thesis Option Program

An additional 19 credit hours of graduate-level geosciences courses must be taken. Please choose from the following courses:

Code	Title	Credits
ENV-SCI 5550	Ecotoxicology	3
GEOG 5502	Environmental Remote Sensing and Digital Image Analysis	4
GEOG 5504	Biogeography and Landscape Ecology	3
GEOG 5506	Global Environmental Change	3
GEOG/GEOLOGY 5508	Archaeological Field Survey Methods	3
GEOG 5509	Urban Geography	3
GEOG 5526	Paleoecology: Microfossils and Climate Change	3
GEOG 5535	Geoarchaeology	3
GEOG 5542	Quaternary Environments	3
GEOG 5546	Global Water and Sustainability	3
GEOG 5548	Satellite Climatology	4
GEOLOGY 5507	Archeological Resources Management	3
GEOLOGY 5509	Field Study in Archaeology	1-5
GEOLOGY 5513	Advanced Mineral Deposits	3
GEOLOGY 5521	Advanced Methods for Earth and Environmental Science	3
GEOLOGY 5531	X-Ray Diffraction and Fluorescence Methods: X-Ray Mthds Geol/Anly	2

GEOLOGY 5534	Hazardous Waste Operation Management	2
GEOLOGY 5535	Aqueous Geochemistry	3
GEOLOGY 5536	Introduction to Scanning Electron Microscopy Methods	2
GEOLOGY 5541	Environmental Geophysics	3
GEOLOGY 5551	Geotechnics	4
GEOLOGY 5570	Advanced Hydrogeology	3
GEOLOGY 5571	Tectonics	3
GEOLOGY 5572	Earthquake Geology	3

Requirements for Retention

1. For newly admitted graduate students, elimination of all undergraduate deficiencies (if any) in the undergraduate major and its supporting prerequisites is required upon or before the completion of the first 12 hours of coursework for graduate credit.
2. A 3.0 (B) average or better must be maintained in all graduate coursework. In addition, a 3.0 (B) average and a satisfactory balance of grades must be maintained in the approved program of study, or the student will be subject to either probationary status or dismissal from the program.
3. Thesis-option M.S. EUG students are required to pass a qualifying examination administered by the department during first year orientation.

Requirements for Graduation

1. Formal acceptance of a Program of Study, including thesis research proposal for thesis option students, is required by the department and the School of Graduate Studies upon completion of the GEOG/GEOLOGY 5597.
2. No more than 12 credit hours of the program may be 300- to 400-level courses, and at least 18 credit hours must be at the 5000-level or above.
3. A formal written thesis and final oral examination are required of thesis option M.S. EUG students. The format of the thesis must be in accordance with guidelines of the School of Graduate Studies.
4. Satisfactory compliance with all applicable requirements of the School of Graduate Studies is required, including continuous enrollment and residency. Please refer to the General Graduate Academic Regulations and Information (p. 454) section of this catalog.

Minor: Environmental Studies

Student Learning Outcomes

Students graduating from this program will:

- describe the components and function of Earth systems, have knowledge of environmental policy and ethical approaches to environmental issues, and have engaged in global challenges such as climate change, global water scarcity and ocean acidification, energy, consumption and waste management, and urban sustainability.
- actively involved with diverse communities throughout their course work and understand environmental challenges from multiple cultural perspectives and through world experiences.
- demonstrate this learning through the application, across the curriculum, of advanced geographical knowledge, quantitative, and analytical skills in their application to new settings and complex problems.
- have the ability to characterize environmental elements analytically and communicate their findings effectively.

Environmental Studies Minor

Program Coordinator:

Caroline Davies, Earth and Environmental Science, (816) 235-1335;

Students pursuing the bachelor of arts degree who wish to obtain a minor in environmental studies must take at least 18 credit hours of coursework from the following list, a minimum of nine credit hours at the 300- or 400-level and a minimum of nine credit hours at UMKC. The program of study is to be planned with a program coordinator.

Code	Title	Credits
Required Courses		
ENV-SCI 110R	Understanding the Earth: Introduction to Environmental Science and Laboratory	3
ENV-SCI 110L	Understanding the Earth Laboratory	2
ENV-SCI 210	Issues in Environmental Science	3
Electives		
Select a minimum of one of the following:		3
ECON 420	Environment, Resources And Economic Growth ¹	

PHILOS 370	Environmental Ethics And Policy ¹	
See the electives listed under B.A. and B.S. Environmental Studies		7
Total Credits		18

¹ May not be counted in both required and elective categories.

Courses which do not apply as credit in the Minor program are: GEOG 417, GEOG 398, GEOG 499WI, GEOLOGY 398, GEOLOGY 499WI

Minor: Environmental Sustainability

Student Learning Outcomes

Students graduating from this program will:

- Sustainability students can describe the interactions and feedbacks of Earth systems, have knowledge of environmental policy and urban planning, and are engaged in sustainability issues at many scales.
- Sustainability students will be actively involved with diverse communities throughout their course work, and assess sustainability challenges from multiple cultural perspectives and through world experiences.
- Sustainability students will demonstrate this learning through the application of advanced sustainable knowledge, quantitative, and analytical skills in their application to new settings and complex problems.
- Sustainability students will have the ability to characterize human-environmental interactions analytically and communicate their findings effectively.

Program Description

Global populations are becoming predominantly urban and the state of the environment is central to issues of quality of life, health and safety. The Sustainability minor program provides students with the most innovative preparation in urban environmental sustainability through course work that cross cuts multiple disciplines and focuses on integrative solutions. Students develop a foundation knowledge in Earth systems. Students engage the challenges of sustainability through course work and community problem solving in sustainable thinking, planning, policy, and design. Undergraduate students gain essential life skills, a foundation in complex environmental and human systems, and critical problem solving skills.

Program Requirements

Code	Title	Credits
Required		
Take three hours of the following:		3
ENV-SCI 496	Environmental Internship	
Earth Systems and Resources		
Select one of the following:		3-4
GEOG 215	Weather and Climate	
GEOG 406	Global Environmental Change	
ENV-SCI 449	Global Water and Sustainability	
GEOG 360	Principles of Biogeography	
Sustainable Thinking		
Select one of the following:		3
PHILOS 370	Environmental Ethics And Policy	
POL-SCI 380	Political Science And Politics	
Sustainable Planning and Policy		
Select one of the following:		3
ANTHRO 331	Urban Anthropology	
ENV-SCI 321	Climate Change Impact Assessment and Policy Response	
SOCIOL 431	Social Organization Of The City	
UPD 430	Planning For Historic Preservation	
Sustainable Design		
Select one of the following:		3
ECON 420	Environment, Resources And Economic Growth	
LAW 8757N	Entrepreneurship & New Venture Creation	
UPD 432	Urban Environment Planning And Design	

Analytical Tools

Select one of the following:		3-4
GEOG 401	Advanced Geographic Information Science	
GEOG 450	Gis Fundamentals for Research Applications	
GEOG 444	Spatial Data Analysis	
UPD 420	Transportation Planning	
Total Credits		18-20

Courses which do not apply as credit in the Minor program are: GEOG 417, GEOG 398, GEOG 499WI, GEOLOGY 398, GEOLOGY 499WI

Requirements

Minimum of 18 hours, Minimum of 9 hours from UMKC

Minimum of 9 Junior/Senior (300/400) level courses.

Minor: Geography

Student Learning Outcomes

Students graduating from this program will:

- Understand human-environmental relationships and their spatial dimensions in various geographic areas, from local places to the entire world.
- Integrate knowledge from the humanities, social sciences, and natural sciences and apply that information to places.
- Know how to design, produce, and interpret maps using modern technology. Evidence of success is provided by performance on our exit examinations, admission to graduate schools, and ultimately the successful careers in geosciences pursued by our graduates.

Academic minors are offered in geography (18 hours) and in geology (18 hours). At least nine of the hours needed for the minor must be taken at UMKC. The minor programs are sufficiently flexible to enable students with diverse backgrounds to choose relevant coursework from the department's offerings. The programs are structured to ensure that students gain an appreciation of the breadth of the minor field. The minor should be declared as early as possible, but not later than the beginning of the student's senior year. Up to eight hours of coursework may simultaneously count in both the major and minor areas, where applicable. This applies to departmental and non-departmental students.

Minor in Geography

A minor in geography may be obtained with a minimum of 18 semester hours of coursework in this discipline (at least nine of which must be at the 300- and 400-level).

Either ENV-SCI 110R (5 hours with lab) -or- GEOG 105 (3 hours) is required.

Note: GEOG 398, GEOG 417, and GEOG 499WI do not count as credit in a minor program in geography.

Minor: Geology

Student Learning Outcomes

Students graduating from this program will:

- Understand the forces and processes that build and shape the Earth.
- Be able to identify minerals and rocks and understand their formation processes.
- Understand evolution, earth history, and the role of fossils in geologic time.
- Be able to utilize techniques to describe the three-dimensional geometry of Earth layers and deformation processes.
- Collect and interpret field data, produce maps, and use them to solve geologic and environmental problems.
- Be able to critically analyze published literature and have experience with technical writing and presentations.

Academic minors are offered in geography (18 hours) and in geology (18 hours). At least nine of the hours needed for the minor must be taken at UMKC. The minor programs are sufficiently flexible to enable students with diverse backgrounds to choose relevant coursework from the department's offerings. The programs are structured to ensure that students gain an appreciation of the breadth of the minor field. The minor should be declared as early as possible, but not later than the beginning of the student's senior year. Up to eight hours of coursework may simultaneously count in both the major and minor areas, where applicable. This applies to departmental and non-departmental students.

Minor in Geology

A minor in geology may be obtained with a minimum of 18 semester hours of coursework in this discipline (at least nine of which must be at the 300- and 400-level).

GEOLOGY 220 (5 hours with lab) -and- GEOLOGY 250L (3 hours) are required.

Note: GEOLOGY 398, and GEOLOGY 499WI do not count as credit in a minor program in geology.

Undergraduate Certificate: Geographic Information Systems (GIS)

Student Learning Outcomes

Students graduating from this program will:

- Identify geospatial issues and technical needs in problem-solving in relation to relevant academic disciplines, industrial production, or public services.
- Design geospatial technical approaches for problem-solving.
- analyze geospatial data and produce maps using relevant GIS software.
- Present geospatial study findings with oral presentation and written reports.

Geographic Information Systems (GIS) and related geospatial techniques are fast-growing and increasingly applied to almost all sectors of our society. Examples include environmental mapping, urban planning, and public resource management. This Missouri State-approved, transcribed undergraduate certificate program offers GIS-related multidisciplinary courses through several academic programs of the College of Arts & Sciences, such as Geosciences, Urban Planning and Design, Sociology, Economics, and Criminal Justice and Criminology. The curriculum is designed to prepare students for a variety of careers in the rapidly growing job market.

This undergraduate certificate program is open to any degree-seeking undergraduate students at UMKC with appropriate academic backgrounds.

For completion of the certificate program, the student is required to finish the coursework of 17-18 credit hours with a 3.0 GPA or higher.

Code	Title	Credits
GEOG 203	Introduction to Geographic Information Systems	4
GEOG 401	Advanced Geographic Information Science	4
Electives		
Select three of the following:		9-10
ECON 411	Geographic Information Systems (GIS) for Urban Economic Development	
GEOG 402	Environmental Remote Sensing and Digital Image Analysis	
GEOG 404	Biogeography and Landscape Ecology	
GEOG 417	Special Topics	
GEOG 444	Spatial Data Analysis	
GEOG 448	Satellite Climatology	
GEOLOGY 456	Field Methods in 3D Imaging of the Environment	
SOCIOL 434	Spatial Thinking in Social Science	
UPD 300	Quantitative Planning Methods And Techniques	
UPD 400	Advanced GIS For Urban Planning	
Total Credits		17-18

Department of Economics

Haag Hall, Room 211
 5120 Rockhill Road
 (816) 235-1314
economics@umkc.edu
<https://cas.umkc.edu/economics/>

Mailing Address

University of Missouri-Kansas City
 Department of Economics
 Haag Hall 211
 5100 Rockhill Road

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Department Chair:

Erik K. Olsen, olsenek@umkc.edu
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Undergraduate Advisor:

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IPhD Coordinator:

Scott Fullwiler, scottf@umkc.edu
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M.A. Advisor:

Sirisha Naidu, snaidu@umkc.edu
(816)-235-5715

Office Support Assistant III:

Jill Folsom, (816) 235-1314

Professors Emeriti:

W. Robert Brazelton, Peter J. Eaton, L. Kenneth Hubbell, A. Ross Shepherd, James I. Sturgeon, Karen S. Vorst, F. Eugene Wagner, John O. Ward, L. Randall Wray.

Professors:

Mathew Forstater

Associate Professors:

William Black, Scott Fullwiler, Sirisha Naidu, Erik K. Olsen (chair), Linwood Tauheed,

Assistant Professors:

Zhongjin Li

Lecturers:

Michael Kelsay, Panayiotis Manolakos

The Department of Economics is committed to promoting excellence in broad-based undergraduate programs; graduate and interdisciplinary doctoral education; research; and community, university and professional service. The department focuses its research, teaching and service efforts on the urban mission of the University by fostering a diversity of research and teaching perspectives for faculty and students.

Our Students

The department offers programs leading to a Bachelor of Arts, Master's of Arts and Interdisciplinary Ph.D., in Economics. It also provides undergraduate service courses to the College of Arts and Sciences, the Bloch School, and the School of Computing and Engineering. Undergraduate majors participate in a variety of visiting lecture programs and faculty colloquialism through the Economics Club and the Omicron Delta Epsilon (the economics honorary society).

Faculty and Facilities

Faculty members of the department maintain active, extensive research programs and a strong commitment to teaching – holding four outstanding teaching awards. Faculty members have served as presidents for national and regional economic associations and lectured and conducted research in the Fulbright Program, the Ford Foundation, the U.S. Department of Commerce, and the U.S. Department of Labor. Faculty members have established national and international reputations in a number of research fields. For a small faculty, the department has ranked high among other economics departments at comparable institutions nationally.

The Department of Economics and the Center for Economic Information are housed in Haag Hall. Faculty and other department programs are housed in Mannheim Hall. Students have access to state-of-the-art computer labs and classrooms.

Center for Economic Information

Haag Hall, Room 210
5120 Rockhill Road
(816) 235-1394

Douglas Bowles, Director

The Center for Economic Information (CEI) was established in November 1994 with the goal of making local, regional and national information accessible to economic decision-makers in the Kansas City metropolitan area. The CEI is affiliated with the Department of Economics and the College of Arts and Sciences.

The center is involved in research, teaching and outreach activities. The primary expertise of the center is in application of information technology for economic analysis.

You may request information about economics programs by calling the department's main number, (816) 235-1314; visiting the website at <https://cas.umkc.edu/economics/>; or sending an information request via email to economics@umkc.edu.

For specific information on the undergraduate degree program, contact Mathew Forstater, undergraduate advisor, forstaterm@umkc.edu. For master's program inquiries, contact Sirisha Naidu, M.A. Advisor, snaidu@umkc.edu, (816)-235-5715. For PhD program inquiries, contact Scott Fullwiler, scottf@umkc.edu, (816) 235-5701.

Faculty

W. Robert Brazelton; professor emeritus of economics; B.A. (Dartmouth College); M.A., Ph.D. (University of Oklahoma).

William Black; associate professor of economics and law; Ph.D. (University of California at Irvine).

Doug Bowles¹; assistant teaching professor, director, CEI, director, SSC, Ph.D., (University of Missouri-Kansas City)

Peter J. Eaton; associate professor emeritus of economics; B.A. (University of Santa Clara); Ph.D. (University of Florida).

Mathew Forstater^{2,3}; professor of economics; B.A. (Temple University); M.A. (New School for Social Research); Ph.D. (New School for Social Research).

Scott Fullwiler^{2,3}; associate professor of economics; B.A., Ph.D. (University of Nebraska-Lincoln)

L. Kenneth Hubbell; professor emeritus of economics; B.A., M.A. (Texas Christian University); Ph.D. (University of Nebraska).

Michael Kelsay¹; Adjunct professor of economics; Ph.D. (University of Tennessee).

Zhongjin Li^{2,3}; assistant professor of economics; B.A. Renmin University of China, M.A. and Ph.D. University of Massachusetts Amherst.

Sirisha Naidu^{2,3}; associate professor of economics; B.A. Stella Maris College, M.SC. Madras School of Economics, M.A. and Ph.D. University of Massachusetts Amherst.

Erik K. Olsen^{2,3}; associate professor of economics; B.S. (Northeastern University); Ph.D. (University of Massachusetts at Amherst).

Ross Shepherd; professor emeritus of economics; A.B. (Harvard University); M.A., Ph.D. (Syracuse University).

James Sturgeon; professor emeritus of economics, Ph.D. University of Oklahoma.

Linwood Tauheed^{2,3}; associate professor of economics; Ph.D. (University of Missouri at Kansas City).

Karen S. Vorst; professor emeritus of economics; B.S. (Bowling Green State University); Ph.D. (Indiana University).

F. Eugene Wagner; professor emeritus of economics; B.A., M.S. (University of Missouri-Kansas City); Ph.D. (Syracuse University).

John O. Ward; professor emeritus of economics; B.A., M.A. (University of Toledo); Ph.D. (University of Oklahoma).

L. Randall Wray; professor emeritus of economics, B.A. (University of the Pacific); M.A. and Ph.D. (Washington University in St. Louis).

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

Undergraduate Undergraduate Degrees:

- Bachelor of Arts: Economics
- Minor in Economics

Graduate Graduate Degrees:

- Master of Arts: Economics
- Interdisciplinary Ph.D.

Courses

ECON 100 Economics Explained Credits: 3

Everything you need to know about how the economy works and where it's going. This course simplifies and clarifies the vocabularies and concepts used to describe all the important economic phenomenon in our society today: unemployment, trade deficits, government budget deficits or surpluses, inflation, investments, and customer debt. It describes where we've been (economically) and assess the future of the economic system we call capitalism.

ECON 100 - MOTR ECON 100: Introduction to Economics



ECON 150 Introduction To Labor Studies Credits: 3

This interdisciplinary course offered by The Institute for Labor Studies, covers the role of workers and the labor movement in society and the American political and economic system. Students will gain an overview, from a labor viewpoint, of the organization of work and workers, collective bargaining and representation, and labor's rights, roles, and strategies in a democracy and in the global economy. A particular focus will be the image of the working class and organized labor in the media and among public perception.

ECON 201 Introduction to Economics I Credits: 3

Economics I deals primarily with macroeconomic or national economic concepts, the economics of the determination of recession, inflation, maintenance of full employment and economic growth, with an emphasis upon the economics of modern Keynesian analyses. It further introduces the economics of Marx and Ayres and discusses relevant and current economic issues. ECON 201 and ECON 202 are prerequisites for most other economics courses.

ECON 201 - MOTR ECON 101: Introduction to Macroeconomics



ECON 202 Introduction To Economics II Credits: 3

Economics II deals primarily with microeconomics, firm analysis, the principles of demand, supply, elasticity, price determination, costs, income distribution, market structures, trade, and other related social, economic issues. ECON 201 and ECON 202 are prerequisites for most other economics courses.

ECON 202 - MOTR ECON 102: Introduction to Microeconomics



ECON 301 Macroeconomic Analysis Credits: 3

This course provides more in-depth analysis of the macroeconomy. It examines the economic system as a whole and the ways in which its functioning is affected by the behavior of the interdependent sectors of which it is composed. It details the major factors affecting national income and the use of sectoral accounts in analyzing economic prospects and policies.

Prerequisites: ECON 201.

ECON 302 Microeconomic Analysis Credits: 3

This course provides in-depth analysis of the microeconomy. It examines the functioning of the individual enterprise and households. It specifically details problems confronting business enterprises operating under different types of market situations. It features analyses of the influence of the prices factors of production on methods of production and the effects that changes in income levels and in relative prices have on sales of different types of goods and services.

Prerequisites: ECON 202.

ECON 303H Special Issues In Economic Credits: 3

Readings and discussions of selected economic topics. Content varies over time as economic conditions change. Designed for outstanding students in Principles of Economics.

ECON 314 Political Economy of Race, Class And Gender: Theory, History, And Policy Credits: 3

Analyzes how the political economy of race, class and gender discrimination result in differences in opportunities and outcomes in society. Begins with an introduction to political economy. Then moves to an historical overview of the origins of oppression based on gender (patriarchy), class and race and their relation to the rise and development of capitalism. Discursive and non-discursive factors are investigated. Alternative theoretical approaches to understanding the intersections of race, class, and gender are evaluated. Policy debates on issues related to affirmative action, education, welfare, employment, and others are considered.

ECON 331 Money And Banking Credits: 3

A study of the structure, operations and problems of banks and other financial institutions with emphasis on their macroeconomic performance. The importance of banking in the financial system and the influence of Federal Reserve monetary policies are also studied.

Prerequisites: ECON 301.

ECON 336 The Kansas City Economy Credits: 3

This course explores the Kansas City economy in depth from both a micro and macro perspective. The macro approach details how important the Kansas City economy is to the state of Missouri, to the US economy, and in the international arena. The micro approach details the contribution of the many different sectors of the KC area to the overall local economy.

ECON 340 Collective Bargaining Credits: 3

This course involves a study of the economics and process of collective bargaining in the labor sphere, including contract negotiations, contract enforcement, and methods to resolve bargaining disputes. Both theoretical and applied issues in collective bargaining will be addressed. Students will participate in a contract bargaining simulation.

ECON 341 Union Leadership and Administration Credits: 3

This course focuses on the roles and challenges of union leadership in a changing environment. Topics include the union leaders' role as a representative, organizer and educator as well as administrative responsibilities within the union and the relationship with enterprise management in both adversarial and participatory situations. Options for leadership styles and organizational models will be discussed and explored in both theory and practice. Leaders will develop their skills of motivation, speaking, strategic planning and managing complex campaigns and diverse organizations.

ECON 353 Financial Analysis And The Economy Credits: 3

This course examines techniques of financial evaluation used by individuals, corporate managers, and portfolio analysts. Focus of the course will be on the interaction of the mechanics of analytical methods and economic activity. Topics covered will include individual portfolio building, asset evaluation, and financial market theory.

Prerequisites: ECON 301.

ECON 395A Economic Issues Credit: 1**ECON 395C The Economics Of Energy Credit: 1****ECON 402 Labor and the Global Political Economy Credits: 3**

This course will examine current issues, trends, and developments which are shaping labor in today's global economy. Students will analyze the shifting balance of power between labor and capital, the role of government, and evaluate the strategic options for workers and unions operating in a global environment.

ECON 404R American Economic History Since 1865 Credits: 3

The course deals with the emergence of Industrial American since 1865. It covers the rise to dominance of the large modern corporation, the problem of economic and social instability and stability, the rise of trade associations, cartels, and government regulation in an unstable economy, and the evolution of American economic policy and national economic planning.

ECON 404RR American Labor History Credits: 3

This course examines history of work and the working class in the U.S. from 1750 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.

ECON 406WI History Of Economic Thought Credits: 3

Analysis of basic concepts of economic thought, their historical sources and significance.

ECON 411 Geographic Information Systems (GIS) for Urban Economic Development Credits: 3

An advanced quantitative methods course featuring the application of Geographic Information Systems (GIS) to the problems of urban economic development. Surveys federal, state, and local geospatial and attribute data resources, including Census Bureau TIGER files, and provides training in geodatabase construction and management. Geospatial processing, editing, and address geocoding are also covered. Formal analytical methods (cartographic aesthetics and visualization, spatial analysis, exploratory data analysis, network analysis, crime analysis, etc.) are all applied in the context of the problematics of urban and regional economic development.

Prerequisites: GEOG 203 or UPD 203.

ECON 412 International Trade And Development Credits: 3

This course emphasizes the global allocation of resources and distribution of income in the analysis of economic development and international trade. Major topics include various theories of economic development, comparative advantage, terms of trade, tariffs, quotas, economic integration and the use of trade to foster economic development.

Prerequisites: ECON 301.

ECON 416 Law And Economics Credits: 3

This course will examine the use of economic principles in the analysis and application of public and private law. Emphasis will be given to the efficiencies of laws in meeting social objectives, how laws can be modified to become more economically efficient, and the uses of economics in the actual practice of the law. Issues covered will include proofs of liability in antitrust, contracts and employment law using statistical and economic analysis, and the calculation of economic damages in commercial, employment and personal injury/death litigation. Graduate students will be assigned a specific research paper.

ECON 420 Environment, Resources And Economic Growth Credits: 3

This course focuses on the theory and policy issues involved in resource recreation and depletion; environmental destruction, preservation and recreation; and the interrelation of these problems of and prospects for economic growth.

ECON 421 Mathematical Economics Credits: 3

An introduction to mathematical methods as applied to the questions addressed by economists. The principal methods to be applied are matrix algebra and differential calculus in the context of optimization. Other topics may include integral calculus, differential equations, difference equations, or linear and non-linear programming.

Prerequisites: ECON 301, ECON 302 and (MATH 206 or MATH 210).

ECON 425 Intermediate Economic Statistics Credits: 3

An introduction to the empirical side of economics. Estimation theory and the properties of commonly used estimators are covered. Some of the more important topics dealt with are: multiple regression, heteroscedasticity and autocorrelation in regression analysis, analysis of variance and the use of qualitative variables in regression analysis. Hands-on work with computer software designed for econometrics is stressed. No experience with computers necessary.

Prerequisites: ECON 301 and ECON 302.

ECON 429 Environment, Resources And Economic Growth Credits: 3

This course focuses on the theory and policy issues involved in resource creation and depletion; environmental destruction, preservation and recreation; and the interrelation of these problems of and prospects for economic growth.

Prerequisites: ECON 201, ECON 202.

ECON 431 Monetary Theory And Policy Credits: 3

A study of the nature and functions of money and the financial system, with emphasis on monetary theory and its application to current banking and financial problems. Recent contributions to monetary theory and current literature.

Prerequisites: ECON 201, ECON 202, ECON 301.

ECON 435 Public Finance Credits: 3

Problems of public and private sector decision making of revenue-expenditure policies and an examination of the actual legal, political and economic policies for revenues and expenditures of federal, state and local governments.

Prerequisites: ECON 201, ECON 202, ECON 302.

ECON 437 State And Local Government Finance Credits: 3

This course investigates the role, problems and relative importance of municipal governments in the United States. Such areas as the demand for public services, tax and expenditure policies, and intergovernmental fiscal relations will be explored in detail. Case studies of state and local governments will be introduced to emphasize the problems and proposed solutions arising in modern municipal governments.

Prerequisites: ECON 201, ECON 202, ECON 302.

ECON 438 Economic Policy Credits: 3

Analysis of the confluence of political and economic behavior, the economics of collective action.

Prerequisites: ECON 201, ECON 202, ECON 301 and ECON 302.

ECON 442 International Finance Credits: 3

This course emphasizes the global activity and balance of payments implications of government taxation, expenditure and monetary policies under various capital market conditions. Major topics include: exchange rates and the balance of payments; national income determination in an open economy; integrated and non-integrated capital markets; economic growth stabilization policies and the quest for global economic stability.

Prerequisites: ECON 201, ECON 202, ECON 301.

ECON 451 Institutional Economic Theory Credits: 3

Analysis of impact of modern philosophy and developments in social sciences on economic theory.

ECON 458 Urban Economics Credits: 3

An inquiry into the economics of location decisions and the influence of these on urban growth and on the real estate market; the evaluation of urban transportation and other public services; an examination of economic development of ghetto neighborhoods.

Prerequisites: ECON 302.

ECON 460 Industrial Organization Credits: 3

The structure, conduct, and performance of American industry. Historical evolution of American industry; alternative industrial systems. Antitrust policies and their alternatives. Technological change and industrial performance.

Prerequisites: ECON 302.

ECON 475 Economics Institutions and Policies Credits: 3

This course focuses on the economic system analysis of labor market phenomena in the context of historical-institutional development and labor market policies, this course is offered winter semester only.

Prerequisites: ECON 201 and ECON 202.

ECON 486 Labor Economics Credits: 3

An examination of the theories of wage determination, the economic effects of wage determination upon the wage structure, the distribution of national income, employment, and an introduction to collective bargaining.

Prerequisites: ECON 301 and ECON 302.

ECON 488 Radical Political Economy Credits: 3

This course will cover the ideas that constitute radical political economy. It will show how radical political economy can be used to examine current economics and social problems and will outline possible economic structures of utopian visions.

Prerequisites: ECON 201, ECON 202.

ECON 490 Readings In Economics Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the professor in any of the following fields: (a) economic theory, (b) history of economic thought, (c) labor economics, (d) urban economics, (e) monetary and fiscal policy and theory, (f) international economics, (g) economic development, (h) comparative economic systems, (i) public finance, (j) public policy toward business, (k) quantitative economics.

Prerequisites: ECON 201, ECON 202.

ECON 496 Practicum in Urban Economic Development Credits: 3

The Practicum in Urban Economic Development provides students with the opportunity to integrate and apply the knowledge and skills developed through previous coursework to real-world problems of urban economic development. Working on collaborative, service-learning projects in partnership with both community and metropolitan-level organizations, students will engage with the process of applied urban economic development in a team-structured context. Student teams will be each be responsible for one term project over the course of the semester. The course will culminate with the public presentation of project outcomes.

Prerequisites: ECON 336, ECON 458.

ECON 497 Internship Credits: 1-6

The course allows the student to participate in cognate, approved internships of a professional nature.

Prerequisites: ECON 201 and ECON 202; completion of 75 credit hours and undergraduate major or graduate student in Economics.

ECON 5501 Advanced Macroeconomic Analysis Credits: 3

Basic theoretical concepts of national income and statistical tools utilized in its measurement. Aggregate demand and supply as problems of economic dynamics. The course includes examination of the primary competing theoretical approaches: neoclassical, Keynesian, new classical, real business cycle, new Keynesian supply side, Austrian, and Post Keynesian. Topics covered include growth, money, labor markets consumption, investment, expectations formation, role of time and uncertainty, equilibrium and disequilibrium analysis, exchanges rates, international trade, and optimal currency areas. Policy implications of the various macroeconomic theories are explored.

Prerequisites: ECON 301 and ECON 302.

ECON 5502 Advanced Microeconomic Analysis Credits: 3

The course first provides a critical survey of neoclassical microeconomic theory, including methodology, demand theory, production and cost theory, theory of competitive and non-competitive markets, distribution, welfare, and general equilibrium. It then introduces heterodox microeconomic theory, covering its historical origins, methodology, structural organization of economic activity, in-put-output models, flow of funds, agency and institutions, and the business enterprise.

Prerequisites: ECON 302, ECON 5521.

ECON 5503 Advanced Heterodox Economics Credits: 3

The course examines various theoretical approaches and topics, both historically and currently, that constitute heterodox economics. In particular the course deals in depth with the mathematical and economic properties of heterodox production and price models. After reviewing the mathematics of linear production-price models, the module will examine Leontief, Sraffian, and other heterodox price and production models.

Prerequisites: ECON 301, ECON 302, and MATH 210.

ECON 5504R American Economic History Since 1865 Credits: 3

The course deals with the emergence of Industrial America since 1865. It will cover the rise to dominance of the large modern corporation, with the problem of economic and social instability and stability, with the rise of trade associations, cartels, and government regulation in an unstable economy, and with the evolution of American economic policy and national economic planning.

ECON 5504RR American Labor History Credits: 3

This course examines the history of work and the working class in the U.S. from 1750 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.

Prerequisites: Graduate standing.

ECON 5505 Advanced Comparative Economic Systems Credits: 3

Contents vary depending upon the instructor's design for the course.

Prerequisites: ECON 301, ECON 302.

ECON 5506 Advanced History Of Economic Thought Credits: 3

This seminar uses issues raised in the reading of two 'classic' primary texts, Adam Smith's *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776) and John Maynard Keynes's *The General Theory of Employment, Interest and Money* (1936), as points of departure for the examination of a series of topics in the history and development of economics and alternative paradigms in the discipline. These investigations will lead us to the study of a number of other seminal articles, representing alternative approaches in the field. Topics include competition, accumulation, path dependence and endogenous technical change, cumulative causation, the laws of return, money and credit, capital theory, and more.

Prerequisites: ECON 301, ECON 302.

ECON 5508 Controversial Issues In Recent Economic Literature Credits: 3

This course will focus on theoretical and policy-oriented controversies that have occurred in economic in the 20th century. The type of controversies covered include, but are not restricted to, money, unemployment, business cycles and economic growth, pricing and administered prices, capital controversy, labor theory of value controversy, and free trade vs. protectionism. While the course concentrates on recent debates, it identifies the origins of the modern disputes in earlier controversies. For each controversy, its real world importance and policy implications are discussed.

ECON 5511 Geographic Information Systems (GIS) for Urban Economic Development Credits: 3

An advanced quantitative methods course featuring the application of Geographic Information Systems (GIS) to the problems of urban economic development. Surveys federal, state, and local geospatial and attribute data resources, including Census Bureau TIGER files, and provides training in geodatabase construction and management. Geospatial processing, editing, and address geocoding are also covered. Formal analytical methods (cartographic aesthetics and visualization, spatial analysis, exploratory data analysis, network analysis, crime analysis, etc.) are all applied in the context of the problematics of urban and regional economic development.

Prerequisites: GEOG 203 or UPD 203.

ECON 5512 Advanced Economic Development Credits: 3

Contents vary depending upon the instructor's design.

Prerequisites: ECON 301, ECON 302.

ECON 5513 Economic Cycles And Growth Credits: 3

A critical review and evaluation of economic analysis and the forces of economic fluctuation and growth; and analysis of statics, dynamics, monopolistic competition, the role of the interrelationships of the market structure and other institutional forces as they relate to fluctuations and growth. An emphasis will be made on the critical evaluation of recent literature in the field of economic analysis related to fluctuations, growth, statics, dynamics, market structure and the reinterpretation of economic fluctuations, growth, forecasting and overall economic behavior. An analysis of the technological, monetary, and fiscal policy implied by economic trends and growth will also be discussed.

Prerequisites: ECON 5501.

ECON 5516L Law And Economics Credits: 3

This course will examine the use of economic principles in the analysis and applications of public and private law. Emphasis will be given to the efficiencies of laws in meeting social objectives, how laws can be modified to become more economically efficient, and the uses of economics in the actual practice of the law. Issues covered will include proofs of liability in antitrust, contracts and employment law using statistical and economic analysis, and the calculation of economic damages in commercial, employment and personal injury/death litigation.. Graduate students will be assigned a specific research paper..

Prerequisites: ECON 302.

ECON 5521 Mathematical Economics Credits: 3

An introduction to mathematical methods as applied to the questions addressed by economists. The principal methods to be applied are matrix algebra and differential calculus in the context of optimization. Other topics may include integral calculus, differential equations, difference equations or linear and nonlinear programming.

Prerequisites: ECON 301, ECON 302 and MATH 110.

ECON 5525 Econometric Methods Credits: 3

Continuation of ECON 425. The major problems encountered in building and testing economic models are treated and alternative solutions to these problems are discussed. Major topics include corrections for heteroscedasticity and autocorrelation, maximum likelihood and BLUE estimation, simultaneous equations methods, probit and logit analysis and distributed lags. Other topics may include ARIMA or other series analytic methods, three stage least squares and dynamic multipliers or simulation. Work with econometric software is stressed. No programming experience necessary.

Prerequisites: ECON 425 and ECON 5521.

ECON 5529 Readings In Quantitative Economics Credits: 3

Readings from the economic literature which stress advanced mathematical or econometric tools. A general subject matter is selected by the student with the consent of the instructor.

Prerequisites: ECON 5521, ECON 5525.

ECON 5531 Monetary Theory And Policy Credits: 3

A study of the nature and functions of money and the financial system, with emphasis on monetary theory and its application to current banking and financial problems; recent contributions to monetary theory and current literature.

Prerequisites: ECON 301.

ECON 5535 Theory Of Public Finance Credits: 3

An inquiry into the scope and nature of economics with emphasis on the nature of the public sector including a brief study of welfare criteria along with the study of ability to pay, benefit theory of taxation, and expenditure theories.

ECON 5537 State And Local Government Finance Credits: 3

This course investigates the role, problems and relative importance of municipal governments in the United States. Such areas as the demand for public services, tax and expenditure policies, and intergovernmental fiscal relations will be explored in detail. Case studies of state and local governments will be introduced to emphasize the problems and proposed solutions arising in modern municipal governments.

Prerequisites: ECON 302.

ECON 5538 Economic Policy Credits: 3

Analysis of the confluence of political and economic behavior, the economics of collective action.

Prerequisites: ECON 301 and ECON 302.

ECON 5540 Advanced International Trade Credits: 3

This course emphasizes the global allocation of resources and distribution of income under various commodity market conditions and government trade policies. Major topics include: comparative advantage; terms of trade; the distribution of gains and losses from trade; perfect vs. imperfect competition; tariffs, quotas and other barriers to trade; exchange rates and the balance of payments; preferential trading arrangements; international factor movements and multinational corporations.

Prerequisites: ECON 302; graduate standing.

ECON 5542 Advanced International Finance Credits: 3

This course emphasizes the global activity and balance of payments implications of government taxation, expenditure and monetary policies under various capital market conditions. Major topics include: exchange rates and the balance of payments; national income determination in an open economy; integrated and non-integrated capital markets; economic growth, stabilization policies and the quest for global economic stability.

ECON 5548 Advanced Socialist Economic Systems Credits: 3

The course will deal with the theoretical analysis of socialist economic theory, Marxian and non-Marxian, and/or of socialist economics systems such as those of Eastern Europe, the Chinese mainland and elsewhere. The emphasis of the course will vary depending upon the instructor's design for the course.

Prerequisites: ECON 301 and ECON 302.

ECON 5550 Regional Economics Credits: 3

The economics of spatial relations, emphasizing basic location and land utilization theory and the role of transport will be considered at the micro-level. Keynesian and neoclassical growth theories and contemporary policy approaches to regional growth and decline are analyzed.

Prerequisites: ECON 302.

ECON 5551 Advanced Institutional Theory Credits: 3

Evolution, organization and allocation functions of the modern industrial economy. Contributions and limitations of conventional economic concepts. Philosophical and theoretical interpretations of the economy in light of modern developments in philosophy and social science.

Prerequisites: ECON 451.

ECON 5558 Advanced Urban Economics Credits: 3

The study of the city as a dynamic system of interrelated and interdependent markets. Significant markets in cities include land, housing, labor, transportation and public services.

ECON 5560 Industrial Organization Credits: 3

The structure, conduct and performance of American industry. Historical evolution of American industry; alternative industrial systems, antitrust policies and their alternatives. Technological change and industrial performance.

Prerequisites: ECON 301, ECON 302.

ECON 5575 Labor Economics, Institutions and Policies Credits: 3

This course focuses on the economic analysis of labor market phenomena in the context of historical-institutional development and on labor market policies. This course is offered winter semester only.

Prerequisites: ECON 201 and ECON 202.

ECON 5583 Racial Inequality & Public Policy Credits: 3

This course will provoke open debate and discourse about public policy responses to racial inequality. The emphasis is on stimulating participants to think about and to analyze critically the range of strategies offered for reducing racism and racial economic inequality.

ECON 5587 Human Resource Economics Credits: 3

An analysis of the factors determining the productivity of human resource: education, nutrition, job training and work environment. An analysis of work patterns, wage patterns, and the impact of automation. Graduate students will be assigned a specific research paper on a topic to be decided with the instructor.

Prerequisites: ECON 302.

ECON 5588 Advanced Political Economy Credits: 3

This course gives students a comprehensive introduction to the history and modern practice of political economy, with particular emphasis on Marxian and Classical political economy. Topics include: value theory, class theory, economic reproduction, economic crisis, the theory of history, and methodology.

ECON 5589 Graduate Seminar In Labor Economics Credits: 3

Content of seminar will vary from semester to semester depending upon the instructor's design for the course.

ECON 5590 Special Topics Credits: 1-3

Selected topics in theoretical and applied economics.

ECON 5590A Special Topics Credits: 1-3**ECON 5590B Special Topics Credits: 1-3****ECON 5590C Special Topics Credits: 1-3****ECON 5591 Research And Planning Seminar Credits: 3**

The objective of this research seminar is to apply the quantitative techniques and theoretical constructs of economics to an urban-regional problem. Students are required to formulate and evaluate present economic models, and then complete a research project.

Prerequisites: ECON 5502 and ECON 5521.

ECON 5599 Research And Thesis Credits: 1-6

Directed specialized research.

ECON 5601 Colloquium In Advanced Macroeconomics Credits: 3

The course will deal with analyses of topics in Macroeconomic analysis and Macroeconomic policies and investigation of current literature in diverse areas of Macroeconomic analysis. A written report(s) will be made upon the selected assignment(s).

Prerequisites: ECON 5501.

ECON 5602 Colloquium In Advanced Microeconomics Credits: 3

As a continuation of Economics 502, this course deals with the business enterprises-including production, costs, pricing, and investment-markets, market demand, market governance, general price-quantity models of the economy, microfoundations of the heterodox macroeconomics, and social welfare.

Prerequisites: ECON 5502.

ECON 5606 Colloquium on Advanced History of Economic Thought Credits: 3

The course examines advanced topics in history of economic thought.

Prerequisites: ECON 5506.

ECON 5608 Topics In Economic Theory Credits: 3

This course deals with advanced topics in Institutionalism, Post Keynesian, and other heterodox economic theory. May be repeated with different topic.

ECON 5616 History Of Economics In The 20th Century Credits: 3

The history of 20th century economics is concerned with a number of interdependent issues, including the institutional organization of economics at universities; the historical development of the structures and social networks that make-up the economic paradigms of neoclassical economics, Marxian economics, Post Keynesian economics, and other heterodox economics; and the role of institutional and state power to maintain the dominance of the neoclassical paradigm. The aim of the course is to introduce students to this institutional/organizational history.

ECON 5625 Colloquium In Econometrics Credits: 3

This course treats advanced topics in econometrics such as non-linear estimation techniques, model development, simultaneous equation estimation techniques, and simulation. Topics are developed from theoretical and application perspectives. Familiarity with personal computer is necessary.

Prerequisites: ECON 5501, ECON 5502, ECON 5521, ECON 5525, or equivalents.

ECON 5631 Colloquium on Monetary Theory and Policy Credits: 3

This course explores advanced monetary theory and policy, examining recent debates and current research practices, as well as classic articles on monetary theory and policy.

Prerequisites: ECON 5601 or ECON 5501 and ECON 5531.

ECON 5645 Financial Macroeconomics Credits: 3

This course will introduce the student to the central role of financial analysis in macroeconomic analysis and to theories of macroeconomics instability based on the integration of finance and macroeconomics. It will examine modern finance theory and modern approaches to financial analysis, paying particular attention to the contributions made by Fisher and Keynes.

ECON 5660 Evolution Of American Industrial Society Credits: 3

Drawing on economic and organizational theory, the course will concentrate on the evolution of American industrial technology, the American business enterprise, and the organization of American industries and markets since 1870.

ECON 5665 Colloquium In Advanced Health Economics Credits: 3

This course is designed as a seminar with a special emphasis on analysis of econometric methods to assess issues in health care. The topics are developed from a theoretical and applied perspective. Familiarity with personal computers is necessary. Special emphasis will be given in the selection of course topics to the interests and backgrounds of participants.

Prerequisites: ECON 5521, ECON 5525, ECON 5565.

ECON 5680 Teaching Methods And Course Design Credits: 3

This course is designed to prepare students for the challenge of teaching economics. Students will be taught how to write a syllabus; how to prepare for class; how to plan learning activities; how to become skillful in leading discussion; how to present an effective lecture; how to test and assess student learning; how to develop effective group projects; how to motivate their students for lifelong learning. Students will be required to design a course to be taught at the 200-, 300 or 400-level. The student will prepare a complete set of course materials, including a lecture outline, a list of required readings, useful handouts, course materials, including a lecture outline, a list of required readings, useful handouts, course assignments, exams, etc. The course should incorporate an interdisciplinary approach and should emphasize an "active learning" component, designed to promote a "rich learning experience." The student will work closely with an appropriate member of the faculty.

Prerequisites: Must have completed/passed Comprehensive Exams.

ECON 5688 Colloquium On Political Economy Credits: 3

This course is designed as a seminar and will take into account theory and policy analysis from alternative perspectives. The topics covered will include philosophical foundations of contemporary theory and policy, the organization of production information and finance, resource and environment, wealth and income distribution, public and private policy and planning. Stress is placed on contemporary research and students are expected to become involved in research projects.

ECON 5690 Special Doctoral Readings In Economics Credits: 1-3

Special research topics in Economics at the Doctoral level.

ECON 5699 Doctoral Dissertation Credits: 1-12

Directed selected research for Economics in the interdisciplinary doctoral program.

ECON 5899 Required Graduate Enrollment Credit: 1

Bachelor of Arts / Master of Arts: Economics - Dual Degree Program

Student Learning Outcomes

Students graduating from this program will:

- Apply the theory and methods of the 'standard' approaches in both micro and macroeconomics given a variety of social and economic issues.
- Have a capacity for critical thinking and its role in challenging the 'standard' approach to economic problems.
- Demonstrate well-developed written and verbal communication skills.
- Demonstrate competency in a variety of qualitative and quantitative methods that will become part of their problem-solving toolkit.
- Have an advanced knowledge of the basic areas of the field.
- Be able to integrate their knowledge with critical thinking skills.
- Be able to articulate their knowledge, both orally and in writing.
- Be able to effectively research the literature of this field.

This program offers students the opportunity to fulfill the requirements of the BA and MA degrees in less time, and for less money, than the separate degree programs. Students earning a UMKC BA degree in Economics may count up to 9 credit-hours of 400-level undergraduate credit toward the MA degree. A student completing the requirements for the BA degree with 9 credit-hours of 400-level coursework (including ECON 425 and 451) can earn the MA degree with seven additional Economics courses (as specified below). For a full-time student this additional coursework can be completed in one year of study.

The requirements for this program are:

- Students must apply after completion of 60 hours toward their BA degree and prior to the start of the anticipated undergraduate graduation term.
- To apply, students must submit an application and a completed Declaration of Major form to the Department of Economics.

- Student applications will be reviewed and approved or denied at the discretion of the MA Program Advisor in the Department of Economics. **The deadline for decision is December 1 for a May Graduation and May 1 for a December graduation.**
- Students must pass a college-level calculus course before entering the program. MATH 206 Brief Calculus and Linear Algebra or an equivalent is recommended; MATH 210 Calculus I is also acceptable.

BA-MA Requirements

BA Component – see the requirements for the BA-Economics program (<https://catalog.umkc.edu/colleges-schools/arts-sciences/academic-departments-programs/economics/bachelor-of-arts-economics/>).

MA Component

Code	Title	Credits
Required Undergraduate Courses		
ECON 425	Intermediate Economic Statistics	3
ECON 451	Institutional Economic Theory	3
One ECON 400-Level Elective		3
Required MA Courses		
ECON 5501	Advanced Macroeconomic Analysis	3
ECON 5502	Advanced Microeconomic Analysis	3
ECON 5521	Mathematical Economics	3
ECON 5525	Econometric Methods	3
ECON 5551	Advanced Institutional Theory	3

Elective Graduate Economics Courses: Two Economics courses at the 5500 level or higher.

Bachelor of Arts: Economics

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Apply the theory and methods of the 'standard' approaches in both micro and macroeconomics given a variety of social and economic issues.
- Have a capacity for critical thinking and its role in challenging the 'standard' approach to economic problems.
- Demonstrate well-developed written and verbal communication skills.
- Demonstrate competency in a variety of qualitative and quantitative methods that will become part of their problem-solving toolkit.

Career Implications

The undergraduate degree in economics is excellent preparation for graduate study in economics and most other academic disciplines, as well as law and business. A degree in economics opens a wide range of career choices including teaching, government service, finance, banking and insurance. It is excellent preparation for a career in business, public administration and management.

Advising System

Students in the program should see the Economics website for more information about undergraduate advising.

Honor Society

The Zeta chapter of the Omicron Delta Epsilon International Honor Society in Economics is on campus. Information on this organization can be obtained from the Department Chair. The society is open to all undergraduate students with at least 12 hours of economics and a 3.0 GPA in economics and related courses. Graduate students in economics with a 3.0 GPA also may join.

Special Awards and Scholarships

The Joe E. Brown Institutional Economics Award is given each year to an undergraduate or graduate student for outstanding academic performance in the study of institutional theory. The department also offers the Hodges Scholarships for Economics, James Crew Scholarship, Gene Wagner Honorary Scholarship, and the Karen Vorst Scholarship for undergraduates.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
	Writing Intensive Course (300-level or above)	3
	Foreign Language (3rd Semester Level)	9
	Laboratory Science Experience	1
Total Credits		13

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

This program requires a minimum of 36 hours of courses in the department. A minimum 2.0 GPA in the major is required for graduation.

Code	Title	Credits
Major Prerequisites		
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
STAT 235	Elementary Statistics	3
Major Requirements		
ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
ECON 301	Macroeconomic Analysis	3
ECON 302	Microeconomic Analysis	3
ECON 425	Intermediate Economic Statistics	3
ECON 451	Institutional Economic Theory	3
Major Electives (choose from the following)		18
Any 300 or 400-level ECON course not included in Major Requirements is a major elective. 5500-level courses may be taken as a B.A. major elective with permission of department.		
ECON 340	Collective Bargaining	
ECON 402	Labor and the Global Political Economy	
ECON 404RR	American Labor History	
ECON 412	International Trade And Development	
ECON 416	Law And Economics	
ECON 421	Mathematical Economics	
ECON 427	Labor Economics	
ECON 460	Industrial Organization	
ECON 475	Economics Institutions and Policies	
Total Credits		42

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		35

Minimum GPA: 2.0

Total Credit Hours: 120

Teacher Certification in Social Studies

Student Learning Outcomes

Upon graduating with a Teacher Certification in Social Studies:

- Students will be able to distinguish the attributes of a variety of economic theories and policies.
- Students will be able to use their economic knowledge to examine a wide variety of problems that are economic, social and/or political in nature, on both the micro and macro levels.
- Students will have knowledge of statistical methods that will become part of their problem-solving toolset.
- Students will become proficient writers through assignments in regular classes, as well as intensive-writing experiences in the capstone course.
- All students will have undertaken a research project in conjunction with a local community development corporation as part of an academic service learning assignment. In fact, there will be many opportunities to be actively engaged with the Kansas City community through our community service requirement in various courses.
- Students will be better problem solvers and better-informed citizens.

Certification as a middle school (grades 5-9) or secondary (grades 9-12) social studies teacher in either Kansas or Missouri requires that a student complete specific requirements in History, Political Science, Economics, Geography, Behavioral Sciences and the School of Education. A separate application for teacher education is required. For further information about the program, consult the School of Education (p. 1430) section of this catalog or contact the Education Student Services Office at (816) 235-2234.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ECON 201 or 202 ^{CC}		3 ECON 201 or 202 ^{CC}	3
GEFSE 101		3 ENGLISH 225	3

ENGLISH 110	3	COMM-ST 110 or 277	3
MATH 110 or STAT 235 ^{CC}	3	GECRT-SC 101	3
GECRT-SS 101	3	Foreign Language Requirement (110 or higher)	3
	15		15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ECON 301 or 302 ^{CC}		3 ECON 302 or 301 ^{CC}	3
STAT 235 (or General Elective)		3 ECON 3XX/4XX Major Elective	3
GECRT-AH 101		3 GECDV 201	3
GECUE 201		3 Foreign Language course (211)	3
Foreign Language course (120 or higher)		3 General Elective	3
	15		15

Third Year

Fall Semester	Credits	Spring Semester	Credits
ECON 425		3 ECON 451	3
ECON 3XX/4XX Major Elective		3 ECON 3XX/4XX Major Elective	3
HISTORY 101, 102, or POL-SCI 210		3 Lab Science ^{LO}	1
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		General Elective	3
	15		16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
ECON 406WI (or ECON 3XX/4XX Major Elective)		3 ECON 3XX/4XX Major Elective	3
ECON 3XX/4XX Major Elective		3 3XX/4XX General Elective (WI course if not yet completed)	3
3XX/4XX General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	2
	15		14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.

- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Economics

Discipline Coordinator

Scott Fullwiler, (816) 235-5700, scottf@umkc.edu

Economics is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in [Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission](#) and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

In addition to the general criteria for admission, the criteria for admission to the Interdisciplinary Ph.D. program in Economics are:

1. A score of at least 154 in verbal reasoning, a score of at least 154 in quantitative reasoning and at least a 4.0 on the analytical portions of the general Graduate Record Examination.
2. A grade-point average of at least 3.0 (on a 4.0 scale) covering all college work taken prior to the bachelor's degree, or a grade-point average of at least 3.0 (on a 4.0 scale) covering all post-baccalaureate work completed to date.
3. Recommendations for provisional or full admission by the doctoral faculty review group in at least two participating disciplines.
4. Applicants for whom English is not the native language and have studied less than two years (full time) in a U.S. academic program or a comparable program in an English-speaking country are required to obtain a TOEFL score of at least 550 on the paper-based test or 213 on the computer-based test. In addition, to qualify for **full admission** status, international students must achieve a score of at least 4.0 on the Test of Written English (TWE) portion of the TOEFL examination. Students admitted provisionally because of the TWE requirement may take a TWE equivalency test through UMKC's Applied Language Institute once they arrive on campus.
5. Applicants must have at least 18 undergraduate semester credit hours in economics, including intermediate microeconomics and macroeconomics and a course in elementary statistics. In addition, it is strongly recommended that applicants have some of the following courses: econometrics, mathematical economics, history of economic thought, heterodox economics, economic history, calculus and linear algebra. Students with fewer than 18 credit hours will be admitted only on a provisional status.
6. Applicants matriculated into the M.A. Economics program at UMKC may apply for admission to the Interdisciplinary Ph.D. program in Economics as soon as they have completed 15 credit hours and have earned a grade-point average of 3.25 or better.
7. Applicants who wish to transfer to the UMKC Interdisciplinary Ph.D. program in Economics from other institutions must have obtained a grade-point average of at least 3.0 covering all their graduate work. Transfer students must apply for transfer credits toward the Interdisciplinary Ph.D. as soon as possible after completion of a minimum of 12 credits at UMKC with a grade-point average of 3.0 or better. Up to 30 transfer credit hours may be granted. No transfer credit will be granted for any courses not relevant to the Interdisciplinary Ph.D. in Economics or for any course with a GPA of less than 3.0.

The deadline for receipt of completed applications and supporting documentation is Feb. 1 for the fall semester and Sept. 1 for the spring semester.

Alternate Admission Criteria

Applicants who do not fit the above criteria may petition the Economics doctoral committee with evidence of scholarly publication, research and recommendations, but the decision rests with the committee.

Qualifying Requirements for Full Admission

At the time admission is offered, provisional students will be notified of any course deficiencies or qualifying requirements to be met for full admission. The faculty will make a decision with regard to full admission based upon the student's performance in meeting the qualifying requirements.

Suggested Compatible Co-disciplines

Curriculum and Instruction (p. 1568), Educational Leadership Policy and Foundations (p. 1572), History (p. 1584), Public Affairs and Administration (p. 1605), Social Science Consortium (p. 1607)

Core Program Requirements

For Students with Economics as a Primary Discipline

The Interdisciplinary Ph.D. in Economics consists of a minimum of 18 required coursework credit hours in Economics—including:

Code	Title	Credits
ECON 5506	Advanced History Of Economic Thought	3
ECON 5551	Advanced Institutional Theory	3
ECON 5601	Colloquium In Advanced Macroeconomics	3
ECON 5602	Colloquium In Advanced Microeconomics	3
ECON 5625	Colloquium In Econometrics	3
ECON 5688	Colloquium On Political Economy	3
Total Credits		18

If the student has not taken the prerequisites to ECON 5601, ECON 5602 and ECON 5625, he/she will be required to take ECON 5501, ECON 5502, ECON 5521, and ECON 5525 --an additional 12 coursework credit hours (or, a total of 30 hours). All students are strongly urged to take two fields in Economics, each consisting of two three-credit hour courses for a total of 12 additional coursework credit hours. These courses will be taken in Economics and at least one additional field such as sociology, history, public administration, education, mathematics, political science, geosciences, computer science or others, provided that such fields participate in the doctoral program.

Code	Title	Credits
Required Courses		
ECON 5501	Advanced Macroeconomic Analysis	3
ECON 5502	Advanced Microeconomic Analysis	3
ECON 5506	Advanced History Of Economic Thought	3
ECON 5521	Mathematical Economics (Calculus I strongly recommended)	3
ECON 5525	Econometric Methods	3
ECON 5551	Advanced Institutional Theory	3
ECON 5601	Colloquium In Advanced Macroeconomics	3
ECON 5602	Colloquium In Advanced Microeconomics	3
ECON 5625	Colloquium In Econometrics	3
ECON 5688	Colloquium On Political Economy	3
Additional Requirements		
Coursework in an outside field or fields, depending upon the requirements of co-discipline regulations		
Dissertation and oral examination		12
Total Credits		42

For Students with Economics as a Co-discipline

Those students taking Economics as a co-discipline will take a minimum of 12 hours in Economics, at the graduate level, including:

Code	Title	Credits
ECON 5501	Advanced Macroeconomic Analysis	3
ECON 5502	Advanced Microeconomic Analysis	3

Comprehensive Examination Guidelines

Primary discipline students are required to pass a qualifying examination in Economics theory--micro, macro and political economy, and in quantitative methods. Students taking field concentrations must pass a Comprehensive Examination in those fields, or meet the requirement by an alternative means that is accepted by the department.

Co-discipline students must receive grades of "B" or better in ECON 5501 and ECON 5502. In addition, the oral portion of the Comprehensive Examination will require students to integrate knowledge between topics in Economics and the student's coordinating unit.

Master of Arts: Economics

Student Learning Outcomes

Students graduating from this program will:

- Have an advanced knowledge of the fundamental areas of the field.
- Be able to integrate their knowledge with critical thinking skills.
- Be able to articulate their knowledge, both orally and in writing.
- Be able to effectively research the literature of this field.

Career Implications

The master of arts in economics is designed as a preparation for further graduate training at the doctoral level and for professional positions in industry, business, government, teaching and research. Courses may be taken in areas other than economics with the approval of the M.A. advisor.

Advising System

Students should consult with the M.A. advisor, Sirisha Naidu, snaidu@umkc.edu, 816-235-5715 to plan their graduate program of study.

Admission Requirements

Students may be admitted for graduate study in economics if they have a baccalaureate degree in economics from an accredited college or university with an overall grade-point average of at least 2.5 on the 4.0 scale (or the equivalent). Applicants whose undergraduate GPA is less than 2.5 may be considered for admission upon petition to the Graduate Admission Committee of the Department of Economics.

Students who have a baccalaureate degree with an overall undergraduate GPA of 2.5 or better and who did not major in economics may be admitted to the program upon consultation with the department's M.A. advisor and on demonstrating proficiency in the following areas:

- Intermediate Macroeconomic Analysis
- Intermediate Microeconomic Analysis
- Introductory Statistics

All students with less than a 2.5 (4.0 scale) GPA prior to admission shall be required to take the general Graduate Record Examinations (GRE).

International students who have studied less than two years (full time) in a U.S. academic program or a comparable program in an English-speaking country are required to have TOEFL score of 550 or above or 213 on the computer-based test or 79 on the internet test; or obtain a IELTS score of 6.0 or more.

Degree Requirements

Thirty hours of graduate work are required for the M.A. in economics. The following required courses (15 hours) and their prerequisites are listed:

Code	Title	Credits
ECON 5501	Advanced Macroeconomic Analysis	3
ECON 5502	Advanced Microeconomic Analysis	3
ECON 5521	Mathematical Economics ^{1,2}	3
ECON 5525	Econometric Methods ³	3
ECON 5551	Advanced Institutional Theory ⁴	3
Additional hours of coursework ⁵		15
Total Credits		30

¹ A course in Calculus is strongly recommended as a prerequisite for ECON 5521. MATH 206 at UMKC, or an equivalent course elsewhere, recommended.

² For students not entering in the fall semester, it is strongly recommended that ECON 5521 be taken at the first opportunity.

³ ECON 425 or an equivalent undergraduate course in econometrics.

⁴ ECON 451 or an alternative course approved by the instructor of ECON 5551.

⁵ An additional 15 hours of coursework must be completed. Up to nine of these hours may be in selected 400-level courses in economics or graduate courses in closely related disciplines, upon consultation with the graduate adviser. Graduate credit toward the M.A. in economics is not given for courses at the 300 level. No more than 6 hours of ECON 5590, may be counted toward graduation, and no Special Topics courses in other related disciplines are permitted to count towards the requirements of the M.A. degree.

Substitutions for the above prerequisites may be approved by the M.A. advisor.

The prerequisites for graduate courses are very important and must be completed prior to enrollment in courses with prerequisites. Graduate students in economics must also comply with the general graduate academic regulations as found in the School of Graduate Academic Regulations and Information (<https://catalog.umkc.edu/general-graduate-academic-regulations-information/general-graduate-academic-regulations/>) section of this catalog.

Requirements for Retention

Students are expected to maintain a high degree of academic excellence. Students must maintain a minimum 3.0 graduate grade-point average. A student who receives a grade of C+ or lower will receive an academic warning. Students who receive a grade of C or C- in two classes, or a grade of D + or lower in one class, will be dropped from the program. A 3.0 (B) must be earned in all undergraduate courses approved for graduate credit and in ECON 5590 and ECON 5599.

A student is required to fill out a "program of study" with the M.A. advisor before the completion of 15 hours of coursework. At that time, the graduate committee will consider the student's performance and make a recommendation with regard to retention of the student. After being approved by the College of Arts and Sciences graduate officer, the program of study is filed with the UMKC Records Office and may be amended upon consultation with the M.A. advisor.

Requirements for Graduation

Elective Courses Option

Students are required to complete 15 hours beyond the required courses. Of these, 6 hours must be at the 5500 level. Economics 5591 and 5599 cannot be counted towards graduation requirements.

Project Option

Students are required to complete 15 hours beyond the required courses. Of these, 6 hours must be at the 5500-level or above. Students complete a supervised applied research project that counts as part of the 15 hours beyond the required courses. The number of hours for the project depends on its scope and is determined by the student and his/her project advisor. For more information about the project, see the M.A. Advisor. Depending on the scope of the project, students are required to take 3 to 6 hours from among the following courses:

Code	Title	Credits
ECON 5591	Research And Planning Seminar (required)	3
ECON 5599	Research And Thesis ¹	1-6

¹ ECON 5591 prerequisite.

Minor in Economics

Student Learning Outcomes

Students graduating from this program will:

- Students will be able to distinguish the attributes of a variety of economic theories and policies.
- Students will be able to use their economic knowledge to examine a wide variety of problems that are economic, social and/or political in nature, on both the micro and macro levels.
- Students will become proficient writers through assignments in regular classes, as well as intensive-writing experiences in the capstone course.
- Students will be better problem solvers and better-informed citizens.

Program Requirements

The minor in economics is open to all students and consists of a minimum of 18 hours (six courses) in economics.

The courses are:

Code	Title	Credits
ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
ECON Upper Level Electives		12
ECON 301	Macroeconomic Analysis	
ECON 302	Microeconomic Analysis	
ECON 314	Political Economy of Race, Class And Gender: Theory, History, And Policy	
ECON 331	Money And Banking	

ECON 336	The Kansas City Economy
ECON 340	Collective Bargaining
ECON 353	Financial Analysis And The Economy
ECON 402	Labor and the Global Political Economy
ECON 404RR	American Labor History
ECON 406WI	History Of Economic Thought
ECON 411	Geographic Information Systems (GIS) for Urban Economic Development
ECON 412	International Trade And Development
ECON 416	Law And Economics
ECON 420	Environment, Resources And Economic Growth
ECON 421	Mathematical Economics
ECON 425	Intermediate Economic Statistics
ECON 427	Labor Economics
ECON 431	Monetary Theory And Policy
ECON 435	Public Finance
ECON 438	Economic Policy
ECON 442	International Finance
ECON 451	Institutional Economic Theory
ECON 458	Urban Economics
ECON 460	Industrial Organization
ECON 475	Economics Institutions and Policies
ECON 488	Radical Political Economy
ECON 496	Practicum in Urban Economic Development

Total Credits

18

Students must maintain a 2.0 GPA within the minor coursework to be awarded the minor in Economics.

Department of English Language and Literature

Cockefair Hall, Room 106

5121 Rockhill Road

(816) 235-1305 or (816) 235-1307

Fax: (816) 235-1308

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Mailing Address

University of Missouri-Kansas City

Department of English Language and Literature

Cockefair Hall 106

5121 Rockhill Road

Kansas City, MO 64110-2499

Chair: Jennifer Phegley

Associate Chair: Laurie Ellinghausen

Professors:

Hadara Bar-Nadav, Virginia Blanton, Stephen Dilks, Laurie Ellinghausen, Jane Greer, Christie Hodgen, James McKusick, Jennifer Phegley, Jeffrey Rydberg-Cox

Associate Professors:

John Barton, Jennifer Frangos, Michael Pritchett, Anthony Shiu, Whitney Terrell

Assistant Professors:

Antonio Byrd

Associate Teaching Professors:

Crystal Gorham Doss

Associate Research Professors:

Robert Stewart

Full-time Lecturers:

Sheila Honig, Cynthia Jones

Professors Emeriti:

Joan Dean, Robert M. Farnsworth, Moira Ferguson, Daniel F. Jaffe, James McKinley, David Ray, Lois Spatz, Thomas Stroik, Linda Voigts, David Weinglass, Robert Willson

Associate Professors Emeriti:

Ralph Berets, Daniel Mahala, James A. Reeds, Jonas Spatz, Jacqueline Wood

Department Description

The Department of English Language and Literature offers programs of study that lead to the Bachelor of Arts, the Master of Arts, the Master of Fine Arts, and the Interdisciplinary Doctor of Philosophy degrees. In the undergraduate program, students may pursue a general English program, or they may select an emphasis in American Literary and Cultural Studies; Classical, Medieval and Early Modern Literature; Language and Rhetoric; or Creative Writing. Four minors in English are offered: Creative Writing, Language and Literature; Manuscript, Print Culture, Editing; and Writing. Master's in English students may focus their studies on Literature, or may select from two emphases: Language and Literature or Manuscript, Print Culture, and Editing. The M.F.A. in Creative Writing and Media Arts is an interdisciplinary program leading to a terminal degree. English is an academic discipline eligible for full participation in the University's Interdisciplinary Ph.D. program.

The Department of English includes faculty who have a broad range of professional competence in the study of literature and language, and who are trained to teach courses in British and American literature, linguistics, American culture, film, creative writing, and composition. The department believes the study and teaching of literature and language to be an important means of preserving and vitalizing our humanistic tradition.

Publications

The Department of English and the College of Arts and Sciences publish *New Letters*, a continuation of *The University Review*, which for over 50 years published the works of new and distinguished writers. *New Letters* continues to provide a medium for the best imaginative writing available.

The Department of English sponsors the publication of *Number One*, a magazine of student poetry and fiction, and *The Sosland Journal*, a collection of award-winning student essays from the Ilus W. Davis contest.

BkMk Press, operated under the auspices of the College of Arts and Sciences and housed in the Department of English, publishes books of high-quality poetry and prose by professional writers.

Related Information, Opportunities, and Conferences

The Department of English sponsors undergraduate and graduate student conferences, a writers' reading series, summer creative writing workshops, and annual contests in creative and expository writing. The Department offers additional scholarships for creative writers and students in literature, including the Diversity in English Scholarship for undergraduates. Graduate students are also eligible for the Farnsworth Fellowship. Interdisciplinary Ph.D. students can apply for the Ilus Davis Doctoral Teaching Fellowship. The Department also offers courses and an annual conference for English teachers as part of its continuing education function. Four student groups provide social and literary activities for majors and interested others: English Graduate Student Association, Graduate Students in Creative Writing, and Sigma Tau Delta (the international English honor society).

Career Implications of the Undergraduate Degree

The English major is recommended for students interested in a broad, general background in the humanities and in the skills of analysis, synthesis, and self-expression. It is excellent preparation for medicine, business, and law, as well as for further literary study in graduate school.

In addition to careers in education, writing, and editing, English majors with writing and editorial skills find that they are desirable candidates for positions in businesses where effective communication and written evaluation are required.

Advising System

All undergraduate English majors are assigned to the Director of Undergraduate Studies.

Internships and Other Opportunities

Through the resources of the metropolitan media and publishing houses, as well as the on-campus facilities of the national literary journal *New Letters*, the literary publisher BkMk Press, and the academic journal, *Eighteenth Century Theory & Interpretation*, students may gain experience in writing and editing. With the approval of the supervising faculty, as well as the Director of Undergraduate Studies, students may intern with these media for credit. In addition, a number of other on- and off-campus internships are available for writers and editors.

Graduate Degrees

The Department of English offers three graduate programs: the Master of Arts: English; the Master of Fine Arts: Creative Writing and Media Arts; and the Interdisciplinary Ph.D.

Faculty

Hadara Bar-Nadav^{2,3}; professor of English; B.A. (William Paterson College); M.A. (Montclair State University); Ph.D. (University of Nebraska-Lincoln).

John C. Barton^{2,3}; associate professor of English; B.A. (University of California-Berkeley); M.A., Ph.D. (University of California-Irvine).

Ralph A. Berets associate professor emeritus of English; B.A., M.A., Ph.D. (University of Michigan).

Virginia Blanton^{2,3}; curators' distinguished professor of English; B.A. (Southwestern College); M.A., Ph.D. (Binghamton University).

Antonio Byrd^{2,3}; assistant professor of English; B.S. (Auburn University at Montgomery); M.L.A. (Auburn University at Montgomery); Ph.D. (University of Wisconsin-Madison).

Joan F. Dean^{2,3}; curators' distinguished teaching professor emerita of English; A.B. (Canisius College); M.A., Ph.D. (Purdue University).

Stephen Dilks^{2,3}; professor of English; B.A. (University of Stirling, Scotland); M.A., Ph.D. (Rutgers University).

Crystal Gorham Doss; associate teaching professor in English; B.A. (William Jewell College); M.A. (University of Kansas); Ph.D. (University at Buffalo).

Laurie Ellinghausen^{2,3}; professor of English; B.A. (University of Houston), M.A. (Ohio State University), Ph.D. (University of California-Santa Barbara).

Robert M. Farnsworth professor emeritus of English; B.A. (University of Michigan); M.S. (University of Connecticut); Ph.D. (Tulane University).

Maira Ferguson professor emerita of English; B.A. (University of London, Birkbeck College); M.A., Ph.D. (University of Washington, Seattle).

Jennifer Frangos^{2,3}; associate professor of English; B.A. (Vassar College); M.A. (State University of New York-Buffalo), Ph.D. (State University of New York-Stony Brook).

Jane Greer^{2,3}; curators' distinguished teaching professor of English; B.A. (Hanover College); M.A., Ph.D. (Ohio State University).

Christie Hodgen^{2,3}; professor of English; B.A. (University of Virginia, Charlottesville); M.F.A. (Indiana University, Bloomington), Ph.D. (University of Missouri, Columbia).

Sheila Honig; lecturer in English; B.A., M.A. (University of Missouri, Columbia).

Daniel Freeman Jaffe professor emeritus of English; B.A. (Rutgers University); M.A. (University of Michigan).

Cynthia Jones; lecturer in English & Classics; B.A., M.A., Ph.D. (University of Missouri-Kansas City).

Daniel Mahala^{2,3}; associate professor emeritus of English; B.A. (State University of New York at Binghamton); M.A. (New York University); D.A. (State University of New York at Albany).

James C. McKinley; professor emeritus of English; B.J., M.A., Ph.D. (University of Missouri, Columbia).

James McKusick^{2,3}; professor of English; B.A. (Dartmouth College); M.A. (Yale University); M.Phil. (Yale University); Ph.D. (Yale University).

Jennifer Phegley^{2,3}; professor of English; B.A. (Southwest Texas State University); M.A., Ph.D. (Ohio State University).

Michael Pritchett^{2,3}; associate professor of English; B.J. (University of Missouri, Columbia); M.F.A. (Warren Wilson College).

David Ray professor emeritus of English; B.A., M.A. (University of Chicago).

James A. Reeds associate professor emeritus of English and linguistics; B.A., M.A. (University of Iowa); A.M., Ph.D. (University of Michigan).

Jeffrey A. Rydberg-Cox^{2,3}; curators' distinguished professor of English and classics; B.A. (Colorado College); M.A., Ph.D. (University of Chicago).

Anthony Shiu^{2,3}; associate professor of English; B.A. (Ohio University); M.A. (University of Vermont), Ph.D. (Michigan State University).

Robert Stewart²; associate research professor of English and editor of New Letters; B.A. (University of Missouri-St. Louis), M.A. (University of Missouri-Kansas City).

Thomas Stroik^{2,3}; curators' distinguished professor emeritus of English; B.A., M.A., Ph.D. (University of Wisconsin-Madison).

Whitney Terrell^{2,3}; associate professor of English; B.A. (Princeton University); M.F.A. (University of Iowa).

Linda E. Voigts; curators' distinguished professor emerita of English; B.A. (William Jewell College); M.A. (University of Missouri-Kansas City); Ph.D. (University of Missouri, Columbia).

Robert F. Willson, Jr.; professor emeritus of English; B.A. (Wayne State University); M.A., Ph.D. (University of Wisconsin).

Jacqueline Wood; associate professor emerita of English & Black Studies; B.A. (Ohio Wesleyan University); M.A. (Florida Atlantic University); Ph.D. (University of Florida).

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

Undergraduate Bachelor of Arts: English

To major in English is to devote oneself to the study of culture, past and present; to books, their readers, writers, and publishers; to critical thinking and the interpretation of what it means to be human; to language and the communication of ideas in both written and spoken form. An education in English allows for a command of the written and spoken word. It is this command that allows those that have pursued a degree in English to find success in a variety of arenas through their ability to persuade and interpret, clarify ideas, think independently and creatively, and their overall commitment to the cultural repository that an English degree offers.

Students who choose to major in English Literature and Language develop their abilities to read and analyze texts written in the English language. They study British and American literature of the past and present and learn to view texts through a variety of interpretive lenses. English majors also develop their abilities as flexible, effective writers, capable of moving among a variety of genres, including creative and expository writing.

Within the 36-credit hour program, English majors take a core set of courses, including survey courses on the history of British and American literature, a course devoted to Shakespeare, and courses in linguistics and rhetoric. Beyond this core, students may choose to emphasize in the study of literature, rhetoric, creative writing, or classical, medieval, and early modern literature. In their final year, all students select from a menu of capstone options, including a senior thesis (recommended for students interested in graduate school), a seminar on teaching writing (recommended for students seeking certification to teach in secondary schools), or one of many upper-level seminars.

Students majoring in English may also consider a minor in another area of English studies, provided that there be no more than 9 credit hours of overlap between the major/emphasis and the minor

Undergraduate Admission Requirements Preparation

Transfer students should enter the English major with soundly developed writing and reading skills and a general familiarity with the major authors and literary movements of English and American literature. Transfer students should meet with the Director of Undergraduate Studies immediately upon admittance to discuss requirements and any possible transfer credits towards the major. With the approval of the Director of Undergraduate Studies, the Department accepts up to 18 hours of transfer credits in English for courses fulfilling major requirements.

Undergraduate Programs

Bachelor of Arts: English (p. 746)

Bachelor of Arts: English American Literary and Cultural Studies Emphasis (p. 751)

Bachelor of Arts: English Creative Writing Emphasis (p. 761)

Bachelor of Arts: English Classical, Medieval, & Early Modern Literature Emphasis (p. 756)

Bachelor of Arts: English Language and Rhetoric Emphasis (p. 766)

Teacher Certification in English (p. 795)

Minor in Creative Writing (p. 791)

Minor in Language and Literature (p. 792)

Minor in Manuscript, Print Culture, and Editing (p. 794)

Minor in Writing (p. 795)

Graduate

Graduate Degrees:

- Master of Arts: English (p. 773)
- Master of Fine Arts: Creative Writing and Media Arts (p. 777)
- Interdisciplinary Ph.D. in English (p. 773)

Assistantships

The Department of English offers a limited number of Graduate Teaching Assistantships on a competitive basis. Applications for Graduate Teaching Assistantships are considered in January for the following fall semester. All Graduate Teaching Assistants are expected to enroll in at least six hours per semester. Graduate Teaching Assistantships may be awarded to students who demonstrate readiness to become teachers in first- and second-year writing courses. Graduate Teaching Assistants must undergo a pre-semester orientation and attend mentoring meetings twice monthly with the Director of Composition and fellow graduate teachers. First-semester GTAs are also required to complete successfully ENGLISH 5519.

Courses

ENGLISH 100T TOEFL Preparation Credits: 1-3

This course will prepare students to take the TOEFL (Test of English as a Foreign Language), in either the paper-based (PBT) or internet-based (iBT) form, and/or to improve their scores from previous attempts. Exercises focus on developing the skills and strategies necessary for navigating TOEFL questions while continuing to develop the general English language skills that support success on the TOEFL. The course will provide students with a personal awareness of strengths and weaknesses so they may focus their test preparation work in and outside of class. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 110 English I: Introduction To Academic Prose Credits: 3

This course introduces students to college-level reading, writing, and discourse analysis: it engages students in the analysis and creation of texts that reveal multiple perspectives about specific rhetorical situations and cultural issues. In addition to learning how to revise by analyzing their own writing, students will learn to edit their own work and use proper academic documentation.

ENGLISH 110 - MOTR ENGL 100: Composition I



ENGLISH 119 Myth and Literature Credits: 3

A study of classical myth including readings from Homer to Ovid, analysis of selected myths in later literature, art, and music, and a study of contemporary definitions and approaches to myth.

ENGLISH 120 Literary Monstrosities Credits: 3

This course explores representations of monsters in literature. Students are introduced to different ways of thinking about monstrosities from a range of cultural and historical perspectives, as well as through a variety of materials in order to approach this question from an interdisciplinary perspective.

ENGLISH 123 True Lives: Autobiographical Arts and Acts Credits: 3

This course explores life writing and other autobiographical practices. Students will read and analyze a variety of life writing forms and think critically about life writing in various cultural, historical, and social contexts. They will also examine autobiography as a form of self-expression, as an articulation of personal and social values, as a public art, and as a way to study human experience in different contexts. Genres may include memoir, autobiography, diaries, etc., at the discretion of the instructor.

ENGLISH 124 Writing About Literature Credits: 3

This course is designed to be taken either prior to or concurrent with a student's first literature course. It introduces students to literary criticism in its broadest, most generic sense, as a stylized response to reading. Students in the course will be introduced to different approaches to writing about literature, to methods of generating ideas, and focusing and developing a topic.

ENGLISH 126 Popular Literature Credits: 3

This course is designed to help students develop a fuller understanding of the human condition by exploring a range of accessible, bestselling fiction and non-fiction from a variety of periods and places, historic and contemporary. The course may include popular stories, songs and ballads, the scripts of blockbuster plays and films, best-selling novels, and widely distributed nonfictional prose.

ENGLISH 126 - MOTR LITR 100: Introduction to Literature



ENGLISH 141 Women and Literary Culture/The Heroine in Literature Credits: 3

This course explores the role of the heroine in literature. Students will examine how the heroine is crafted by a variety of writers and think critically about the role of the heroine in various cultural, historical, and social contexts. Genres may include science fiction/fantasy, mystery, romance, etc. at the discretion of the instructor.

ENGLISH 200 Introduction To Undergraduate Study In English Credits: 3

An investigation of reading, writing, and research practices associated with studies in English. Students will learn about multiple forms, genres, and critical approaches, as well as encounter texts from various historical periods and places.

ENGLISH 200 - MOTR LITR 100: Introduction to Literature

**ENGLISH 203 Introduction to Journalism Credits: 3**

Introduction to the styles and techniques of reporting and writing basic news through assignments in straight news, features and in-depth stories. Exposure to the history and principles of American journalism. Practical application in writing news and news feature articles.

ENGLISH 207 World Literature in English Credits: 3

This course helps students develop a fuller understanding of the human condition by exploring accessible literary texts in English by non Euro-American writers. The course provides historical, economic and political contexts and is designed for students who enjoy learning about global cultures by reading and discussing a diverse range of bestselling literature.

ENGLISH 207 - MOTR LITR 200: World Literature

**ENGLISH 213 Introduction To Drama Credits: 2-3**

Beginning with an intensive study of a few plays analyzed to elicit general principles, the course moves on to consider several representative examples of each of the major periods and types of Western drama, from the Greeks to the present.

ENGLISH 213 - MOTR LITR 100D: Introduction to Literature-Drama

**ENGLISH 214 Introduction To Fiction Credits: 3**

Students will be introduced to the study of fiction as a literary art form. Students will continue to develop their understanding of fiction-writing in preparation for more advanced courses in literature and creative writing. Coursework will focus on close reading of short and long forms of fiction selected from a range of literary periods and world literature. Students are expected to interpret and analyze various forms of fiction and write critically about the role of fiction as a form of cultural discourse.

ENGLISH 214 - MOTR LITR 100F: Introduction to Literature-Fiction

**ENGLISH 215 Introduction To Poetry Credits: 3**

An introduction to the study of poetry for students desiring a basic course either to develop a greater appreciation of poetry or to prepare for more advanced courses in literature or creative writing. Class discussions will focus on close readings of poems and analysis of poetic techniques. Writing assignments will complement reading and class discussion and will enable students to develop their own critical and creative skills.

ENGLISH 215 - MOTR LITR 100P: Introduction to Literature-Poetry

**ENGLISH 216 The Craft of Creative Writing Credits: 3**

This course introduces students to the key techniques that writers of imaginative literature use. Students will develop skills at writing and reading in multiple genres.

ENGLISH 225 English II: Intermediate Academic Prose Credits: 3

This course extends the work of ENGLISH 110 with an additional emphasis on research. Each section of ENGLISH 225 uses a combination of book-length and shorter texts on focus on specific historical and/or cultural issues. As they learn to participate in scholarly conversations, students will find and evaluate library and internet sources. As with ENGLISH 110, this course emphasizes revision, editing, and proper academic documentation.

Prerequisites: ENGLISH 110 or DISC 100 or ACT sub-score of 30 or SAT writing sub-score of 690.

ENGLISH 225 - MOTR ENGL 200: Composition II



ENGLISH 242 Women Writing/Women Reading Credits: 3

This course investigates women as producers and consumers of literature. Students will become acquainted with diverse women writers, explore women's reading practices, and interrogate the cultural, historical, and social contexts that influence women's writing and reading.

ENGLISH 242 - MOTR LITR 106: Women's Literature

**ENGLISH 250 Introduction to Language Acquisition and Diversity Credits: 3**

Investigation of the basic principles of first and second language acquisition. Topics addressed include language competency, socio-cultural factors in language, dialects, acquisitional principles, and language diversity. Students will take part in monitored classroom observations in public schools, and will critically analyze how the topics addressed in class apply to real life and to teaching situations.

ENGLISH 270 Writing Tutor Training Seminar Credits: 3

This course covers the basics of serving as a tutor for writers. Students acquire hands-on experience in consulting with writers at all stages of the writing process, including invention work, drafting, revising, documenting, and editing. Students will also become conversant in theories of peer tutoring and research on Writing Centers.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 273 Science Fiction Credits: 3

This course focuses on a range of science fiction texts from a variety of periods and traditions. Students will examine the relationship between different types of science fiction from various periods and the related social, economic, and political contexts.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 278 Asian American Literature Credits: 3

This course examines literary and cultural texts produced by Asian Americans from the nineteenth century to the present. Texts will be drawn from a variety of genres and from several Asian American groups in order to examine how Asian American literature engages, challenges, revises, and reinvents American literary traditions. The course will identify and explore specific cultural and political issues that have shaped the writings, including trans-nationalism, immigration, racial identity, group identity, and community. Authors may include Carlos Bulosan, Maxine Hong Kingston, John Okada, Bienvenido Santos, and Hisaye Yamamoto.

ENGLISH 278 - MOTR LITR 105AS: Multiculture Literature

**ENGLISH 300CB Women in the Ancient World Credits: 3**

This course focuses on the history, representation, literature, social lives, and political roles of women in ancient civilization including Egypt, Mesopotamia, the Biblical World, Greece, and Rome. It integrates methodologies from history, art history and archaeology, literary studies, and women's studies.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 300CD American Social Film: Silver Screen & American Dream Credits: 3

This course will combine American social history and film history in the sound era. Using Hollywood entertainment films, the course will look at Hollywood as an indicator of social, political and economic conditions in the United States since the 1930s. The main topics are representations of the American dream and nightmare, poverty and affluence, success and failure.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 300CE Radical Changes Since 1945 Credits: 3

This course will focus on modernism, post-modernism and expressionism in the visual arts and literature since World War II. Common lectures will address intellectual movements—such as existentialism and formalism—and cultural development—such as the increased impact of technology and mass media—in contemporary society. By focusing on these movements, the cluster course hopes to provide an integrated view of the literature and visual arts of the period and to draw upon analogous developments in contemporary architecture, music, philosophy and film.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 300CW Critical Issues in Women's & Gender Studies Credits: 3

This class is an interdisciplinary upper-level course that will examine critical issues in women's and gender studies by focusing on the intersections of gender, race, class, sexuality, and social context. Through their study of these intersections, students will be more sensitive to the impact of social structures on gender and the experiences of women and men.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 300CX Empire Credits: 3

This is an interdisciplinary, team-taught course designed to teach students ways to think about the complexities of human cultures, past and present, helping them examine how imperialism continues to shape contemporary understandings of personal, institutional, and cultural identities (both of selves and others). The course engages students in the analysis of global cultures with a focus on the economic, environmental, political and social consequences of specific imperial regimes and the ongoing impact of these regimes on particular groups that continue to live with the legacies of empire.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 300CY Ancient World in Cinema Credits: 3

This course will explore the tradition of depicting the ancient Mediterranean world in film from the early silent era to the present. Topics to be covered include the ways that filmmakers respond to literary and historical sources from the ancient world, interact with the artistic tradition of films about the ancient world, the relation of these films to other works by the same creative personnel (directors, actors, writers, producers, etc.), and the political and cultural contexts in which the films were released.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 300F SS:Academic English/International Grad Teaching Assistants Credits: 3

The study and practice of standard spoken English combined with the study and practice of classroom teaching techniques. Exercises focusing on improvement of pronunciation, and formal (classroom presentation) and informal (conversation) English speaking are combined with techniques for lecture organization, strategies for clear content presentation, and with analysis of the American post-secondary educational culture. This course is designed for prospective International Graduate Teaching Assistants who need to improve their English communication skills and obtain an understanding of American educational culture.

ENGLISH 301WI Writing And The Academy Credits: 3

This course examines social and ethical issues raised by academic reading and writing. While some attention is paid to the formal aspects of academic prose within specific disciplines, the main emphasis of the course is on the cultural consequences of the different ways that academic knowledge is created and taught. In addition to studying the language and structure of academic reading and writing, the course explores the various rhetorics of the academy in terms of a broad range of subjects including economics, gender, education, history, and myth. This course satisfies the junior-level writing requirement and counts towards the writing minor.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 304WI Workplace Writing Credits: 3

This writing intensive course focuses on the rhetorical principles of workplace communication, providing students with opportunities to analyze complex rhetorical situations, to study various workplace genres, and to compose texts that meet the needs of diverse stakeholders.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 305WI Theory And Practice Of Composition Credits: 3

A course in expository writing that will include reading on composition theory and the nature of literacy. Frequent short essays and a long paper.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 306WI Advanced Composition Credits: 3

Further study of writing for those who wish to continue the study beyond the two semesters of composition. Emphasis will be placed on translating critical thinking into effective writing. Required of business and public administration majors.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 307WI Language, Literacy, Power Credits: 3

This course uses discourse analysis to investigate language and literacy. Students will explore how the discourses of institutional and cultural identities act as instruments of power and legitimacy.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 308 Rhetorics of New Media Credits: 3

This course will focus on the rhetorical study of new media texts (such as hypertext, networked multimedia, multimedia art and performance, virtual spaces, and so on) and theories of new media. The course will consider the rhetorical possibilities and constraints of new media and critically examine their impact on democratic discourse and literacy in the public sphere. Specialized knowledge of multimedia equipment and software is neither expected nor required.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 309WI Rhetorics of Public Memory Credits: 3

This course explores how museums and other cultural institutions function as rhetorical agents in creating and preserving public memory. Students will explore how processes of collection, arrangement, and visual display operate as modes of persuasion and make arguments about civic identities and community values.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 310 Introduction To Linguistics/Language Science Credits: 3

This course is a comprehensive introduction to the theory, methodology, and applications of the science of language. It examines properties of human language, covers all branches of language science, and provides a foundation for a critical understanding of language issues.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 311 American Literature I Credits: 3

A survey of American literature and culture from its beginnings to 1865. This course will cover a range of authors, several genres, and culture forms, which may include fiction, poetry, drama, autobiography, oral, contact and/or slave narratives, folklore, and songs.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 311 - MOTR LITR 101A: American Literature-Pre-Civil War**ENGLISH 312 Creative Writing I Fiction Credits: 3**

A course centered on the short story. Emphasis is placed on three areas: general principles governing the writing of fiction; practice in short fiction (primarily the short story, but including the novella); criticism; and technical skills (including editing and rewriting).

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 313WI Reporting Credits: 3

A seminar of practical application in advanced reporting. Assignments to cover news events and to pursue in-depth news reports on the campus and off.

Prerequisites: COMM-ST 203 or ENGLISH 203.

ENGLISH 315 Creative Writing Poetry Credits: 3

Writing and rewriting poems, with discussion of techniques needed to produce desired effects. Analysis and evaluation of student work. Examination of technical means utilized in selected poems by accomplished poets.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 316 Literary Nonfiction Credits: 3

Literary Nonfiction studies the reading and writing of nonfiction prose as a literary art. We'll survey the historical development of literary nonfiction (especially the essay), sample contemporary authors of the genre, write critical commentary on works we read, and compose personal essays of our own. The course is not exclusively a literary seminar nor a creative writing workshop, but seeks to mix and make connections between these modes, in the tradition of the essay itself.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 316WI Literary Nonfiction Credits: 3

Literary Nonfiction is a writing intensive course in the reading and writing of nonfiction prose as a literary art. We'll survey the historical development of literary nonfiction (especially the essay), sample contemporary authors of the genre, write critical commentary on works we read, and compose personal essays of our own. The course is not exclusively a literary seminar nor a creative writing workshop, but seeks to mix and make connections between these modes, in the tradition of the essay itself.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 317 British Literature I Credits: 3

A survey of British Literature and culture from its beginnings to the 18th century, including works by Chaucer and Milton.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 317 - MOTR LITR 102A: British Lit-Beg to 18th Cent.**ENGLISH 318 Bible As Literature Credits: 3**

A critical study of the major portions of the Old and New Testaments and the Apocrypha, with special attention to the development of literature from oral tradition, the literary genres, themes and archetypes represented in the collection, and the diction and style which have influenced later literature. Consideration also of the relation of Biblical literature to the historical, religious, and cultural milieu of the ancient Near East.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 320 Structure Of English Credits: 3

Not a remedial grammar course. Methods of linguistic inquiry and grammatical description. Study of traditional and modern schools of syntax, especially transformational grammar. Practice describing the structure of sentences. Application to the teaching of grammar in high schools.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 321 American Literature II Credits: 3

A survey of American literature and culture from 1865 to the present. This course will cover a range of authors, several genres, and culture forms, which may include fiction, poetry, drama, autobiography, essay, lyrics, and film.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 321 - MOTR LITR 101B: American Literature-Post-Civil War**ENGLISH 323 Shakespeare Credits: 3**

An intensive critical study of William Shakespeare's writings in various contexts (historical, social, political, literary, contemporary, for example). Readings will encompass at least eight plays and will include at least one comedy, history, tragedy, and romance. Required of all English majors.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 325 Arthurian Legends Credits: 3

Focusing on writers such as Marie de France, Chretien de Troyes, Sir Thomas Malory, Alfred, Lord Tennyson, Sara Teasdale, Bernard Malamud, and Marion Zimmer Bradley, this course examines the legend of King Arthur and his Round Table as a recurring myth, repeatedly manifested in time through literature, art, history, music, and film.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 326 Modern And Contemporary Irish Literature Credits: 3

This course examines a range of texts written by Irish-born writers from the end of the nineteenth century on. While it is likely the course will include texts by the most famous Irish writers, such as Yeats, Joyce, Beckett, O'Brien, Heaney, and Friel, course materials will vary from semester to semester and may focus on a specific genre, historical period, or area of interest.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 327 British Literature II Credits: 3

A survey of British Literature and culture from the late 18th century to the present. This course will cover a range of authors and genres, including at least one novel.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 327 - MOTR LITR 102B: British Lit-Late 18th Cent-Present**ENGLISH 330 History Of The English Language Credits: 3**

The study of English beginning with the Indo-European language family up to and including varieties of English spoken around the world today. Both outer history and the inner history of phonology, morphology, syntax, and lexicon will be addressed.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 331 African American Literature I Credits: 3

This course provides a survey of African American literature from its beginnings to the Harlem Renaissance of the 1920's and 1930's. Areas of interest will include abolitionist literature (especially Slave Narratives), turn-of-the-century literature and the Harlem Renaissance. This course will examine any or all of the following literary forms: fiction, poetry, drama, autobiography and essay. It will view African American literature in its historical and cultural contexts.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 331 - MOTR LITR 105AA: Multiculture Lit-African American**ENGLISH 332WI African American Novel Credits: 3**

This course will examine the African American Novel in the 19th and 20th centuries. The novels will be examined in their historical and cultural contexts.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 333 African American Literature II Credits: 3

A survey of African American literature from the end of the Harlem Renaissance to the present, covering a range of authors, texts, and contexts.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 336 Contemporary American Literature Credits: 3

This course focuses on contemporary American literature, concentrating on literary and cultural change. Topics, genres, and authors discussed will vary each semester.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 337 Introduction to American Literary and Cultural Studies Credits: 3

This course focuses on American literary and cultural production in an interdisciplinary manner. It explores how social, political, and economic conditions interact with the fields of art, film, history, and literature from colonial times to the present.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 339 Introduction to Screenwriting Credits: 3

An introduction to the form and language of the motion picture screenplays. Students create a blueprint for a movie and examine visual storytelling in-depth, including basic dramatic structure, scene and sequence construction and dialogue. Students will master the industry screenplay format, adapt a short story for the screen, and learn to receive feedback in small groups.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 342WI Women And Rhetoric Credits: 3

A study of the position of women within the traditions of western rhetoric. Students will examine the rhetorical practices of women as they pursue both public and private goals. Christine de Pizan, Sor Juana Ines de la Cruz, Hannah More, Maria Stewart, Frances Willard, Ida Wells-Barnett, Meridel Le Sueur, and Gloria Anzaldua are among the female rhetorians who may be studied in this course.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 344WI Women & Literary Culture: Genre Focus Credits: 3

A study of women writers that focuses on genre, i.e., texts that share a common set of conventions. The course will explore the conventions associated with a particular genre in various historical periods and consider the ways in which gender and genre intersect in shaping texts and their interpretation.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 345WI Women And Literary Culture: Historical Focus Credits: 3

A study of women's literary culture in a specific historical period either as broadly defined as Medieval or Renaissance or as narrowly defined as a decade or movement (e.g., 1960's, abolitionist movement). This course includes women writers across multiple boundaries (e.g., national, generic, racial, sexual, socio-economic). Content will change depending on the instructor.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 350 The 18th Century Novel Credits: 3

A detailed examination of the development of the novel in the 18th century. The course emphasizes the evolution of the novel from such predecessors as rogue literature, the picaresque story and the romance, due to changing social realities. The novelists studied may include Austen, Behn, Fielding, Godwin, Haywood, Richardson, Smollett, and Sterne.

Prerequisites: ENGLISH 110 or DISC

ENGLISH 351 Special Readings Credits: 1-3

Readings in a period, genre or theme to be selected by the instructor with attention to the needs of students who are interested in literary topics not covered in regular offerings. Proposals for a course in such readings require the approval of the department.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 351A Special Readings: Detective Fiction Credits: 3

This course will focus on a specific period, sub-genre, or theme related to Detective fiction.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 355 The Novel Before 1900 Credits: 3

Intensive attention to novels in English written before 1900, which may include comparative or analytical studies of genre; critical reception of novels; serialization, gender issues; authors and editors; and valuation.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 356 Studies in Poetry Credits: 3

An intensive study of poetry through the examination of a specific topic or the works of particular poets, for instance: Love, Seduction, and Betrayal; Form and Change; Death, Grief, and Consolation; Whitman, Dickinson, and the Soul; Sacred Poetry; Poetry and Metaphysics; The Long Poem; The Comic Poem; Sonnet, Sonnet Sequence and the Lyric; The Voyage; Nature, Self, and the Romantic Poet.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 360 The Modern Novel Credits: 3

This course focuses on selected novelists between 1900 and 1945 and is organized around particular literary themes, sub-genres, or contemporary issues.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 365WI Contemporary Novel Credits: 3

This course focuses on selected novelists since 1945 and is organized around particular literary themes, sub-genres, or contemporary issues.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 367 Introduction to Latinx Literature Credits: 3

An introduction to the literary production by US Latinx, the course introduces students to writings by authors from various Latinidades—such as Chicana/Chicano, Puerto Rican, Chilean American, Cuban American, Dominican American, and Mexican American—in multiple genres, including poetry, fiction, drama, personal essay, and film.

Prerequisites: ENGLISH 110 or DISC 100.

ENGLISH 380 Composing in the Digital Age Credits: 3

This course will focus on the study and creation of multimodal texts (such as webpages that include hypertext, video, and images). The course will consider the rhetorical possibilities and constraints of various modalities. Specialized knowledge of multimedia equipment and software is neither expected nor required.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 381 Writing for Social Media Credits: 3

This course will focus on the rhetorical study of social media and practical strategies for using social media effectively. The course will critically examine how the design and use of popular and emergent social media platforms affect democratic discourse and the public sphere. Specialized knowledge of social media platforms and software is neither expected nor required.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 400TC Advanced Studies in 20-21st Century Works Credits: 3

Advanced Studies in 20-21st Century Works. Approved topics include: Modern and Contemporary Irish Literature, Modern Poetry, Contemporary Poetry, Postcolonial Literature, and The Romantic Period.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 404 Old English Credits: 3

This course is a study of Old English, its grammar, its poetic style, and its literature, both poetry and prose.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 405 Magazine Editing Credits: 3

A course combining academic study of editorial management, publishing operations and language skills, with "hands on" experience in article evaluation, editing, magazine production, and legal matters such as copyright and libel. Class work concentrates on authentic and effective language use, with attention given to copy editing, grammar, typography, printing processes, financing and distribution for commercial and small-press publications.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 408 Harlem Renaissance Credits: 3

This course examines the period from 1920 to 1940, known as the Harlem Renaissance, a time of unprecedented literary and cultural creativity by Black artists. This course explores a variety of cultural productions, not only traditional forms of literature such as novels, short stories, plays and poetry, but also nonliterary objects of study such as painting, sculpture, and music.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 410 Black Women Writers Credits: 3

This course explores the writings of African American Women Writers. The course examines how these writers have interacted with and often revised stereotypical representations of African American womanhood typically found within canonical and African American male literatures. The course will examine literature (which might include fiction, poetry, autobiography, and drama) of the nineteenth and twentieth centuries; the majority of the works will be by modern and contemporary authors such as Nella Larsen, Zora Neale Hurston, Toni Morrison, and Terry McMillan. By placing the works in this sort of cultural and historical context, it will be possible to examine the unique tradition of African American women's writing as well as individual texts.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 412 Chaucer Credits: 3

Readings from Chaucer's most important works, especially "The Canterbury Tales" and "Troilus and Criseyde" with emphasis on them as types of medieval genres and on the Middle English language.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 413 Renaissance Literature I Credits: 3

English literature from the time of Wyatt and Surrey to the beginning of the 17th century, including the works of Spenser, Marlowe, Sidney, Shakespeare and others.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 414 Milton Credits: 3

A study of Milton's prose and poetry, with special attention to "Paradise Lost".

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 415 Restoration And Early 18th-Century British Literature Credits: 3

British literature from the late 17th century to the mid 18th century. Selected writers may include Addison and Steele, Behn, Congreve, Defoe, Dryden, Finch, Milton, Pope, Rochester, Swift, and Wortley Montagu.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 416 The Romantic Period Credits: 3

An extensive study of selected writers (such as Austen, Barbauld, Byron, Coleridge, Hazlitt, Hemans, Keats, Gilpin, the Shelleys, Wollstonecraft, and Wordsworth) organized around literary themes and/or cultural issues important to the Romantic period.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 417 Modern Poetry Credits: 3

Study of works by modernist poets such as Hopkins, Yeats, Frost, Stevens, Williams, Moore, Pound, H.D., Eliot, Millay, Hughes.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 418 19th-Century American Literature Credits: 3

An intensive study of either selected major American writers in the 19th century or of 19th -century literary movements.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 422 Medieval Literature Credits: 3

Western religious and secular verse and prose to the 15th century. Late Middle English works are read in the original; all other selections in translation.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 423 Renaissance Literature II Credits: 3

English literature from 1600 to the beginning of the Restoration, including the works of Donne, Jonson, Milton and other contemporaries.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 425 18th-Century British Literature II Credits: 3

British literature in its critical and historical context from 1750 to 1798. The writers studied may include Blake, Burney, Collins, Johnson, and Gray.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 426 The Victorian Period Credits: 3

An intensive study of selected writers (such as Arnold, Braddon, the Brontes, the Brownings, Dickens, Darwin, Eliot, Gaskell, Hardy, Ruskin, and the Rossetts) organized around literary themes and/or cultural issues important to the Victorian period.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 427 Contemporary Poetry Credits: 3

Study of works by contemporary poets (post World War II), such as Auden, Bishop, Hayden, Berryman, Rukeyser, Larkin, Rich, Plath, Heaney, Boland, Komunyakaa.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 428 20th-Century American Literature Credits: 3

An intensive study of either selected major American writers in the 20th century or of 20th-century literary movements.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 429B Advanced Screenwriting Credits: 3

This course provides students with advanced theory in narrative screenwriting, training in industry standard script analysis (called "coverage") and story editing. Students will be required to draft, revise and workshop a short film screenplay or will focus on a feature screenplay, delivering a draft and revision of the first act and a detailed outline for the rest of the script. Students will workshop feature screenplays in small groups, emphasizing the art of constructive story editing.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 339 or COMM-ST 354.

ENGLISH 430WI Advanced Technical Writing Credits: 3

This course is designed for those who plan to do or teach professional, business, or technical writing. Beginning with a brief background in the history of technical writing, the course will deal with current theories and methods of teaching technical and professional writing, and will cover such areas as business usage; technical linguistic problems and theories; the language of contracts, specifications, and other binding documents; and computer-oriented problems.

Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 431 18th-Century British Literature Credits: 3

British literature from the mid to late 18th century. Selected writers may include Blake, Burney, Collins, Equiano, Fielding, Gray, Johnson, Sheridan, and Wollstonecraft.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 432WI Advanced Creative Writing Prose Credits: 3

A course for advanced students of fiction writing. Open to students who have taken English 312 or its equivalent. The class will proceed through analysis of models, discussion of general principles, critique of student work. Students will simultaneously be encouraged to experiment and to refine the form and subjects best suited to their talents. Emphasis will remain on the short story, though there may be units in other forms—novella, film script, the non-fiction essay.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 312 or ENGLISH 315 or ENGLISH 316WI.

ENGLISH 433 Histories Of Writing, Reading, And Publishing Credits: 3

A study of selected topics concerning the material practices of writing, reading, and publishing within specific cultural and historical contexts. Issues examined may include authorship, education, information technologies, libraries, literacy, periodicals, popular literature, publishers, and communities of readers.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 434 Postcolonial Literature Credits: 3

An exploration of postcolonialism through the study of literary and theoretical texts created by or representing peoples whose historical experience has been decisively shaped by the experience or legacies of colonialism. Texts will be drawn from a variety of genres and from several countries. The course will consider several definitions of postcolonialism and related terms such as cosmopolitanism, hybridity, diaspora, and nationalism.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 435WI Advanced Creative Writing Poetry Credits: 3

An advanced poetry workshop that includes intensive reading of contemporary poetry and aims at each student creating a portfolio of publishable poems. The focus of the course will vary to address a variety of topics such as metaphor and closure; imitation and the line; form and voice. May be repeated once for credit.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 312 or ENGLISH 315 or ENGLISH 316WI.

ENGLISH 436WI Poetic Forms Credits: 3

An advanced creative writing course that focuses on intensive study of and practice in metrics and traditional and nonce forms. May be repeated once for credit.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 312 or ENGLISH 315 or ENGLISH 316WI.

ENGLISH 437WI Prose Forms Credits: 3

The making of a work of prose requires expertise with the structure of the chosen form, and an understanding of the relationship of form to content. This class teaches the techniques for planning and drafting major prose forms which could include the very-short story, the story, novella, novel, linked-story collection, episodic novel, essay novel, the play, the creative nonfiction book, and others. Students will learn how to create particular prose forms and how to use content as a guide to inventing new forms. We will examine some of the best examples of both traditional and newly invented forms by writers such as Anton Chekhov, Katherine Anne Porter, Tim O'Brien, and Sandra Cisneros.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 312 or ENGLISH 315 or ENGLISH 316WI.

ENGLISH 438 The "New Letters" Writing Conference Credits: 1-3

An intensive weekend conference for creative writers of varying genres and levels of experience, published and unpublished – fiction, poetry, nonfiction, stage and screen. The conference includes creative and interdisciplinary sessions on writing and publishing, genre-specific workshops, socializing and networking opportunities, and private manuscript consultations. The course of study for two-and three-credit students includes selected reading and post-weekend tutorial time conducted by accomplished, working writers. The conference may be repeated once for credit. Two- and three-credit students need the instructor's consent and must have taken a 300-level creative-writing course in the focus genre prior to enrolling.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 439 Shakespeare and Film Credits: 3

Grounded in the close analysis of texts, this course examines film adaptations of Shakespeare's plays across the range of dramatic genres (history plays, tragedy, comedy, and romance). This course is open to seniors and graduate students only. Graduate students will be responsible for supplemental critical readings.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 440 American Culture Credits: 3

Texts that offer perspectives on key historical themes of American culture. Texts may be grouped around any culturally significant principle (e.g. region, race, gender, class, ethnicity, religion) or theme (e.g. the mythology of the frontier, marriage and domesticity, the American Dream). The course may be taken twice for credit, provided substantive changes in topic.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 441 Girls And Print Culture Credits: 3

This course deals with girls' relationships to the continually evolving print culture. Students will examine various literary representations of girlhood by adult writers, explore texts directed at girls (e.g., conduct books, periodicals, textbooks), and study the writing and reading practices of girls themselves.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 442 Playwriting I Credits: 3

Theory and practice of writing for the theatre with emphasis on the basic techniques.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 443 Playwriting II Credits: 3

Theory and practice of writing for the theatre with emphasis on advanced techniques.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 445 History And Principles Of Rhetoric Credits: 3

A study of selected writings of ancient, and modern rhetoricians illustrating key issues in the development of Western discourse theory and practice.

Issues examined include the relationships between rhetoric and knowledge, orality and literacy, and rhetoric and poetics. Attention will also be given to the implications of rhetorical theory for modern language instruction.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 447 Theory and Criticism in English Studies Credits: 3

A survey of major schools and methods of literary theory and criticism. Authors and texts to be determined by the instructor of the course.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 448 External Internship Credits: 1-3

Students may complete an external internship involving writing and editing with a publishing company, trade magazine, literary or academic journal, other print or electronic media organization, or with advertising, public relations, or non-profit firms. Internships are granted on a competitive basis. Students will compile a portfolio of their work under the direction of the internship supervisor to be submitted for evaluation to the department's internship coordinator.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 449A Publication Practicum Credits: 1-3

This course provides practical experience with New Letters magazine, New Letters on the Air, and BkMk Press in business analysis/reporting, copy-editing, manuscript evaluation, promotion/grant development, library research, market research, and other skills. The practicum is limited to three students per semester, to be chosen on the basis of demonstrated writing and organizational skills. References are required. May be taken for no more than three credit hours over a maximum of two semesters.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 449B Publication Practicum Credits: 3

This course covers the basics of producing an issue of an academic journal. Students acquire hands-on experience at all stages of production.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 449C Publication Practicum Credits: 1-3

This course allows students to work with a faculty member on an ad hoc project for publication such as a special journal issue or festschrift, book manuscript, a new scholarly edition of a primary text, or a digital edition. Course may be repeated once for continued work on the same project.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 450 Special Readings Credits: 1-3

Intensive individual readings in a field, genre, or individual figure to be selected by a student or a group of students in consultation with an instructor willing to direct the project. Generally limited to graduating seniors who have completed the majority of the work for their major. Not open to students in their first semester at UMKC. May be repeated for credit.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 451 Shakespeare Comedies And Histories Credits: 3

A study of Shakespeare's major comedies and history plays with special emphasis on his dramatic works before 1600.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 452 Early English Drama Credits: 3

English religious and secular drama prior to Shakespeare. Mystery and morality plays are studied, with emphasis on their literary and social backgrounds. Close reading of such works as "Everyman," "The Wakefield Second Shepherd's Play," and "The Spanish Tragedy."

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 453 Modern Drama, 1880-1945 Credits: 3

A study of modern drama: Continental, British, and American, including history and development, critical theory, and literary evaluation. This course will focus on the earlier modern playwrights from Ibsen and Shaw, with special attention to naturalism.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 454 The Civil Rights Movement in African American Literature Credits: 3

This course examines how African American literature shaped ideas about freedom, rights, citizenship and race in the civil rights movement. It draws on a variety of literary forms-speeches, essays, autobiographies, fiction, drama, poetry and film-to explore the movement's impact on communities and cultures as well as its various debates and competing visions.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 455 Studies In The Novel 1740-1900 Credits: 3

An intensive study of no more than three major novelists of the eighteenth or nineteenth century. The content of the course will change, depending on the instructor.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 456 From Field Shout to Hip Hop: African American Poetic Traditions Credits: 3

This course examines the development of African American poetry from its early forms as field shouts, ballads, and blues to present forms including spoken word and hip hop. Includes authors such as Phillis Wheatley, Paul Lawrence Dunbar, Langston Hughes, Gwendolyn Brooks, Tupac Shakur, and Jessica Care Moore.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 457 Stages Toward Freedom: African American Dramatic Traditions Credits: 3

This course explores the development of African American dramatic traditions from the eighteenth century through the Harlem Renaissance Black Arts Movement, to current postmodernism. Includes authors such as W.W. Brown, Zora N. Hurston, Amiri Baraka, Sonia Sanchez, August Wilson, Suzan-Lori Parks.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 458 Slave Narratives: Race, Gender, and Writing Freedom Credits: 3

A truly American, home grown genre and powerful force in the development of American political and social realities, the African American Slave Narrative is an established, recognized influence in the development of African American and American literary history. In this course you will have the opportunity to explore the historical trajectory of the Slave Narrative, looking at early formulations of its structure, purpose and conventions—especially in terms of gender and race, subsequent various permutations, and the eventual development of the Neo-slave Narrative as its resurrection, which adds to the complexity and theoretical impact of the literary autobiography from black perspectives.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 459 African American Migrations in Literature Credits: 3

The course examines representations of two different trajectories of migration in African American literature: African American journeys from the south to northern and mid-western regions of America, and concurrent migrations of Caribbean people to the US in the early twentieth century.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 460 Special Offerings Credits: 1-4

The instructor who gives this course determines what its content shall be. All aspects of literature and linguistics are within its possible range.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 461 Shakespeare Tragedies And Romances Credits: 3

A study of Shakespeare's major tragedies and late romances with special emphasis on his dramatic literature after 1600.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 462 Restoration And 18th-Century Drama Credits: 3

The drama after the restoration of the monarchy and the reopening of the theaters through the 18th century. Special emphasis is placed on the comedy of manners and the heroic drama in the Restoration and the sentimental comedy in the 18th century. Includes such playwrights as Dryden, Congreve, Etherege, Wycherley, Steele, Lillo, Cumberland, Sheridan, and Goldsmith.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 463 Contemporary Drama II Credits: 3

A study of contemporary drama: Continental, British, and American, including history and development, critical theory and literary evaluation. This course will focus on the more recent writers, including the absurdists, with special attention to experimental drama.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 464 Medieval Methods & Paleography Credits: 3

This course examines the methodology and historiography of Medieval Studies. Through an introduction to paleography, the study of medieval handwritings, it prepares students for advanced work in Medieval and Renaissance studies. Using an interdisciplinary approach, this course will examine the historical and cultural settings for medieval texts, their physical form and production, as well as the tradition of textual transmission in the medieval world. In addition to gaining familiarity with the many different types of primary sources, such as literary, artistic, legal and notarial sources, students will be exposed to methods for practical archival work in various European nations. Recommended preparation: First Year Latin.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 465 Studies In The Modern Novel Credits: 3

An intensive study of no more than three major 20th-century novelists. The content of the course will change, depending on the instructor.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 468 Women's Literature in Africa and the African Diaspora Credits: 3

This course is a comparative examination of the variety of literary works produced by women of African descent in the United States, the Caribbean and Africa. Students will explore the cross-cultural implications of texts in light of the intersections of gender, race and class.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 470 Introduction To Descriptive Linguistics Credits: 3

General introduction to linguistics science. Linguistic analysis, structures and change. Language families. Historical reconstruction. Generative grammar.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 310.

ENGLISH 475 Creative Nonfiction Credits: 3

This course emphasizes the study and crafting of creative nonfiction. special attention is given to developing the writing techniques required to shape publishable narratives out of experience.

Prerequisites: ENGLISH 225 or DISC 200, and ENGLISH 312 or ENGLISH 315 or ENGLISH 316WI.

ENGLISH 477CS Classical Studies Credits: 3

Advanced study in Classical literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 477DH Studies in Digital Humanities Credits: 3

Advanced study in in Digital Humanities. Subject varies and will be visible when students enroll.

ENGLISH 477EM Early Modern Studies Credits: 3

Advanced study in Early Modern literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 477ES 18th-Century Studies Credits: 3

Advanced study in eighteenth-century British or American literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 477MS Medieval Studies Credits: 3

Advanced study in Medieval literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 477NS 19th-Century Studies Credits: 3

Advanced study in nineteenth-century British or American literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 477RC Studies in Rhetoric and Composition Credits: 3

Advanced study in rhetoric and composition. Subject varies and will be visible when students enroll.

ENGLISH 477SA Studies in Authorship Credits: 3

Advanced study of individual authors or groups of authors in a variety of periods or literary and cultural movements. Subject varies and will be visible when students enroll.

ENGLISH 477SG Studies in Genre Credits: 3

Advanced study in a single genre such as the novel, the short story, poetry, drama, or non-fiction. Subject varies and will be visible when students enroll.

ENGLISH 477TS 20th- and 21st-Century Studies Credits: 3

Advanced study in twentieth- and twenty-first-century British or American literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 487FI Creative Writing Workshop Credits: 3

Advanced creative writing workshop. Subject varies and will be visible when students enroll.

ENGLISH 487MG Multigenre Workshop Credits: 3

Advanced creative writing workshop in multiple genres. Subject varies and will be visible when students enroll.

ENGLISH 487NF Nonfiction Workshop Credits: 3

Advanced creative writing workshop in nonfiction. Subject varies and will be visible when students enroll.

ENGLISH 487PO Creative Writing Workshop Credits: 3

Advanced creative writing workshop. Subject varies and will be visible when students enroll.

ENGLISH 499 Senior Tutorial Credits: 3

A comprehensive tutorial for students who have a faculty-approved research project. The project will culminate in a critical study of 20-25 pages or a creative writing portfolio of similar length. This course is appropriate for students who intend to continue their studies at the graduate level.

Prerequisites: ENGLISH 225 or DISC 200.

ENGLISH 5447EM Early Modern Studies Credits: 3

Advanced study in Early Modern literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5477CS Classical Studies Credits: 3

Advanced study in Classical literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5477DH Studies in Digital Humanities Credits: 3

Advanced study in Digital Humanities. Subject varies and will be visible when students enroll.

ENGLISH 5477EM Early Modern Studies Credits: 3

Advanced study in Early Modern literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5477ES 18th-Century Studies Credits: 3

Advanced study in eighteenth-century British or American literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5477MS Medieval Studies Credits: 3

Advanced study in Medieval literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5477NS 19th-Century Studies Credits: 3

Advanced study in nineteenth-century British or American literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5477RC Studies in Rhetoric and Composition Credits: 3

Advanced study in rhetoric and composition. Subject varies and will be visible when students enroll.

ENGLISH 5477SA Studies in Authorship Credits: 3

Advanced study of individual authors or groups of authors in a variety of periods or literary and cultural movements. Subject varies and will be visible when students enroll.

ENGLISH 5477SG Studies in Genre Credits: 3

Advanced study in a single genre such as the novel, the short story, poetry, drama, or non-fiction. Subject varies and will be visible when students enroll.

ENGLISH 5477TS 20th- and 21st-Century Studies Credits: 3

Advanced study in twentieth- and twenty-first-century British or American literature and culture. Subject varies and will be visible when students enroll.

ENGLISH 5487FI Fiction Workshop Credits: 3

Advanced creative writing workshop in fiction. Subject varies and will be visible when students enroll.

ENGLISH 5487MG Multigenre Workshop Credits: 3

Advanced creative writing workshop in multiple genres. Subject varies and will be visible when students enroll.

ENGLISH 5487NF Nonfiction Workshop Credits: 3

Advanced creative writing workshop in nonfiction. Subject varies and will be visible when students enroll.

ENGLISH 5487PO Poetry Workshop Credits: 3

Advanced creative writing workshop in poetry. Subject varies and will be visible when students enroll.

ENGLISH 5500 Graduate Study In English Credits: 3

An introduction to methods of research and scholarship related to English studies. The course uses a wide spectrum of print and digital materials, library facilities (including archives and Special Collections), databases, and other resources to explore English studies as an academic discipline and profession.

ENGLISH 5500P Special Topics Credits: 3**ENGLISH 5501 Magazine Editing Credits: 3**

A course combining academic study of editorial management, publishing operations, and language skills, with "hands on" experience in article evaluation, editing, magazine production, and legal matters such as copy right and libel. Class work concentrates on authentic and effective language use, with attention given to copy editing, grammar, typography, printing processes, financing and distribution for commercial and small-press publications.

ENGLISH 5502 Magazine Nonfiction Credits: 3

This course emphasizes the origination and execution of nonfiction magazine articles for a variety of publications. Special attention is given to successful queries and the various writing techniques required for different kinds of articles. Students learn re-structuring and revision and the legalities affecting writers. Students are expected to complete three publishable articles.

ENGLISH 5503 Old English Credits: 3

This course is a study of Old English, its grammar, its poetic style, and its literature, both poetry and prose.

ENGLISH 5508 Harlem Renaissance Credits: 3

This course examines the period from 1920 to 1940, known as the Harlem Renaissance, a time of unprecedented literary and cultural creativity by Black artists. This course explores a variety of cultural productions, not only traditional forms of literature such as novels, short stories, plays and poetry, but also nonliterary objects of study such as painting, sculpture, and music.

ENGLISH 5510 Black Women Writers Credits: 3

This course explores the writings of African American Women Writers. The course examines how these writers have interacted with and often revised stereotypical representations of African American womanhood typically found within canonical and African American male literatures. The course will examine literature (which might include fiction, poetry, autobiography, and drama) of the 19th and 20th centuries; the majority of the works will be by modern and contemporary authors such as Nella Larsen, Zora Neale Hurston, Toni Morrison, and Terry McMillan. By placing the works in this sort of cultural and historical context, it will be possible to examine the unique tradition of African American women's writings as well as individual texts.

ENGLISH 5512 Chaucer Credits: 3

Readings from Chaucer's most important works, especially "The Canterbury Tales" and "Troilus and Criseyde" with emphasis on them as types of medieval genres and on the Middle English language. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5513 Renaissance Literature I Credits: 3

English literature from the time of Wyatt and Surrey to the beginning of the 17th century, including the works of Spenser, Marlowe, Sidney, Shakespeare and others. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5514 Milton Credits: 3

A study of Milton's prose and poetry, with special attention to "Paradise Lost". Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5515 Restoration And Early 18th-Century British Literature Credits: 3

British literature from the late 17th century to the mid-18th century. Selected writers may include Addison and Steele, Behn, Congreve, Defoe, Dryden, Finch, Pope, Rochester, Swift, and Wortley Montagu.

ENGLISH 5516 The Romantic Period Credits: 3

An extensive study of selected writers (such as Austen, Barbauld, Byron, Coleridge, Hazlitt, Hemans, Keats, Gilpin, the Shelleys, Wollstonecraft, and Wordsworth) organized around literary themes and/or cultural issues important to the Romantic period.

Prerequisites: ENGLISH 327.

ENGLISH 5517 Modern Poetry Credits: 3

Study of works by modernist poets such as Hopkins, Yeats, Frost, Stevens, Williams, Moore, Pound, H.D., Eliot, Millay, Hughes. Students will make in class presentations and submit papers requiring research and bibliographic work.

ENGLISH 5518 19th-Century American Literature Credits: 3

An intensive study of either selected major American writers in the 19th century or of 19th-century literary movements. Students will make in class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5519 Teaching Writing: Theories, Histories, Contexts, Practices Credits: 3

This course focuses on issues related to the teaching of English at the high school and college levels, with an emphasis on the teaching of writing. Issues addressed may include assignment design, teaching invention and revision, response to and evaluation of writing, collaborative learning, relationships between reading and writing, classroom uses of electronic media, and institutional contexts within which teachers work. The course is required of Graduate Teaching Assistants in the UMKC Composition Program, to be taken either prior to or concurrently with their first semester of teaching. Secondary English teachers and others interested in English teaching are also welcome.

ENGLISH 5520 Greater Kansas City Writing Project Credits: 3

Studies in methods and objectives for the teaching of English with special attention to secondary school teaching. This course is repeatable for credit with advisor approval.

ENGLISH 5520A Greater Kansas City Writing Project Credits: 3**ENGLISH 5520B Greater Kansas City Writing Project Credits: 3****ENGLISH 5520D Greater Kansas City Writing Project Credits: 3****ENGLISH 5522 Medieval Literature Credits: 3**

Western religious and secular verse and prose to the 15th century. Late Middle English works are read in the original; all other selections in translation. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5523 Renaissance Literature II Credits: 3

English literature from 1600 to the beginning of the Restoration, including the works of Donne, Jonson, Milton, and other contemporaries. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5526 The Victorian Period Credits: 3

An intensive study of selected writers (such as Arnold, Braddon, the Brontes, the Brownings, Dickens, Darwin, Eliot, Gaskell, Hardy, Ruskin, and the Rossetis) organized around literary themes and/or cultural issues important to the Victorian period.

Prerequisites: ENGLISH 327.

ENGLISH 5527 Contemporary Poetry Credits: 3

Study of works by contemporary poets (post- World War II), such as Auden, Bishop, Hayden, Berryman, Rukeyser, Larkin, Rich, Plath, Heaney, Boland, and Komunyakaa. Students will make in class presentations and submit papers requiring research and bibliographic work.

ENGLISH 5528 20th Century American Literature Credits: 3

Major American writers or literary movements of the 20th century. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5529 Graduate Seminar: Screenwriting Credits: 3

A seminar on advanced theory in narrative screenwriting, script analysis and constructive story editing. Students draft, revise and workshop a short film script or a feature screen play, and deliver a pitch, treatment, draft and revision of the first act and detailed outline of the whole script. Students workshop feature screenplays in small groups.

Prerequisites: ENGLISH 429B or COMM-ST 454.

ENGLISH 5531 Late 18th-Century British Literature Credits: 3

British literature from the mid to late 18th century. Selected writers may include Blake, Burney, Collins, Equiano, Fielding, Gray, Johnson, Sheridan, and Wollstonecraft.

ENGLISH 5532 Advanced Creative Writing: Fiction Credits: 3

A course for advanced students of fiction writing. The class will proceed through analysis of models, discussion of general principles, and critique of student work. Students will simultaneously be encouraged to experiment and to refine the form and subjects best suited to their talents. Emphasis will remain on the short story, though there may be units in other forms—novella, film script, the non-fiction essay. May be repeated once for credit.

Prerequisites: Graduate Standing.

ENGLISH 5533 Histories Of Writing, Reading, And Publishing Credits: 3

A study of selected topics concerning the material practices of writing, reading, and publishing within specific cultural and historical contexts. Issues examined may include authorship, education, information technologies, libraries, literacy, periodicals, popular literature, publishers, and communities of readers.

ENGLISH 5534 Postcolonial Literature Credits: 3

An exploration of postcolonialism through the study of literary and theoretical texts created by or representing peoples whose historical experience has been decisively shaped by the experience or legacies of colonialism. Texts will be drawn from a variety of genres and from several countries. The course will consider several definitions of postcolonialism and related terms such as cosmopolitanism, hybridity, diaspora, and nationalism.

ENGLISH 5535 Advanced Creative Writing: Poetry Credits: 3

An advanced poetry workshop that includes intensive reading of contemporary poetry and aims at each student creating a portfolio of publishable poems. The focus of the course will vary to address a variety of topics such as metaphor and closure; imitation and the line; form and voice. May be repeated once for credit.

Prerequisites: Graduate Standing.

ENGLISH 5536 Poetic Forms Credits: 3

An advanced creative writing course that focuses on intensive study of and practice in metrics and traditional and nonce forms. May be repeated once for credit.

Prerequisites: ENGLISH 315.

ENGLISH 5537 Prose Forms Credits: 3

This course covers techniques for planning and drafting major prose forms. Students will learn how to use content as a guide to inventing new forms (i.e. novella, novel, linked-story collection, episodic novel, essay novel, and creative nonfiction book).

Prerequisites: ENGLISH 432WI, ENGLISH 435WI.

ENGLISH 5538 Women's Literature in Africa and the African Diaspora Credits: 3

This course is a comparative examination of the variety of literary works produced by women of African descent in the United States, the Caribbean and Africa. Students will explore the cross-cultural implications of texts in light of the intersections of gender, race and class.

ENGLISH 5540 American Culture Credits: 3

Texts that offer perspectives on key historical themes of American culture. Texts may be grouped around any culturally significant principle (e.g. region, race, gender, class, ethnicity, religion) or theme (e.g. the mythology of the frontier, marriage and domesticity, the American Dream). Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5541 Girls And Print Culture Credits: 3

This course deals with girls' relationships to the continually evolving print culture. Students will examine various literary representations of girlhood by adult writers, explore texts directed at girls (e.g., conduct books, periodicals, textbooks), and study the writing and reading practices of girls themselves.

ENGLISH 5545 History And Principles Of Rhetoric Credits: 3

A study of selected writings of ancient and modern rhetoricians illustrating key issues in the development of Western discourse theory and practice. Issues examined include the relationships between rhetoric and knowledge, orality and literacy, and rhetoric and poetics. Attention will also be given to the implications of rhetorical theory for modern language instruction. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5546 From Field Shout to Hip Hop: African American Poetic Traditions Credits: 3

This course examines the development of African American poetry from its early forms as field shouts, ballads, and blues to present forms including spoken word and hip hop. Includes authors such as Phillis Wheatley, Paul Lawrence Dunbar, Langston Hughes, Gwendolyn Brooks, Tupac Shakur, and Jessica Care Moore.

ENGLISH 5547 Theory and Criticism in English Studies Credits: 3

A survey of major schools and methods of literary theory and criticism. Authors and texts to be determined by the instructor of the course.

ENGLISH 5548 External Internship Credits: 1-3

Students may complete an external internship involving writing and editing with a publishing company, trade magazine, literary or academic journal, other print or electronic media organization, or with advertising, public relations, or non-profit firms. Internships are granted on a competitive basis. Students will compile a portfolio of their work under the direction of the internship supervisor to be submitted for evaluation to the department's internship coordinator.

ENGLISH 5549A Publication Practicum Credits: 1-3

This course provides practical experience with New Letters magazine, New Letters on the Air, and BkMk Press in business analysis/reporting, copy-editing, manuscript evaluation, promotion/grant development, library research, market research, and other skills. The practicum is limited to three students per semester, to be chosen on the basis of demonstrated writing and organizational skills. References are required. May be taken for no more than three credit hours over a maximum of two semesters. Permission of the instructors required.

ENGLISH 5549B Publication Practicum Credits: 1-3

This course covers the basics of producing an issue of an academic journal. Students acquire hands-on experience at all stages of production.

ENGLISH 5549C Publication Practicum Credits: 1-3

This course allows students to work with a faculty member on an ad hoc project for publication such as a special journal issue or festschrift, book manuscript, a new scholarly edition of a primary text, or a digital edition. Course may be repeated once for continued work on the same project.

ENGLISH 5550 Graduate Seminar Credits: 3

Authors, works and intellectual currents which form the basis of these seminars may vary from semester to semester, depending upon the instructor's design for the course. May be repeated for credit. Continued in ENGLISH 5555.

ENGLISH 5550A Graduate Seminar Medieval Literature I Credits: 3**ENGLISH 5550B Graduate Seminar Renaissance Literature I Credits: 3****ENGLISH 5550C Graduate Seminar Neo-Classical Literature I Credits: 3****ENGLISH 5550D Graduate Seminar 19th Century Literature I Credits: 3****ENGLISH 5550E Graduate Seminar American Literature I Credits: 3****ENGLISH 5550F Graduate Seminar Modern Literature I Credits: 3****ENGLISH 5550G Graduate Seminar Literary Criticism Credits: 3****ENGLISH 5550H Graduate Seminar Studies In Fiction I Credits: 3****ENGLISH 5550I Graduate Seminar In Dramatic Literature I Credits: 3****ENGLISH 5550J Graduate Seminar: History Of The English Language Credits: 3****ENGLISH 5550K Graduate Seminar: Creative Writing Prose Credits: 3****ENGLISH 5550M Graduate Seminar In Rhetoric And Composition Credits: 3****ENGLISH 5550MA Greater Kansas City Writing Project: Invitational Credits: 3****ENGLISH 5550MC Greater K.C. Writing Project: Writing & The Teaching Of Literature Credits: 3****ENGLISH 5550MD Greater Kc Writing Project: Critical Thinking & Process Writing Credits: 3****ENGLISH 5550ME Greater K.C. Wrtg Project: Researching The Theories Of Tchng Wrtng Credits: 3****ENGLISH 5550N Graduate Seminar: Criticism Credits: 3****ENGLISH 5550P Graduate Seminar: Sociolinguistics And Dialectology Credits: 3**

Seminar focusing on the role of social factors in language use, and on the origin and development of regional and urban dialects in English. Special attention will be paid to sociolinguistic motivations for change, variation and merger in dialects and languages in contact, and Black English.

ENGLISH 5551 Shakespeare Comedies And Histories Credits: 3

A study of Shakespeare's major comedies and history plays with special emphasis on his dramatic works before 1600. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5552 Early English Drama Credits: 3

English religious and secular drama prior to Shakespeare. Mystery and morality plays are studied with emphasis on their literary and social backgrounds. Close readings of such works as "Everyman," "The Wakefield Second Shepherd's Play," and "The Spanish Tragedy." Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5553 Modern Drama 1880-1945 Credits: 3

A study of modern drama: Continental, British, and American, including history and development, critical theory, and literary evaluation. This course will focus on the earlier modern playwrights from Ibsen to Shaw, with special attention to naturalism. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5554 The Civil Rights Movement in African American Literature Credits: 3

This course examines how African American literature shaped ideas about freedom, rights, citizenship and race in the civil rights movement. It draws on a variety of literary forms-speeches, essays, autobiographies, fiction, drama, poetry and film-to explore the movement's impact on communities and cultures as well as its various debates and competing visions.

ENGLISH 5555 Graduate Seminar Credits: 3

Graduate Seminar - second half.

Prerequisites: ENGLISH 5550.

ENGLISH 5555A Graduate Seminar Medieval Literature II Credits: 3**ENGLISH 5555B Graduate Seminar Renaissance Literature II Credits: 3****ENGLISH 5555C Graduate Seminar Neo-Classical Literature I Credits: 3****ENGLISH 5555D Graduate Seminar In 19th-Century Literature II Credits: 3****ENGLISH 5555E Graduate Seminar American Literature II Credits: 3****ENGLISH 5555F Graduate Seminar In Modern Literature II Credits: 3****ENGLISH 5555G Graduate Seminar Literary Criticism Credits: 3****ENGLISH 5555H Graduate Seminar Studies In Fiction II Credits: 3****ENGLISH 5555I Graduate Seminar In Dramatic Literature II Credits: 3****ENGLISH 5555J Graduate Seminar English Language Credits: 3****ENGLISH 5555K Graduate Seminar In Creative Writing:Poetry Credits: 3****ENGLISH 5555M Graduate Seminar: Composition Credits: 3****ENGLISH 5555N Graduate Seminar: Prose Fiction Credits: 3****ENGLISH 5556 Studies In The Novel 1740-1900 Credits: 3**

An intensive study of no more than three major novelists of the eighteenth or nineteenth century. The content of the course will change, depending on the instructor. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5557 Stages toward Freedom: African American Dramatic Traditions Credits: 3

This course explores the development of African American dramatic traditions from the eighteenth century through the Harlem Renaissance, Black Arts Movement, to current postmodernism. Includes authors such as W.W. Brown, Zora N. Hurston, Amiri Baraka, Sonia Sanchez, August Wilson, Suzan-Lori Parks.

ENGLISH 5558 Slave Narratives: Race, Gender and Writing Freedom Credits: 3

A truly American, home grown genre and powerful force in the development of American political and social realities, the African American Slave Narrative is an established, recognized influence in the development of African American and American literary history. In this course you will have the opportunity to explore the historical trajectory of the Slave Narrative, looking at early formulations of its structure, purpose and conventions—especially in terms of gender and race, subsequent various permutations, and the eventual development of the Neo-slave Narrative as its resurrection, which adds to the complexity and theoretical impact of the literary autobiography from black perspectives.

ENGLISH 5559 African American Migrations in Literature Credits: 3

The course examines representations of two different trajectories of migration in African American literature: African American journeys from the south to northern and mid-western regions of America, and concurrent migrations of Caribbean people to the US in the early twentieth century.

ENGLISH 5560 Special Topics Credits: 1-4

The professor who gives this course determines what its content shall be. All aspects of English studies are within its possible range.

ENGLISH 5561 Shakespeare:Tragedies And Romances Credits: 3

A study of Shakespeare's major tragedies and late romances with special emphasis on his dramatic literature after 1600. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5562 Restoration And 18th- Century Drama Credits: 3

The drama after the restoration of the monarchy and the reopening of the theatres through the 18th century. Special emphasis is placed on the comedy of manners and the heroic drama in the Restoration and the sentimental comedy in the 18th-century. Includes such playwrights as Dryden, Congreve, Etherege, Wycherley, Steele, Lillo, Cumberland, Sheridan, and Goldsmith. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5563 Contemporary Drama Credits: 3

A study of contemporary drama: Continental, British, and American, including history and development, critical theory and literary evaluation. This course will focus on the more recent writers, including the absurdists, with special attention to experimental drama. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5564 Medieval Methods & Paleography Credits: 3

This course examines the methodology and historiography of Medieval Studies. Through an introduction to paleography, the study of medieval handwritings, it prepares students for advanced work in Medieval and Renaissance studies. Using an interdisciplinary approach, this course will examine the historical and cultural settings for medieval texts, their physical form and production, as well as the tradition of textual transmission in the medieval world. In addition to gaining familiarity with the many different types of primary sources, such as literary, artistic, legal, and notarial sources, students will be exposed to methods for practical archival work in various European nations.

Prerequisites: First Year Latin.

ENGLISH 5565 Studies In Modern Novel Credits: 3

An intensive study of no more than three major 20th- century novelists. The content of the course will change depending on the instructor. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5566CA Cluster Course: Images Of The Human Body In The Renaissance Credits: 3

Focusing on Renaissance conceptions of the human body, this cluster treats the following topics as they are reflected in Renaissance literature, art, astrology, astronomy, biology, anatomy, medicine, and politics: A) The dignity of the human body B) Microcosm and macrocosm. C) The human body and the heavens D) Stranger manifestations: freaks and beasts E) The humors F) Disorders of the human body G) The body politic H) The human body as an object of study.

ENGLISH 5566CF Courts And Culture In The Middle Ages Credits: 3

This cluster course offers an interdisciplinary approach to the study of the Middle Ages, focusing on medieval cultures in Europe. Arranged around a series of themes, the cluster will read a variety of documentary and literary texts to investigate not only the "high culture" of the courts but also the interactions of people from various social backgrounds in Western Europe.

ENGLISH 5575 Advanced Creative Writing: Creative Nonfiction Credits: 3

This course is devoted to the study and crafting of the personal essay. Students will explore - and - practice many different varieties of this diverse form. Whether in the guise of aesthetic appreciation, cultural critique, personal history, political reportage, or travelogue, our course readings are first and foremost PERSONAL narratives, both troubled and enriched by their subjectivity (the essay's 'I'). Students will study the many challenges particular to this form (most of which concern notions of truth, and its rendering) and strive to overcome them as they create vivid personal narratives of their own.

ENGLISH 5582 European Literature: 18th Century Credits: 3

The 18th-century course will focus on a representative sampling from authors such as Corneille, Racine, Moliere, Voltaire, Prevost, La Bruyere, La Rochefoucauld, Montesquieu, Diderot, Rousseau, Schiller, Goethe, and Grimmshausen. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5591 Research In Selected Fields Credits: 1-3

Individual study under the direction of a senior member of the department, leading to the writing of a formal or scholarly paper. May be repeated for credit.

ENGLISH 5598A MFA Thesis Credits: 3-6

Under the guidance of a graduate MFA faculty member, students completing the MFA must complete and orally defend a publishable or producible manuscript. May be repeated for a maximum of six hours credit.

ENGLISH 5599 Research And Thesis Credits: 1-9

A student, with permission of the graduate committee, may write a thesis for 3 hours credit.

ENGLISH 5600 Introduction To Doctoral Study In English Credits: 3

Introduction to research skills necessary for doctoral work, particularly for writing the thesis; attention will be paid both to traditional skills such as bibliography and to computer skills.

ENGLISH 5601 Culminating Experience in Literature Credit: 1

Under the guidance of a graduate faculty member in English, students following the program of study in Literature must revise and orally defend a 20-30 page paper in Literature on a pass/no pass basis.

ENGLISH 5602 Culminating Experience in Language & Literature Credit: 1

Under the Guidance of a graduate faculty member in English, Students following the program of study in Language Literature must revise and orally defend a 20-30 page paper in Language Literature on a pass/no pass basis.

ENGLISH 5603 Culminating Experience in Manuscript, Print Culture, & Editing. Credit: 1

Under the guidance of a graduate faculty member in English, students following the program of Study in Manuscript, Print Culture, and Editing must revise and orally defend a 20-30 page paper in Manuscript, Print Culture, and Editing on a pass/no pass basis.

ENGLISH 5650 Doctoral Seminar Credits: 3

ENGLISH 5691 Doctoral Research In Selected Fields Credits: 3

Individual study under the direction of a senior member of the department leading to the writing of a formal or scholarly paper. May be repeated for credit.

ENGLISH 5699 Research And Dissertation Credits: 1-15

Research and preparation for the doctoral dissertation.

ENGLISH 5899 Required Graduate Enrollment Credit: 1

Bachelor of Arts: English

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Create coherent academic arguments that are built upon multi-leveled textual analysis.
- Integrate close reading of primary texts.
- Situate texts in cultural and/or historical contexts.
- Engage in critical conversations.
- Present an essay in ways that reflect a sense of professional rules and conventions.

The Bachelor of Arts in English program is recommended for students interested in literature and language, in writing and reading, in texts of all types and how they influence and reflect our world. The English major is also an excellent choice for those interested in obtaining a firm foundation for graduate study in programs as wide-ranging as business or law school, communications, cultural studies, and, of course, English and Creative Writing. English majors planning to attend graduate school are strongly urged to take courses in all periods of English and American literature.

To graduate with a major in English, students must achieve a grade-point average of at least 2.0 in the 36-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement. At least 18 hours must be taken in the English Department at UMKC. Students complete a capstone project in their final year.

No more than one course in Creative Writing may be counted toward the 36-hour requirement for the Literature major. No courses in expository writing or journalism may be used to fulfill the 300- or 400-level elective requirements.

All students with a major in English must fulfill these requirements. Emphasis areas can be added to the major and they will not be on the diploma, but will be noted in the transcript.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		10

Major Requirements

Students must successfully complete the major requirements below with at least 18 of the 36 required hours taken in the department at UMKC with 12 of those hours at the 300-level or above.

Code	Title	Credits
All of the following in literature:		
ENGLISH 311	American Literature I	3
ENGLISH 317	British Literature I	3
ENGLISH 321	American Literature II	3
ENGLISH 323	Shakespeare	3
ENGLISH 327	British Literature II	3
Select one of the following in Language:		3
ENGLISH 320	Structure Of English	
ENGLISH 330	History Of The English Language	
Select one of the following in Rhetoric:		3
ENGLISH 305WI	Theory And Practice Of Composition	
ENGLISH 308	Rhetorics of New Media	
ENGLISH 309WI	Rhetorics of Public Memory	
ENGLISH 445	History And Principles Of Rhetoric	
Select two electives from the following pre-1900s courses (see footnote for additional details). ¹		6
CLASSICS 300CY	Ancient World in Cinema	
CLASSICS 340AWI	Classical Literature In Translation	
COMM-ST 323	Concepts of the Hero in Ancient Literature and World Cinema	
ENGLISH 318	Bible As Literature	
ENGLISH 331	African American Literature I	
ENGLISH 355	The Novel Before 1900	
ENGLISH 404	Old English	
ENGLISH 412	Chaucer	
ENGLISH 413	Renaissance Literature I	
ENGLISH 414	Milton	
ENGLISH 418	19th-Century American Literature	
ENGLISH 431	18th-Century British Literature	
ENGLISH 433	Histories Of Writing, Reading, And Publishing	
ENGLISH 455	Studies In The Novel 1740-1900	
Select three electives from the following courses or any of those not taken in the pre-1900s section above (see footnote for additional details): ¹		9
CLASSICS 119	Myth and Literature	
COMM-ST 354	Introduction to Screenwriting	
ENGLISH 120	Literary Monstrosities	
ENGLISH 123	True Lives: Autobiographical Arts and Acts	
ENGLISH 124	Writing About Literature	
ENGLISH 126	Popular Literature	
ENGLISH 207	World Literature in English	
ENGLISH 214	Introduction To Fiction	
ENGLISH 215	Introduction To Poetry	
ENGLISH 216	The Craft of Creative Writing	
ENGLISH 242	Women Writing/Women Reading	

ENGLISH 273	Science Fiction
ENGLISH 278	Asian American Literature
ENGLISH 312	Creative Writing I Fiction
ENGLISH 365WI	Contemporary Novel
ENGLISH 410	Black Women Writers
ENGLISH 428	20th-Century American Literature
ENGLISH 440	American Culture
ENGLISH 441	Girls And Print Culture
ENGLISH 442	Playwriting I
ENGLISH 443	Playwriting II
ENGLISH 447	Theory and Criticism in English Studies
ENGLISH 448	External Internship
ENGLISH 449A	Publication Practicum
ENGLISH 449B	Publication Practicum
ENGLISH 450	Special Readings
ENGLISH 454	The Civil Rights Movement in African American Literature
ENGLISH 456	From Field Shout to Hip Hop: African American Poetic Traditions
ENGLISH 459	African American Migrations in Literature
ENGLISH 465	Studies In The Modern Novel
ENGLISH 499	Senior Tutorial

Total Credits

36

¹ Only one English course at the 100- or 200-level may be used to fulfill an elective requirement. At least three of the five electives must be at the 400-level. Two of the five electives must cover periods prior to 1900. No courses in expository writing or journalism may be used to fulfill the 300- or 400-level elective requirements. Elective courses may be offered on a rotation basis. Please consult with your advisor for availability.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		29

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
GEFSE 101		3 1XX/2XX/3XX English Major Elective	3
ENGLISH 110 ^{CC}		3 ENGLISH 225	3
COMM-ST 110, 140, or 277		3 MATH 116 or STAT 115	3
GECRT-AH 101		3 GECRT-SS 101	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 311, 321, 317, or 327 ^{CC}		3 ENGLISH 311, 321, 317, or 327 ^{CC}	3
GECUE 201		3 3XX/4XX English Major Elective	3
HISTORY 101, 102, or POL-SCI 210		3 GECDV 201	3
Foreign Language course (211)		3 GECRT-SC 101	3
General Elective		3 General Elective	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 311, 321, 317, or 327		3 ENGLISH 311, 321, 317, or 327	3
ENGLISH 323		3 ENGLISH 3XX/4XX Rhetoric Elective	3
General Elective		3 Lab Science ^{LO}	1
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		General Elective	3
		15	16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
4XX English Major Elective		3 4XX English Major Elective	3
ENGLISH 3XX Language Elective		3 4XX English Major Elective	3
General Elective		3 3XX/4XX General Elective (WI course if not yet completed)	3
General Elective		3 General Elective	3
General Elective		3 General Elective	2
		15	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

English American Literary and Cultural Studies Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

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Student Learning Outcomes

Students graduating from this program will:

- Create coherent academic arguments that are built upon multi-leveled textual analysis
- Integrate close readings of primary texts
- Situate texts in cultural and/or historical contexts
- Engage in critical conversations
- Present an essay in ways that reflect a sense of professional rules and convention

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		10

Major Requirements

Students must successfully complete the major requirements below with at least 18 of the 36 required hours taken in the department at UMKC with 12 of those hours at the 300-level or above.

Code	Title	Credits
Complete the following introductory course:		
ENGLISH 337	Introduction to American Literary and Cultural Studies	3
Complete the following in Literary Surveys:		
ENGLISH 311	American Literature I	3
ENGLISH 321	American Literature II	3
ENGLISH 331	African American Literature I	3
Select two of the following in Language, Rhetoric, and Theory:		6
ENGLISH 308	Rhetorics of New Media	
ENGLISH 309WI	Rhetorics of Public Memory	
ENGLISH 441	Girls And Print Culture	
ENGLISH 445	History And Principles Of Rhetoric	
ENGLISH 447	Theory and Criticism in English Studies	
Select three of the following in Cultural Issues in American Literature:		9
ENGLISH 278	Asian American Literature	
ENGLISH 410	Black Women Writers	
ENGLISH 440	American Culture	
ENGLISH 454/BLKS 337	The Civil Rights Movement in African American Literature	
ENGLISH 456/BLKS 334	From Field Shout to Hip Hop: African American Poetic Traditions	
ENGLISH 459/BLKS 330	African American Migrations in Literature	
ENGLISH 468	Women's Literature in Africa and the African Diaspora	
Select two of the following Electives:		6
ANTHRO 103	Introduction To Cultural Anthropology	
BLKS 302	Conceptual and Theoretical Foundations in African American Studies	
CONSVTY 353A	History And Development Of Jazz I	
CONSVTY 353WI	History and Development of Jazz II	
ECON 314	Political Economy of Race, Class And Gender: Theory, History, And Policy	
ENGLISH 327	British Literature II	
ENGLISH 431	18th-Century British Literature	
ENGLISH 433	Histories Of Writing, Reading, And Publishing	
GEOG 309	Urban Geography	
HISTORY 354R		
HISTORY 358	History of the American South I	
HISTORY 379	Museums, Monuments, and American Life: An Introduction to Public History	
HISTORY 393		
HISTORY 404	Women and Gender in Latin America	
LLS 300	Special Topics in Latinx and Latin American Studies	
LLS 397	Independent Readings in Latinx and Latin American Studies	
LLS 400	Advanced Special Topics in Latinx and Latin American Studies	
LLS/ART-HIST 421	Made in the USA: Latinx Art and Experience	
SOCIOL 302	Social Stratification	
SOCIOL 322	Race And Ethnic Relations	
WGS 201	Introduction To Women's, Gender, and Sexuality Studies	

WGS 301	Introduction to Feminist Theory	
Capstone Experience: ¹		3
ENGLISH 499	Senior Tutorial ²	
Total Credits		36

¹ Please see the Director of Undergraduate Studies to apply for the Capstone course. All students must complete a Capstone contract, signed by the instructor and submitted to the Director of Undergraduate Studies before the end of the third week of the semester in which the Capstone course is being taken.

² Approval is required by a tenure-line faculty member and the Director of Undergraduate Studies for enrollment in ENGLISH 499 (<https://catalog.umkc.edu/search/?P=ENGLISH%20499>).

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		29

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year			
Fall Semester	Credits	Spring Semester	Credits
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110 ^{CC}		3 MATH 116 or STAT 115	3
GECRT-AH 101		3 COMM-ST 110 or 277	3
HISTORY 101, 102, or POL-SCI 210		3 ENGLISH 337 ^{CC}	3

Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
	15		15
Second Year			
Fall Semester	Credits	Spring Semester	Credits
ENGLISH 311, 321, 331, or 333 ^{CC}		3 ENGLISH 311, 321, 331, or 333 ^{CC}	3
GECRT-SS 101		3 GECRT-SC 101	3
GECUE 201		3 GECDV 201	3
Foreign Language course (211)		3 Lab Science ^{LO}	1
General Elective		3 General Elective	3
		General Elective	3
	15		16
Third Year			
Fall Semester	Credits	Spring Semester	Credits
ENGLISH 311, 321, 331, or 333		3 ENGLISH 311, 321, 331, or 333	3
ENGLISH 2XX/3XX/4XX Cultural Issues in American Lit Elective		3 ENGLISH 3XX/4XX Lang/Rhetoric/Theory Elective	3
1XX/2XX/3XX/4XX Interdisciplinary Elective		3 ENGLISH 3XX/4XX Cultural Issues in American Lit Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
	15		15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
ENGLISH 2XX/3XX/4XX Cultural Issues in American Lit Elective		3 ENGLISH 3XX/4XX Lang/Rhetoric/Theory Elective (WI course)	3
1XX/2XX/3XX/4XX Interdisciplinary Elective		3 1XX/2XX/3XX/4XX Interdisciplinary Elective	3
General Elective (3XX/4XX if needed)		3 General Elective (3XX/4XX if needed)	3
General Elective (3XX/4XX if needed)		3 General Elective (3XX/4XX if needed)	3
General Elective		3 General Elective	2
	15		14
Total Credits: 120			

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.

- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

English Classical, Medieval, & Early Modern Literature Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Create coherent academic arguments that are built upon multi-leveled textual analysis
- Integrate close readings of primary texts
- Situate texts in cultural and/or historical contexts
- Engage in critical conversations
- Present an essay in ways that reflect a sense of professional rules and conventions

The Bachelor of Arts in English with an emphasis in Classical, Medieval, and Early Modern Literature is recommended for students interested in a broad background in the humanities and for those interested in obtaining a firm foundation for further study in graduate school. This option within the English major involves a core of three survey courses to give students grounding in each of the three periods. Students also take one elective from each time period; a course such as "Shakespeare in Film," "The Ancient World in Film," or "Arthurian Legends" that allows for the study of how these literatures have been received in modern society; and a course on the linguistic backgrounds of these literatures, such as "History of English," "Old English," "Ancient Greek," "Classical Latin," or the "History and Principles of Rhetoric." The remaining three electives can be taken in the English Department or many other departments in the college including Classics, History, Art History, Philosophy, and Geosciences.

To graduate with a major in English, students must achieve a grade-point average of at least 2.0 in the 36-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement. At least 18 hours must be taken in the English Department at UMKC. Students complete a capstone project in their final year.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
	Writing Intensive Course (300-level or above)	3
	Foreign Language (3rd Semester Level)	9
	Laboratory Science Experience	1
Total Credits		13

Major Requirements

Students must successfully complete the major requirements below with at least 18 of the 36 required hours taken in the department at UMKC with 12 of those hours at the 300-level or above.

Code	Title	Credits
Literary Survey:		9
CLASSICS 340AWI or CLASSICS 210	Classical Literature In Translation Foundations Of Ancient World Literature I	
ENGLISH 317	British Literature I	
ENGLISH 323	Shakespeare	
Ancient Literature (choose one of the following):		3
CLASSICS 119	Myth and Literature	
ENGLISH 318	Bible As Literature	
Reception (choose one of the following):		3
CLASSICS 300CY	Ancient World in Cinema	
COMM-ST 323	Concepts of the Hero in Ancient Literature and World Cinema	
Language/Linguistics/Rhetoric (choose one of the following):		3
ENGLISH 330	History Of The English Language	
ENGLISH 404	Old English	
ENGLISH 445	History And Principles Of Rhetoric	
Any course with the curricular designation GREEK or LATIN		
Electives:		18
Any six courses from the list above, which have not already been used to satisfy a requirement, or any of the courses listed below.		
ANCH 302	Archaeology of Ancient Disasters	
ANCH 307	Frauds, Myths and Mysteries in Archaeology	
CLASSICS 369	Introduction to Prehistoric and Classical Archaeology	
CLASSICS 391WI	Ancient Greek and Roman Medicine	
ENGLISH 477CS	Classical Studies	
HISTORY 306A	History of Christianity to the Middle Ages	
HISTORY 411A	Medieval Civilization I	
HISTORY 411B	Medieval Civilization II	
HISTORY 412A	Medieval Women & Children	
HISTORY 414	Reformation	
HISTORY 431R	Medieval England, 1066 To 1485	
HISTORY 471	Ancient Greece	
HISTORY 472	Ancient Rome	
HISTORY 474	Late Antiquity: The Transformation of the Mediterranean World (200–600 AD)	
PHILOS 310WI	Ancient Philosophy	
THEATRE 350	Theatre History I	
ENGLISH/CLASSICS 499	Senior Tutorial	
Total Credits		36

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		26

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110 ^{CC}		3 MATH 116 or STAT 115	3
HISTORY 101, 102, or POL-SCI 210		3 COMM-ST 110 or 277	3
GECRT-AH 101		3 GECRT-SS 101	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
	15		15

Second Year

Fall Semester	Credits	Spring Semester	Credits
CLASSICS 210 or 340AW ^{CC}		3 ENGLISH 317 or 323 ^{CC}	3
GECRT-SC 101		3 GECUE 201	3
GECDV 201		3 Lab Science ^{LO}	1
General Elective		3 General Elective	3
Foreign Language course (211)		3 General Elective	3
		General Elective	3
	15		16

Third Year

Fall Semester	Credits	Spring Semester	Credits
CLASSICS 119 or ENGLISH 318		3 CLASSICS 300CY or COMM-ST 323	3
ENGLISH 317 or 323		3 ENGLISH 330, HISTORY 404, or HISTORY 445 (or any GREEK or LATIN course)	3
General Elective		3 3XX/4XX Classic,Medieval,Early Modern Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
3XX/4XX Classic,Medieval,Early Modern Elective		3 3XX/4XX Classical,Medieval, Early Modern Elective	3
3XX/4XX Classic,Medieval,Early Modern Elective		3 3XX/4XX Classical,Medieval, Early Modern Elective	3
3XX/4XX Classic,Medieval,Early Modern Elective		3 3XX/4XX General Elective (WI course if not yet completed)	3
General Elective (3XX/4XX if needed)		3 General Elective	3
General Elective		3 General Elective	2
		15	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Arts: English Creative Writing Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate a thorough understanding of poetics or storytelling craft through the production of creative works that are structurally sound, polished, and complete.
- Demonstrate effective problem-solving and revision strategies in the composition of poems or stories.
- Demonstrate a strong, deliberate command of style, grammar, and mechanics.
- Demonstrate a general knowledge of literary history, especially the literary traditions of their chosen genre.
- Demonstrate the ability to analyze texts critically and the ability to recognize how a text displays a writer's artistic decisions.
- Demonstrate a working vocabulary with which to discuss the technical and aesthetic aspects of their craft.

The Bachelor of Arts in English with Creative Writing Emphasis combines intensive writing workshops with courses in literature to foster discovery and mastery in creative writing. Our program is based on the belief that successful writers grow from the study of writing and the study of literature, which enables students to learn the traditions and adapt them to their own art. Students complete a capstone project in their final year.

To graduate with a major in English, students must achieve a grade-point average of at least 2.0 in the 36-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement. At least 18 hours must be taken in the English Department at UMKC. Students complete a capstone project in their final year. Courses may be offered on a rotation basis. Please consult with advisor for current availability.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		
		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		
		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		
		3
MATH 116	Mathematics For Liberal Arts	

STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		10

Major Requirements

Students must successfully complete the major requirements below with at least 18 of the 36 required hours taken in the department at UMKC with 12 of those hours at the 300-level or above.

Code	Title	Credits
Introductory Literature Courses (select one of the following):		3
CLASSICS 119	Myth and Literature	
CLASSICS 210	Foundations Of Ancient World Literature I	
ENGLISH 120	Literary Monstrosities	

ENGLISH 123	True Lives: Autobiographical Arts and Acts
ENGLISH 126	Popular Literature
ENGLISH 203	Introduction to Journalism
ENGLISH 207	World Literature in English
ENGLISH 214	Introduction To Fiction
ENGLISH 215	Introduction To Poetry
ENGLISH 216	The Craft of Creative Writing
ENGLISH 242	Women Writing/Women Reading
ENGLISH 273	Science Fiction
ENGLISH 278	Asian American Literature

Literature, Language, and Rhetoric:**15**

Select two from the following pre-1900s courses:

CLASSICS 300CY	Ancient World in Cinema
CLASSICS 340AWI	Classical Literature In Translation
COMM-ST 323	Concepts of the Hero in Ancient Literature and World Cinema
ENGLISH 311	American Literature I
ENGLISH 317	British Literature I
ENGLISH 318	Bible As Literature
ENGLISH 323	Shakespeare
ENGLISH 330	History Of The English Language
ENGLISH 331	African American Literature I
ENGLISH 355	The Novel Before 1900
ENGLISH 404	Old English
ENGLISH 431	18th-Century British Literature
ENGLISH 433	Histories Of Writing, Reading, And Publishing
ENGLISH 455	Studies In The Novel 1740-1900
ENGLISH 459	African American Migrations in Literature

Select three from the following courses or any of those not taken in the pre-1900s section above:

ENGLISH 278	Asian American Literature
ENGLISH 305WI	Theory And Practice Of Composition
ENGLISH 308	Rhetorics of New Media
ENGLISH 309WI	Rhetorics of Public Memory
ENGLISH 320	Structure Of English
ENGLISH 321	American Literature II
ENGLISH 327	British Literature II
ENGLISH 441	Girls And Print Culture
ENGLISH 445	History And Principles Of Rhetoric
ENGLISH 447	Theory and Criticism in English Studies
ENGLISH 450	Special Readings
ENGLISH 454	The Civil Rights Movement in African American Literature
ENGLISH 456	From Field Shout to Hip Hop: African American Poetic Traditions
ENGLISH 465	Studies In The Modern Novel

Writing Courses**18**

At least 6 credit hours must be at the 300-level and at least 6 credit hours must be at the 400-level.

ENGLISH 312	Creative Writing I Fiction
ENGLISH 432WI	Advanced Creative Writing Prose
ENGLISH 435WI	Advanced Creative Writing Poetry
ENGLISH 436WI	Poetic Forms
ENGLISH 437WI	Prose Forms
ENGLISH 448	External Internship
ENGLISH 449B	Publication Practicum
ENGLISH 475	Creative Nonfiction

ENGLISH 499	Senior Tutorial
The following may also qualify as additional writing courses with approval from the Director of Creative Writing:	
ENGLISH 339	Introduction to Screenwriting
ENGLISH 429B	Advanced Screenwriting
ENGLISH 442/THEATRE 437	Playwriting I
ENGLISH 443/THEATRE 438	Playwriting II
Total Credits	
36	

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		29

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC’s Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student’s evaluation of progress and major “fit”. In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC’s Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC’s PlanMyDegree ‘Audit’ (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students’ officially recorded (Office of Registration and Records) and “what if” exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC’s PlanMyDegree ‘Plans’ (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student’s officially recorded (Office of Registration and Records) and “what if” exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map
Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC’s Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program’s individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student’s responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year			
Fall Semester	Credits	Spring Semester	Credits
1XX/2XX Introductory Literature Course ^{CC}		3 ENGLISH 225	3
GEFSE 101		3 MATH 116 or STAT 115	3
ENGLISH 110 ^{CC}		3 COMM-ST 110 or 277	3
GECRT-AH 101		3 GECRT-SS 101	3

Foreign Language Requirement (110 or higher)	3	Foreign Language Requirement (120 or higher)	3
	15		15
Second Year			
Fall Semester	Credits	Spring Semester	Credits
ENGLISH 3XX/4XX Literature, Language, and Rhetoric Course I ^{CC}		3 ENGLISH 3XX/4XX Literature, Language, and Rhetoric Course II ^{CC}	3
GECUE 201		3 ENGLISH 3XX/4XX Writing Course I ^{CC}	3
HISTORY 101, 102, or POL-SCI 210		3 GECDV 201	3
Foreign Language course (211)		3 GECRT-SC 101	3
General Elective		3 General Elective	3
	15		15
Third Year			
Fall Semester	Credits	Spring Semester	Credits
ENGLISH 3XX/4XX Writing Course II		3 ENGLISH 3XX/4XX Writing Course III	3
ENGLISH 3XX/4XX Literature, Language, and Rhetoric Course III		3 ENGLISH 3XX/4XX Literature, Language, and Rhetoric Course IV	3
General Elective		3 Lab Science ^{LO}	1
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		General Elective	3
	15		16
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
ENGLISH 3XX/4XX Writing Course IV		3 ENGLISH 4XX Writing Course VI	3
ENGLISH 4XX Writing Course V (WI course recommended)		3 3XX/4XX General Elective (WI course if not completed)	3
ENGLISH 3XX/4XX Literature, Language, and Rhetoric Course V		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	2
	15		14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.

- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

English Language and Rhetoric Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Create coherent academic arguments that are built upon complex rhetorical and/or linguistic analysis.
- Analyze the language and rhetoric of various texts and media.
- Situate media in cultural and/or historical contexts.
- Engage in critical conversations.
- Present an essay in ways that reflect a sense of professional rules and conventions.

The Bachelor of Arts in English with an emphasis in Language and Rhetoric is recommended for students interested in a broad background in the humanities with a focus in language and rhetoric and for those interested in obtaining a firm foundation for further study in graduate school. Students will receive intensive emphasis in the study of rhetoric and linguistic analysis. This option is especially relevant for students considering law school and careers in communications, marketing, and business.

To graduate with a major in English, students must achieve a grade-point average of at least 2.0 in the 36-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement. At least 18 hours must be taken in the English Department at UMKC. Students complete a capstone project in their final year.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		

ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		10

Major Requirements

Students must successfully complete the major requirements below with at least 18 of the 36 required hours taken in the department at UMKC with 12 of those hours at the 300-level or above.

Code	Title	Credits
All of the following in Literature:		
ENGLISH 311	American Literature I	3
ENGLISH 317	British Literature I	3
ENGLISH 321	American Literature II	3
ENGLISH 323	Shakespeare	3
ENGLISH 327	British Literature II	3
Language (select one of the following):		3
ENGLISH 320	Structure Of English	
ENGLISH 330	History Of The English Language	
Rhetoric (select one of the following):		3
ENGLISH 305WI	Theory And Practice Of Composition	
ENGLISH 308	Rhetorics of New Media	
ENGLISH 309WI	Rhetorics of Public Memory	
ENGLISH 342WI	Women And Rhetoric	
ENGLISH 445	History And Principles Of Rhetoric	
Language/Rhetoric/Theory (select two of the following): ¹		6
ENGLISH 305WI	Theory And Practice Of Composition	
ENGLISH 308	Rhetorics of New Media	
ENGLISH 309WI	Rhetorics of Public Memory	
ENGLISH 320	Structure Of English	
ENGLISH 330	History Of The English Language	
ENGLISH 380	Composing in the Digital Age	
ENGLISH 381	Writing for Social Media	
ENGLISH 433	Histories Of Writing, Reading, And Publishing	
ENGLISH 441	Girls And Print Culture	
ENGLISH 445	History And Principles Of Rhetoric	
ENGLISH 447	Theory and Criticism in English Studies	
English Electives (select three of the following): ²		9
CLASSICS 119	Myth and Literature	
CLASSICS 300CY	Ancient World in Cinema	
CLASSICS 340AWI	Classical Literature In Translation	
COMM-ST 323	Concepts of the Hero in Ancient Literature and World Cinema	
ENGLISH 120	Literary Monstrosities	
ENGLISH 123	True Lives: Autobiographical Arts and Acts	
ENGLISH 124	Writing About Literature	
ENGLISH 126	Popular Literature	
ENGLISH 207	World Literature in English	
ENGLISH 214	Introduction To Fiction	
ENGLISH 215	Introduction To Poetry	
ENGLISH 216	The Craft of Creative Writing	
ENGLISH 242	Women Writing/Women Reading	
ENGLISH 273	Science Fiction	
ENGLISH 278	Asian American Literature	
ENGLISH 318	Bible As Literature	
ENGLISH 331	African American Literature I	
ENGLISH 339	Introduction to Screenwriting	
ENGLISH 355	The Novel Before 1900	
ENGLISH 365WI	Contemporary Novel	

ENGLISH 404	Old English	
ENGLISH 431	18th-Century British Literature	
ENGLISH 433	Histories Of Writing, Reading, And Publishing	
ENGLISH 440	American Culture	
ENGLISH 441	Girls And Print Culture	
ENGLISH 442	Playwriting I	
ENGLISH 443	Playwriting II	
ENGLISH 447	Theory and Criticism in English Studies	
ENGLISH 449B	Publication Practicum	
ENGLISH 450	Special Readings	
ENGLISH 454	The Civil Rights Movement in African American Literature	
ENGLISH 455	Studies In The Novel 1740-1900	
ENGLISH 456	From Field Shout to Hip Hop: African American Poetic Traditions	
ENGLISH 459	African American Migrations in Literature	
ENGLISH 465	Studies In The Modern Novel	
ENGLISH 499	Senior Tutorial (approval required)	
Total Credits		36

¹ No course may be used to fulfill more than one requirement, but courses not used for "Language" or "Rhetoric" categories above may be taken for the "Language/Rhetoric/Theory" category.

² Only one course at the 100- or 200-level may be used to fulfill an elective requirement. No more than one course in Creative Writing may be counted toward the 36-hour requirement for the Language and Rhetoric Emphasis. No course in expository writing or journalism may be used to fulfill the 300-level or above elective requirement. Elective coursework may be offered on a rotation basis. Please consult with your advisor for current availability.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		29

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
GEFSE 101		3 ENGLISH 1XX/2XX Major Elective course ^{CC}	3
ENGLISH 110 ^{CC}		3 ENGLISH 225	3
GECRT-AH 101		3 MATH 116 or STAT 115	3
HISTORY 101, 102, or POL-SCI 210		3 COMM-ST 110 or 277	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 311, 321, 317, or 327 ^{CC}		3 ENGLISH 311, 321, 317, or 327 ^{CC}	3
ENGLISH 320 or 330		3 GECDV 201	3
GECRT-SS 101		3 GECRT-SC 101	3
GECUE 201		3 General Elective	3
Foreign Language course (211)		3 General Elective	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 311, 321, 317, or 327		3 ENGLISH 311, 321, 317, or 327	3
ENGLISH 323		3 ENGLISH 3XX/4XX Rhetoric Elective	3
General Elective		3 Lab Science ^{LO}	1
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		General Elective	3
		15	16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 3XX/4XX Language/ Rhetoric/Theory Elective		3 ENGLISH 3XX/4XX Language/ Rhetoric/Theory Elective	3
ENGLISH 3XX/4XX Major Elective (WI course if not yet completed)		3 ENGLISH 3XX/4XX Major Elective	3
General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3

General Elective	3 General Elective	2
	15	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Dual Degree: English BA-MA

Student Learning Outcomes

Students graduating from this program will:

- Create sophisticated academic arguments that situate texts within aesthetic, social, and historical context.
- Produce work in dialogue with current and historical conversations in the field.
- Evaluate and engage methodological approaches appropriate to academic discourse.
- Develop and defend, both orally and in writing, their critical perspectives.
- Synthesize an understanding of interrelations across diverse fields of study.
- Demonstrate a broad grounding in the diversity of fields in English studies.
- Produce written work in a vivid, appropriate style that demonstrates mastery of mechanics and grammar.

B.A. / M.A. English Dual Degree

The English B.A. / M.A. dual-degree program is a pre-professional program that offers students an opportunity to complete an advanced degree in an accelerated fashion. This allows students to shorten their time to degree. This program is ideal for students interested in careers in editing, museum studies, or non-profit work. It is also ideal for students who aim to study law, medicine, or library science.

B.A. students must apply for the B.A. / M.A. English dual-degree program when they have completed 45 credit hours. Applicants should carry at least a 3.75 GPA within the major and must have completed three of the five required literature courses. Students should submit the following materials with their application: an academic, research-based writing sample from a UMKC English course, and two recommendations from UMKC Department of English faculty. The GRE examination requirement for graduate applications is waived.

Students who are admitted to the B.A. / M.A. English dual-degree program will be advised by CAS student services for general education requirements, English Department undergraduate advisors for their major requirements, and a member of the English Department graduate faculty for their M.A. requirements.

B.A. English Requirements

Students pursuing this dual-degree must satisfy all requirements of the Bachelor of Arts: English. Students pursuing this dual-degree are required to take 36 credit hours within the major as detailed in the table below.

Code	Title	Credits
B.A. Literature (take all courses)		15
ENGLISH 311	American Literature I	
ENGLISH 317	British Literature I	
ENGLISH 321	American Literature II	
ENGLISH 323	Shakespeare	
ENGLISH 327	British Literature II	
B.A. Language & Rhetoric (take one course)		3
ENGLISH 305WI	Theory And Practice Of Composition	
ENGLISH 308	Rhetorics of New Media	
ENGLISH 309WI	Rhetorics of Public Memory	
ENGLISH 320	Structure Of English	
ENGLISH 330	History Of The English Language	
ENGLISH 445	History And Principles Of Rhetoric	
B.A. Electives (take three courses - see footnote for details) ¹		9
Take at least one elective from the following pre-1900 courses:		
CLASSICS 283	Women in the Ancient World	
CLASSICS 300CY	Ancient World in Cinema	
CLASSICS 340AWI	Classical Literature In Translation	
COMM-ST 323	Concepts of the Hero in Ancient Literature and World Cinema	
ENGLISH 278	Asian American Literature	
ENGLISH 318	Bible As Literature	
ENGLISH 331	African American Literature I	
ENGLISH 355	The Novel Before 1900	
ENGLISH 404	Old English	
ENGLISH 431	18th-Century British Literature	
ENGLISH 433	Histories Of Writing, Reading, And Publishing	
ENGLISH 455	Studies In The Novel 1740-1900	
Take two more electives from the following courses or any of those not previously taken from the pre-1900 list above:		
ENGLISH 312	Creative Writing I Fiction	
ENGLISH 339	Introduction to Screenwriting	
ENGLISH 365WI	Contemporary Novel	
ENGLISH 441	Girls And Print Culture	
ENGLISH 442/THEATRE 437	Playwriting I	
ENGLISH 443/THEATRE 438	Playwriting II	
ENGLISH 447	Theory and Criticism in English Studies	
ENGLISH 449B	Publication Practicum	
ENGLISH 450	Special Readings	
ENGLISH 454/BLKS 337	The Civil Rights Movement in African American Literature	
ENGLISH 456/BLKS 334	From Field Shout to Hip Hop: African American Poetic Traditions	
ENGLISH 459/BLKS 330	African American Migrations in Literature	
ENGLISH 465	Studies In The Modern Novel	
M.A. Foundation (take all three courses)		9
Students must complete at least 90 credit hours before enrolling in graduate courses for the M.A. Any exceptions to this policy must be approved by the English Department's Director of Graduate Studies.		
ENGLISH 5500	Graduate Study In English	
ENGLISH 5547	Theory and Criticism in English Studies	

English Graduate Course Elective

Total Credits

36

- ¹ At least one of the three electives must be at the 400-level. One of the three electives must cover periods prior to 1900. No courses in expository writing or journalism may be used to fulfill elective requirements. Elective courses may be offered on a rotation basis. Please consult with your advisor for availability.

M.A. English Requirements

Students pursuing this dual-degree program must satisfy all requirements of the Master of Arts: English, including the foreign language requirement. Of the 31 credit hours required for the M.A. in English, 9 credit hours will be applied from the courses required for the B.A. in English, as listed above.

For detailed course requirements, see the Master of Arts: English Degree Requirements page (<https://catalog.umkc.edu/colleges-schools/arts-sciences/academic-departments-programs/english-language-literature/master-of-arts-english/>).

Interdisciplinary Ph.D in English

English is an academic discipline eligible for full participation in UMKC's Interdisciplinary Ph.D. Program. Interested students should review the School of Graduate Studies catalog for general and discipline-specific admission criteria, academic regulations, and degree requirements and also contact the Department's I.Ph.D. Coordinator.

Suggested Focus Areas: American Studies; Manuscript and Print Culture; Medieval Studies; Rhetoric and Composition; Transatlantic Studies; Women's and Gender Studies.

English as a Primary Discipline coordinates well with the co-disciplines of Art History, History, and the Humanities Consortium.

Master of Arts: English

Student Learning Outcomes

Students graduating from this program will:

- Create sophisticated academic arguments that situate texts within aesthetic, social, and historical context.
- Produce work in dialogue with current and historical conversations in the field;
- Evaluate and engage methodological approaches appropriate to academic discourse;
- Develop and defend, both orally and in writing, their critical perspectives;
- Synthesize an understanding of interrelations across diverse fields of study;
- Demonstrate a broad grounding in the diversity of fields in English studies.
- Produce written work in a vivid, appropriate style that demonstrates mastery of mechanics and grammar.

The Department of English offers the Master of Arts in English, which focuses on literary study, as well as two emphasis areas that allow students to concentrate their studies in a particular area: 1) Language and Rhetoric, and 2) Manuscript, Print Culture, and Editing. Through courses in English and American literature, creative and expository writing, film, linguistics, composition/rhetoric, literary criticism, the history of books and print culture, as well as editing, these programs of study are designed to prepare students for teaching, research, and writing careers, for careers in editing, and for further study at the doctoral level. The 31-hour M.A. in English is designed for students desiring a general background in English and American literature and is strongly recommended for students planning further graduate study in English and/or American literature.

The Language and Rhetoric emphasis is designed for students who wish to combine graduate study of literature with the study of linguistics and/or composition and rhetoric. This emphasis is recommended for students interested in teaching in community colleges or secondary schools and for students interested in pursuing the Ph.D. in composition and rhetoric or linguistics.

The Manuscript, Print Culture, and Editing emphasis is designed for students who wish to combine the study of literature with the study of book history, print culture, and editing. This emphasis is recommended for students interested in editorial careers, offering several internship experiences in print and online media, and for students interesting in pursuing the Ph.D. in book history and print culture.

Members of the graduate faculty are assigned as advisors to newly admitted M.A. students. New graduate students should meet with their advisors as soon as possible to prepare an official program of study.

Admission

The application process is competitive. Satisfying the admission requirements does not guarantee admission to the program.

The applicant must hold:

- a B.A. in English, or a B.A. degree that includes at least 30 hours of sophomore-, junior- or senior-level English courses, or the equivalent. Applicants with fewer than 30 hours of undergraduate English courses may be admitted and assigned additional coursework as part of their program. These extra hours are added to the hours required for graduation.
- a 3.0 cumulative grade-point average in undergraduate work and a 3.0 average in undergraduate English coursework. In unusual circumstances, the graduate committee may consider applicants with lower grade-point averages.

Applicants will be asked to submit the following materials with their online application:

1. **Academic information**, including institutions attended, degrees earned, GPA, foreign language experience, honors and awards, and relevant work experience
2. **Writing sample** that demonstrates the applicant's writing abilities in the humanities in up to 15 pages of recent academic prose (upload file)
3. **Statement of purpose** that describes the applicant's academic and professional objectives in an essay of 500-600 words, discussing in detail their interest, research, and writing in their emphasis area (upload file)
4. **Three letters of recommendation** that evaluate the applicant's readiness for graduate study written by three professors or others who know the applicant's abilities and potential well (provide email addresses and recommenders will receive instructions to upload letters)
5. **Transcripts** from all post-secondary schools attended (mail to UMKC Office of Admissions, 5100 Rockhill Road, 120 Administrative Center, 64110)
6. **Graduate Teaching Assistantship** application materials, if applying, including a 250-500 word teaching statement addressing the applicant's interest in and qualifications for teaching, and an academic writing sample from an upper-level college course (upload files)

Students may not take more than six hours of graduate credit in English before entering the program as a "fully admitted" student.

Degree Requirements

Students must earn 31 graduate credits to complete the M.A. in English. Of these credits, at least 15 hours must be at graduate level (courses numbered 5000 and above) and taught by a member of the graduate faculty and at least 9 hours must be in 5000-level seminars or other 5000-level courses which are not cross-listed with 400-level courses.

Students must take ENGLISH 5500, ENGLISH 5547, and one hour of ENGLISH 5601, ENGLISH 5602, or ENGLISH 5603 for their "Culminating Experience," as is appropriate depending on the focus of their studies.

Students must maintain a 3.0 (B) grade-point average to remain in the M.A. program and to complete the degree.

By the time of graduation from the M.A. program, students must fulfill a foreign language requirement by satisfactorily completing (with a C or better) one year (two university semesters) of the same foreign language. Alternatively, the foreign language requirement may be satisfied by scoring a "C" on the final exam of the first-year, second-semester course in a foreign language. Previous undergraduate coursework may be used to satisfy this requirement. Old English may satisfy one semester of this requirement. Foreign language credits do not apply toward the 31-hour degree requirement, unless taken at the graduate level.

Students must remain continuously enrolled, except in summer, for a minimum of 1 credit hour per semester. ENGLISH 5899 is the continuous enrollment course number.

Students must complete a formal Program of Study and have it signed within a year after admission. A final Program of Study must be submitted and signed during the semester a student files to graduate.

Students must complete all coursework within seven years.

Code	Title	Credits
I. Required Courses		
ENGLISH 5500	Graduate Study In English	3
ENGLISH 447/5547	Theory and Criticism in English Studies	3
II. Literary and Rhetorical Studies		
ENGLISH 477RC/5477RC	Studies in Rhetoric and Composition	3
ENGLISH 477SA/5477SA	Studies in Authorship	
ENGLISH 477SG/5477SG	Studies in Genre	
ENGLISH 5519	Teaching Writing: Theories, Histories, Contexts, Practices	
ENGLISH 445/5545	History And Principles Of Rhetoric	
ENGLISH 470	Introduction To Descriptive Linguistics	
ENGLISH 5550J	Graduate Seminar: History Of The English Language	
ENGLISH 5550M	Graduate Seminar In Rhetoric And Composition	
ENGLISH 5555J	Graduate Seminar English Language	
ENGLISH 5555M	Graduate Seminar: Composition	

III. Early Period Literature**3**

ENGLISH 477CS/5477CS	Classical Studies
ENGLISH 477MS/5477MS	Medieval Studies
ENGLISH 477EM/5477EM	Early Modern Studies
ENGLISH 477ES/5477ES	18th-Century Studies
ENGLISH 412/5512	Chaucer
ENGLISH 422/5522	Medieval Literature
ENGLISH 452/5552	Early English Drama
ENGLISH 5503	Old English
ENGLISH 5550A	Graduate Seminar Medieval Literature I
ENGLISH 5555A	Graduate Seminar Medieval Literature II
ENGLISH 413/5513	Renaissance Literature I
ENGLISH 414/5514	Milton
ENGLISH 423/5523	Renaissance Literature II
ENGLISH 451/5551	Shakespeare Comedies And Histories
ENGLISH 452/5552	Early English Drama
ENGLISH 461/5561	Shakespeare Tragedies And Romances
ENGLISH 5550B	Graduate Seminar Renaissance Literature I
ENGLISH 5555B	Graduate Seminar Renaissance Literature II
ENGLISH 415/5515	Restoration And Early 18th-Century British Literature
ENGLISH 416/5516	The Romantic Period
ENGLISH 426/5526	The Victorian Period
ENGLISH 455/5556	Studies In The Novel 1740-1900 ¹
ENGLISH 462/5562	Restoration And 18th-Century Drama
ENGLISH 5550C	Graduate Seminar Neo-Classical Literature I
ENGLISH 5555C	Graduate Seminar Neo-Classical Literature I

IV. Late Period Literature**3**

ENGLISH 477NS/5477NS	19th-Century Studies
ENGLISH 477TS/5477TS	20th- and 21st-Century Studies
ENGLISH 410/5510	Black Women Writers ²
ENGLISH 416/5516	The Romantic Period ¹
ENGLISH 418/5518	19th-Century American Literature
ENGLISH 426/5526	The Victorian Period
ENGLISH 440/5540	American Culture ²
ENGLISH 455/5556	Studies In The Novel 1740-1900 ¹
ENGLISH 458/5558	Slave Narratives: Race, Gender, and Writing Freedom
ENGLISH 5550D	Graduate Seminar 19th Century Literature I
ENGLISH 5550E	Graduate Seminar American Literature I
ENGLISH 5555D	Graduate Seminar In 19th-Century Literature II
ENGLISH 410/5510	Black Women Writers ²
ENGLISH 417/5517	Modern Poetry
ENGLISH 427/5527	Contemporary Poetry
ENGLISH 428/5528	20th-Century American Literature
ENGLISH 440/5540	American Culture ²
ENGLISH 453/5553	Modern Drama, 1880-1945
ENGLISH 454/5554	The Civil Rights Movement in African American Literature
ENGLISH 456/5546	From Field Shout to Hip Hop: African American Poetic Traditions
ENGLISH 457/5557	Stages Toward Freedom: African American Dramatic Traditions
ENGLISH 459/5559	African American Migrations in Literature
ENGLISH 463/5563	Contemporary Drama II
ENGLISH 465/5565	Studies In The Modern Novel
ENGLISH 468/5538	Women's Literature in Africa and the African Diaspora

ENGLISH 5550F	Graduate Seminar Modern Literature I	
ENGLISH 5555E	Graduate Seminar American Literature II	
ENGLISH 5555F	Graduate Seminar In Modern Literature II	
V. Electives		15
Five graduate-level English classes not previously taken for one of the requirements listed above. One creative writing class may be taken as an elective.		
VI. Culminating Experience		1
ENGLISH 5601	Culminating Experience in Literature	
ENGLISH 5602	Culminating Experience in Language & Literature	
ENGLISH 5603	Culminating Experience in Manuscript, Print Culture, & Editing.	
Total Credits		31

Language and Rhetoric Emphasis

If desired, a student may elect the Language and Rhetoric Emphasis when obtaining the M.A. in English. Students who have selected this emphasis must complete the requirements listed below.

For students interested in teaching in community colleges or secondary schools or in pursuing a Ph.D. in composition and rhetoric, ENGLISH 5519 is highly recommended. ENGLISH 5519 is required for graduate teaching assistants.

Code	Title	Credits
I. Required Courses		
ENGLISH 5500	Graduate Study In English	3
ENGLISH 447/5547	Theory and Criticism in English Studies	3
II. Rhetoric and Composition		9
ENGLISH 477RC/5477RC	Studies in Rhetoric and Composition	
ENGLISH 5519	Teaching Writing: Theories, Histories, Contexts, Practices	
ENGLISH 445/5545	History And Principles Of Rhetoric	
ENGLISH 5550M	Graduate Seminar In Rhetoric And Composition	
ENGLISH 5555M	Graduate Seminar: Composition	
III. Electives		15
Five graduate-level English classes not previously taken for one of the requirements listed above. One creative writing class may be taken as an elective.		
VI. Culminating Experience		1
ENGLISH 5602	Culminating Experience in Language & Literature	
Total Credits		31

Manuscript, Print Culture, and Editing Emphasis

If desired, a student may elect the Manuscript, Print Culture, and Editing Emphasis when obtaining the M.A. in English. This emphasis examines the social, cultural, economic, and political history of the written word. It considers relationships among authors, editors, publishers, printers, illustrators, and booksellers as well as the reception of texts by readers, reviewers, and critics. In addition, it allows students to study the production of texts through the centuries while also gaining hands-on editing experience through internal and external publishing internships. Students will take a wide variety of courses covering a range of historical periods that have a significant emphasis on the history of reading, writing, and authorship as well as courses that focus on aspects of contemporary publishing and editing.

Students who have selected this emphasis must complete the requirements listed below.

Code	Title	Credits
I. Required Courses		
ENGLISH 5500	Graduate Study In English	3
ENGLISH 447/5547	Theory and Criticism in English Studies	3
II. Literary and Rhetorical Studies		3
ENGLISH 477RC/5477RC	Studies in Rhetoric and Composition	
ENGLISH 477SA/5477SA	Studies in Authorship	
ENGLISH 477SG/5477SG	Studies in Genre	
ENGLISH 5519	Teaching Writing: Theories, Histories, Contexts, Practices	

ENGLISH 445/5545	History And Principles Of Rhetoric	
ENGLISH 470	Introduction To Descriptive Linguistics	
ENGLISH 5550J	Graduate Seminar: History Of The English Language	
ENGLISH 5550M	Graduate Seminar In Rhetoric And Composition	
ENGLISH 5555J	Graduate Seminar English Language	
ENGLISH 5555M	Graduate Seminar: Composition	
III. Manuscript and Print Culture		3
ENGLISH 433/5533	Histories Of Writing, Reading, And Publishing	
ENGLISH 441/5541	Girls And Print Culture	
ENGLISH 464/5564	Medieval Methods & Paleography	
IV. Editing, Publishing, and Digital Humanities		3
ENGLISH 5501	Magazine Editing	
ENGLISH 5548	External Internship	
ENGLISH 5549A	Publication Practicum	
ENGLISH 5549B	Publication Practicum	
ENGLISH 5549C	Publication Practicum	
ENGLISH 5477DH	Studies in Digital Humanities	
V. Electives		15
Five graduate-level English classes not previously taken for one of the requirements listed above. One creative writing class may be taken as an elective.		
VI. Culminating Experience		1
ENGLISH 5603	Culminating Experience in Manuscript, Print Culture, & Editing.	
Total Credits		31

Culminating Experience

At the end of their M.A. course work (either in the last semester or the second to last semester), all M.A. students in English will revise a seminar paper (written in a previous course) under the guidance of a faculty mentor. The goal of the revisions will be to create a polished paper of about 20-30 pages that could be the basis for a conference paper, a writing sample, or a publishable article.

Students will enroll in and successfully complete one hour of ENGLISH 5601, ENGLISH 5602, or ENGLISH 5603 for their "Culminating Experience," as is appropriate depending on the focus of their studies. Enrollment is required in order to work on this final paper with their chosen faculty mentor.

Final papers will be reviewed by a faculty committee that will rotate each academic year. The committee will consist of two assigned members of the graduate faculty appointed by the Director of Graduate Studies, who will work with the student's faculty mentor.

Students will turn in their revised papers to their mentors and the review committee at least two weeks prior to the end of the semester. The mentor is responsible for arranging a meeting with the student and the review committee before the end of the semester in which the Culminating Experience is taken. After conducting a defense about the paper and providing feedback for the student, the mentor and the review committee will assign a grade of pass or fail. Students must complete the oral defense in order to pass.

In addition to the department requirements above, graduate students in English must comply with the requirements listed in the General Graduate Academic Regulations and Information section of this catalog.

Master of Fine Arts: Creative Writing and Media Arts

Student Learning Outcomes

Students graduating from this program will:

- Mastery of poetics or storytelling craft through the creation of a full-length manuscript of poetry, fiction, non-fiction, plays, or screenplays that are structurally sound, polished, and complete, and have a distinct voice;
- Effective problem-solving and revision strategies in the composition of poems, fiction, non-fiction, plays, or screenplays;
- A deliberate, masterful command of language, including style, grammar, and mechanics;
- Proficiency in at least one genre outside of their primary field and the ability to apply the techniques of their secondary genres to the work they produce in their primary field or study;

- Sophisticated critical analyses of literary texts, including an understanding of how a text displays a writer's artistic techniques and the ability to incorporate those techniques into their own writing; and
- Thorough knowledge of the literary traditions of their primary genre and the ability to situate their own work within current literary conversations.

The Department of English offers the degree Master of Fine Arts (M.F.A.) in Creative Writing and Media Arts. This interdisciplinary degree includes coursework in allied programs in Communication Studies and Theatre. The 42-hour program provides learning opportunities in writing, literary publishing, broadcasting, screen and stage writing, and production skills. The M.F.A. is a terminal degree in the field of Creative Writing and is designed to prepare students for careers as literary artists, authors, playwrights, poets, teachers, and screenwriters.

Admission

The application process is competitive. Satisfying the admission requirements does not guarantee admission to the program.

The applicant must hold:

- a B.A. in English, or a B.A. degree that includes at least 30 hours of sophomore-, junior- or senior-level English courses, or the equivalent. Applicants with fewer than 30 hours of undergraduate English courses may be admitted and assigned additional coursework as part of their program. These extra hours are added to the hours required for graduation.
- a 3.0 cumulative grade-point average in undergraduate work and a 3.0 average in undergraduate English coursework. In unusual circumstances, the Graduate Committee may consider applicants with lower grade-point averages.

Applicants will be asked to submit the following materials with their online application:

1. **Academic information**, including institutions attended, degrees earned, GPA, foreign language experience, honors and awards, and relevant work experience
2. **Writing sample** that demonstrates the applicant's writing abilities in a single emphasis area (no more than 10 pages for poetry; no more than 30 pages for fiction, creative nonfiction, playwriting or screenwriting)
3. **Statement of purpose** that describes the applicant's academic and professional objectives in an essay of 500-600 words, discussing in detail their interest, research, and writing in their emphasis area (upload file)
4. **Three letters of recommendation** that evaluate the applicant's readiness for graduate study written by three professors or others who know the applicant's abilities and potential well (provide email addresses and recommenders will receive instructions to upload letters)
5. **Transcripts** from all post-secondary schools attended (mail to UMKC Office of Admissions, 5100 Rockhill Road, 120 Administrative Center, 64110)
6. **Graduate Teaching Assistantship** application materials, if applying, including a 250-500 word teaching statement addressing the applicant's interest in and qualifications for teaching, and an academic writing sample from an upper-level college course (upload files)

Students may not take more than six hours of graduate credit in English before entering the program as a "fully admitted" student.

Degree Requirements

Students must earn 42 graduate credit hours beyond the bachelor's degree. Of these, at least 27 hours must be at the graduate level (courses numbered 5500 and above) and taught by a member of UMKC's graduate faculty.

Students must maintain a 3.0 (B) grade-point average to remain in the M.F.A. program and to complete the degree.

Foreign Language Requirement: By the time of graduation from the M.F.A. program, students must have completed one year (two university semesters) of a single foreign language. Alternatively, the foreign language requirement may be satisfied by scoring a "C" on the final exam of the first-year, second-semester course in foreign language. Previous undergraduate coursework may be used to satisfy this requirement.

Students must remain continuously enrolled, except in summer, for a minimum of 1 credit hour per semester. ENGLISH 5899 is the continuous enrollment course number.

Students must complete a formal Program of Study and have it signed within a year after admission. A final Program of Study must be submitted and signed during the semester a student files to graduate.

Students must complete all coursework within seven years.

Students must focus on one or more of the following genres:

- Creative Nonfiction (p. 779)
- Fiction (p. 788)
- Playwriting (p. 781)
- Screenwriting
- Poetry (p. 784)

With approval from the Director of Creative Writing and the instructor of the course, students may arrange to submit creative work in their core genre in a workshop of another genre.

Residency requirements: a minimum of 33 hours must be completed at UMKC.

Requirements for M.F.A. Thesis

In consultation with the faculty, the student will choose a thesis committee comprised of three members: a thesis director from the M.F.A. faculty and two other faculty members approved by the director and selected from the M.F.A. faculty, the faculty of another institution, or the faculties of the Departments of English, Communication Studies, or Theatre. Under the guidance of the thesis director, the student will complete a publishable or producible manuscript of one of the following:

- a book of poems (48-80 pages, single spaced); or
- a book of short stories or creative nonfiction essays (180 pages, double spaced); or
- a novel or novel-length nonfiction book (180-page minimum, double spaced); or
- a full-length play or several one-act plays; or
- a feature-length screenplay (95-120 pages) or a series bible and two 1-hour episodes (20 pages + two 45-page episodes); or
- a full-length cross-genre work, with Committee Chair permission.

At the completion of the writing project, the student will meet with his or her committee for a one-hour defense of the thesis.

Advisors may approve courses in other departments that may be highly valuable for particular student programs, e.g., History for documentary film, Foreign Language for translation work, Philosophy for aesthetics and theoretical/experimental approaches, and Art. Collaborative directed studies may be offered to allow two or more students to use two or more genres/media. Students may also seek collaborative opportunities in the Conservatory and in Computer Science.

In addition to the department requirements above, graduate students in English must comply with the requirements listed in the General Graduate Academic Regulations and Information (p. 454) section of this catalog.

Master of Fine Arts: Creative Writing & Media Arts - Creative Nonfiction Emphasis

Student Learning Outcomes

Students graduating from this program will:

- Show mastery of storytelling craft through the creation of a full-length manuscript of creative nonfiction that: a) is structurally sound; b) is polished and complete; c) has a distinct voice and/or vision.
- Show evidence of effective problem-solving and revision strategies
- Demonstrate a deliberate, masterful command of language, including: a) Style; b) grammar and mechanics.
- Demonstrate, in the text or critical introduction, a proficiency in at least one genre outside of their primary field and the ability to apply the techniques of their secondary genres to the work they produce in their primary field of study
- Demonstrate sophisticated critical analyses of literary texts, including an understanding of how a text displays a writer's artistic techniques and the ability to incorporate those techniques into their own writing.
- Demonstrate thorough knowledge of the literary traditions of their primary genre and the ability to situate their own work within current literary conversation.

Coursework

This emphasis follows the Master of Fine Arts in Creative Writing and Media Arts (p. 777) Program Requirements. Students must complete the following coursework for this emphasis:

I. 12 hours of craft workshop: Students choose 4 workshops in their core genre

Code	Title	Credits
ENGLISH 5501	Magazine Editing	3
ENGLISH 5502	Magazine Nonfiction	3
ENGLISH 5575	Advanced Creative Writing: Creative Nonfiction	3
ENGLISH 5555K	Graduate Seminar In Creative Writing: Poetry	3
ENGLISH 5555N	Graduate Seminar: Prose Fiction	3

II. 6 hours of the interdisciplinary component. Students choose at least two craft, workshop, or production courses outside their core genre in English, Theatre, or Communication Studies.

Code	Title	Credits
English		
ENGLISH 432WI/5532	Advanced Creative Writing Prose	3
ENGLISH 437WI/5537	Prose Forms	3
ENGLISH 5550K	Graduate Seminar: Creative Writing Prose	3
ENGLISH 5555N	Graduate Seminar: Prose Fiction	3
ENGLISH 435WI/5535	Advanced Creative Writing Poetry	3
ENGLISH 436WI/5536	Poetic Forms	3
ENGLISH 5555K	Graduate Seminar In Creative Writing:Poetry	3
ENGLISH 5548	External Internship	1-3
ENGLISH 5549B	Publication Practicum	1-3
ENGLISH 5555J	Graduate Seminar English Language	3
Communication Studies Department		
COMM-ST 354	Introduction to Screenwriting ((for MFAs: COMM-ST 5597))	3
COMM-ST 454	Advanced Screenwriting ((For MFAs: COMM-ST 5598))	3
COMM-ST 385	Documentary Production	3
COMM-ST 457	Client-Based Media Production	3
COMM-ST 471	Advanced Media Production	3
COMM-ST 5554	Graduate Seminar: Screenwriting	3
Theatre Department		
THEATRE 400H	Special Problems In Theatre: Playwriting	1-6
THEATRE 437	Playwriting I	3
THEATRE 438	Playwriting II	3
THEATRE 415	Beginning Directing	3
THEATRE 5516A	Technical Production for The Practitioner	3
THEATRE 5516B	Technical Production for The Practitioner	3
THEATRE 5545	Professional Acting Techniques I	3
THEATRE 5565	Introduction To Professional Directing	3
THEATRE 5578	Professional Theatre Administration	3
THEATRE 5590H	Directed Graduate Studies: Playwriting	3-6

III. 12 hours of literature courses are required. 15 hours are recommended.

Students will choose from among more than 65 literature courses listed below. Their principal focus will be in the core genre in which they plan to write their final portfolio, but they may also reach into other genres as well. With their advisor's permission students may also choose courses from other departments.

Code	Title	Credits
ENGLISH 5508	Harlem Renaissance	3
ENGLISH 5510	Black Women Writers	3
ENGLISH 5512	Chaucer	3
ENGLISH 5513	Renaissance Literature I	3
ENGLISH 5514	Milton	3
ENGLISH 5515	Restoration And Early 18th-Century British Literature	3
ENGLISH 5516	The Romantic Period	3
ENGLISH 5517	Modern Poetry	3
ENGLISH 5518	19th-Century American Literature	3
ENGLISH 5519	Teaching Writing: Theories, Histories, Contexts, Practices	3
ENGLISH 5522	Medieval Literature	3
ENGLISH 5523	Renaissance Literature II	3
ENGLISH 5526	The Victorian Period	3
ENGLISH 5527	Contemporary Poetry	3

ENGLISH 5528	20th Century American Literature	3
ENGLISH 5534	Postcolonial Literature	3
ENGLISH 5550A	Graduate Seminar Medieval Literature I	3
ENGLISH 5550B	Graduate Seminar Renaissance Literature I	3
ENGLISH 5550C	Graduate Seminar Neo-Classical Literature I	3
ENGLISH 5550D	Graduate Seminar 19th Century Literature I	3
ENGLISH 5550E	Graduate Seminar American Literature I	3
ENGLISH 5550F	Graduate Seminar Modern Literature I	3
ENGLISH 5550G	Graduate Seminar Literary Criticism	3
ENGLISH 5550H	Graduate Seminar Studies In Fiction I	3
ENGLISH 5550I	Graduate Seminar In Dramatic Literature I	3
ENGLISH 5550J	Graduate Seminar: History Of The English Language	3

Communication Studies Department

COMM-ST 339	Introduction to Film Theory	3
COMM-ST 384	Documentary Film History	3
COMM-ST 392	Topics in World Cinema	3
COMM-ST 393	Topics in Sound & Cinema	3
COMM-ST 394	Topics in Gender and Cinema	3

Theatre Department

THEATRE 400F	Special Problems In Theatre: History	1-6
THEATRE 400M	Special Problems In Theatre: Theory And Criticism	1-6
THEATRE 400N	Special Problems In Theatre: Dramaturgy	1-6
THEATRE 5506RR	French Drama And Theatre	3
THEATRE 5507	19Th-Century Continental Theatre	3
THEATRE 5508	20Th-Century Continental Theatre	3
THEATRE 5509	Russian Drama And Theatre	3
THEATRE 5510	History Of The American Theatre I	3
THEATRE 5511	History Of The American Theatre II	3
THEATRE 5512R	History Of The English Stage I	3
THEATRE 5513	History Of The English Stage II	3
THEATRE 5557	Theatre History I	3
THEATRE 5560	Theatre History II	3
THEATRE 5563	Text Analysis I	3
THEATRE 5564	Text Analysis II	3
THEATRE 5590M	Directed Graduate Studies: Theory And Criticism	3-6
THEATRE 5590N	Directed Graduate Studies: Dramaturgy	3-6

IV. 6 hours of Thesis Portfolio: ENGLISH 5598A

V. 6 hours Electives

From the list of literary classes above, students complete sufficient credit hours to bring the total of all requirements to 42 credit hours. With advisor's approval, students may also select electives from other departments.

Master of Fine Arts: Creative Writing and Media Arts - Playwriting Emphasis

Student Learning Outcomes

Students graduating from this program will:

- Show mastery of playwriting craft through the creation of a full-length manuscript of plays: a) is structurally sound; b) is polished and complete; c) has a distinct voice and/or vision.
- Show evidence of effective problem-solving and revision strategies.
- Demonstrate a deliberate, masterful command of language, including: a) style; b) grammar and mechanics.
- Demonstrate, in the text or critical introduction, a proficiency in at least one genre outside of their primary field and the ability to apply the techniques of their secondary genres to the work they produce in their primary field of study.

- Demonstrate sophisticated critical analyses of literary texts, including an understanding of how a text displays a writer's artistic techniques and the ability to incorporate those techniques into their own writing.
- Demonstrate thorough knowledge of the literary traditions of their primary genre and the ability to situate their own work within current literary conversations.

Coursework

This emphasis follows the Master of Fine Arts in Creative Writing and Media Arts Program Requirements. Students must complete the following coursework for this emphasis:

I. 12 hours of craft workshop: Students choose 4 workshops in their core genre.

Theatre Department

Code	Title	Credits
THEATRE 437	Playwriting I	3
THEATRE 438	Playwriting II	3
THEATRE 415	Beginning Directing	3
THEATRE 5516A	Technical Production for The Practitioner	3
THEATRE 5516B	Technical Production for The Practitioner	3
THEATRE 5545	Professional Acting Techniques I	3
THEATRE 5565	Introduction To Professional Directing	3
THEATRE 5578	Professional Theatre Administration	3
THEATRE 5590H	Directed Graduate Studies: Playwriting	3-6

II. 6 hours of the interdisciplinary component. Students choose at least two craft, workshop, or production courses outside their core genre in English, Theatre, or Communication Studies.

Code	Title	Credits
English		
ENGLISH 432WI/5532	Advanced Creative Writing Prose	3
ENGLISH 437WI/5537	Prose Forms	3
ENGLISH 5550K	Graduate Seminar: Creative Writing Prose	3
ENGLISH 5555N	Graduate Seminar: Prose Fiction	3
ENGLISH 435WI/5535	Advanced Creative Writing Poetry	3
ENGLISH 436WI/5536	Poetic Forms	3
ENGLISH 5555K	Graduate Seminar In Creative Writing:Poetry	3
ENGLISH 5501	Magazine Editing	3
ENGLISH 5502	Magazine Nonfiction	3
ENGLISH 475/5575	Creative Nonfiction	3
ENGLISH 5555J	Graduate Seminar English Language	3
Communication Studies Department		
COMM-ST 354	Introduction to Screenwriting ((for MFAs: COMM-ST 5597))	3
COMM-ST 454	Advanced Screenwriting ((for MFAs: COMM-ST 5598))	3
COMM-ST 385	Documentary Production	3
COMM-ST 457	Client-Based Media Production	3
COMM-ST 471	Advanced Media Production	3
COMM-ST 5554	Graduate Seminar: Screenwriting	3

III. 12 hours of literature courses are required. 15 hours are recommended.

Students choose from among more than 65 literature courses listed below. Their principal focus will be in the core genre in which they plan to write their final portfolio, but they may also reach into other genres as well. With their advisor's permission, students may also choose courses from other departments.

Code	Title	Credits
ENGLISH 5508	Harlem Renaissance	3
ENGLISH 5510	Black Women Writers	3
ENGLISH 5512	Chaucer	3
ENGLISH 5513	Renaissance Literature I	3

ENGLISH 5514	Milton	3
ENGLISH 5515	Restoration And Early 18th-Century British Literature	3
ENGLISH 5516	The Romantic Period	3
ENGLISH 5517	Modern Poetry	3
ENGLISH 5518	19th-Century American Literature	3
ENGLISH 5519	Teaching Writing: Theories, Histories, Contexts, Practices	3
ENGLISH 5522	Medieval Literature	3
ENGLISH 5523	Renaissance Literature II	3
ENGLISH 5526	The Victorian Period	3
ENGLISH 5527	Contemporary Poetry	3
ENGLISH 5528	20th Century American Literature	3
ENGLISH 5534	Postcolonial Literature	3
ENGLISH 5550A	Graduate Seminar Medieval Literature I	3
ENGLISH 5550B	Graduate Seminar Renaissance Literature I	3
ENGLISH 5550C	Graduate Seminar Neo-Classical Literature I	3
ENGLISH 5550D	Graduate Seminar 19th Century Literature I	3
ENGLISH 5550E	Graduate Seminar American Literature I	3
ENGLISH 5550F	Graduate Seminar Modern Literature I	3
ENGLISH 5550G	Graduate Seminar Literary Criticism	3
ENGLISH 5550H	Graduate Seminar Studies In Fiction I	3
ENGLISH 5550I	Graduate Seminar In Dramatic Literature I	3
ENGLISH 5550J	Graduate Seminar: History Of The English Language	3
Communication Studies Department		
COMM-ST 339	Introduction to Film Theory	3
COMM-ST 384	Documentary Film History	3
COMM-ST 392	Topics in World Cinema	3
COMM-ST 393	Topics in Sound & Cinema	3
COMM-ST 394	Topics in Gender and Cinema	3
Theatre Department		
THEATRE 400F	Special Problems In Theatre: History	1-6
THEATRE 400M	Special Problems In Theatre: Theory And Criticism	1-6
THEATRE 400N	Special Problems In Theatre: Dramaturgy	1-6
THEATRE 5506RR	French Drama And Theatre	3
THEATRE 5507	19Th-Century Continental Theatre	3
THEATRE 5508	20Th-Century Continental Theatre	3
THEATRE 5509	Russian Drama And Theatre	3
THEATRE 5510	History Of The American Theatre I	3
THEATRE 5511	History Of The American Theatre II	3
THEATRE 5512R	History Of The English Stage I	3
THEATRE 5513	History Of The English Stage II	3
THEATRE 5557	Theatre History I	3
THEATRE 5560	Theatre History II	3
THEATRE 5563	Text Analysis I	3
THEATRE 5564	Text Analysis II	3
THEATRE 5590M	Directed Graduate Studies: Theory And Criticism	3-6
THEATRE 5590N	Directed Graduate Studies: Dramaturgy	3-6

IV. 6 Hours of Thesis Portfolio: ENGLISH 5598A

V. 6 Hours Electives

From the list of literary classes above, students complete sufficient credit hours to bring the total of all requirements to 42 credit hours. With advisor's approval, students may also select electives from other departments.

Master of Fine Arts: Creative Writing and Media Arts - Poetry Emphasis

Student Learning Outcomes

Students graduating from this program will:

- Show mastery of storytelling craft through the creation of a full-length manuscript of poetry, fiction that: a) is structurally sound; b) is polished and complete; c) has a distinct voice and/or vision.
- Show evidence of effective problem-solving and revision strategies.
- Demonstrate a deliberate, masterful command of language, including: a) style; b) grammar and mechanics.
- Demonstrate, in the text or critical introduction, a proficiency in at least one genre outside of their primary field and the ability to apply the techniques of their secondary genres to the work they produce in their primary field of study.
- Demonstrate sophisticated critical analyses of literary texts, including an understanding of how a text displays a writer's artistic techniques and the ability to incorporate those techniques into their own writing.
- Demonstrate thorough knowledge of the literary traditions of their primary genre and the ability to situate their own work within current literary conversations?

Coursework

This emphasis follows the Master of Fine Arts in Creative Writing and Media Arts Program Requirements. Students must complete the following coursework for this emphasis:

I. 12 hours of craft workshop: Students choose 4 workshops in their core genre

Code	Title	Credits
ENGLISH 435WI/5535	Advanced Creative Writing Poetry	3
ENGLISH 436WI/5536	Poetic Forms	3
ENGLISH 5555K	Graduate Seminar In Creative Writing:Poetry	3

II. 6 hours of the interdisciplinary component. Students choose at least two craft, workshop, or production courses outside their core genre in English, Theatre, or Communication Studies.

Code	Title	Credits
ENGLISH 432WI/5532	Advanced Creative Writing Prose	3
ENGLISH 437WI/5537	Prose Forms	3
ENGLISH 5550K	Graduate Seminar: Creative Writing Prose	3
ENGLISH 5555N	Graduate Seminar: Prose Fiction	3
ENGLISH 5501	Magazine Editing	3
ENGLISH 5502	Magazine Nonfiction	3
ENGLISH 5532	Advanced Creative Writing: Fiction	3
ENGLISH 5548	External Internship	1-3
ENGLISH 5549A	Publication Practicum	1-3
ENGLISH 475	Creative Nonfiction	3
ENGLISH 5555J	Graduate Seminar English Language	3
ENGLISH 5575	Advanced Creative Writing: Creative Nonfiction	3

Communication Studies Department

COMM-ST 354	Introduction to Screenwriting	3
COMM-ST 454	Advanced Screenwriting	3
COMM-ST 385	Documentary Production	3
COMM-ST 457	Client-Based Media Production	3
COMM-ST 471	Advanced Media Production	3
COMM-ST 5554	Graduate Seminar: Screenwriting	3

Theatre Department

THEATRE 400H	Special Problems In Theatre: Playwriting	1-6
THEATRE 437	Playwriting I	3
THEATRE 438	Playwriting II	3
THEATRE 415	Beginning Directing	3
THEATRE 5516A	Technical Production for The Practitioner	3

THEATRE 5516B	Technical Production for The Practitioner	3
THEATRE 5545	Professional Acting Techniques I	3
THEATRE 5565	Introduction To Professional Directing	3
THEATRE 5578	Professional Theatre Administration	3
THEATRE 5590H	Directed Graduate Studies: Playwriting	3-6

III. 12 hours of literature courses are required. 15 hours are recommended.

Code	Title	Credits
ENGLISH 5508	Harlem Renaissance	3
ENGLISH 5510	Black Women Writers	3
ENGLISH 5512	Chaucer	3
ENGLISH 5513	Renaissance Literature I	3
ENGLISH 5514	Milton	3
ENGLISH 5515	Restoration And Early 18th-Century British Literature	3
ENGLISH 5516	The Romantic Period	3
ENGLISH 5517	Modern Poetry	3
ENGLISH 5518	19th-Century American Literature	3
ENGLISH 5519	Teaching Writing: Theories, Histories, Contexts, Practices	3
ENGLISH 5522	Medieval Literature	3
ENGLISH 5523	Renaissance Literature II	3
ENGLISH 5526	The Victorian Period	3
ENGLISH 5527	Contemporary Poetry	3
ENGLISH 5528	20th Century American Literature	3
ENGLISH 5534	Postcolonial Literature	3
ENGLISH 5550A	Graduate Seminar Medieval Literature I	3
ENGLISH 5550B	Graduate Seminar Renaissance Literature I	3
ENGLISH 5550C	Graduate Seminar Neo-Classical Literature I	3
ENGLISH 5550D	Graduate Seminar 19th Century Literature I	3
ENGLISH 5550E	Graduate Seminar American Literature I	3
ENGLISH 5550F	Graduate Seminar Modern Literature I	3
ENGLISH 5550G	Graduate Seminar Literary Criticism	3
ENGLISH 5550H	Graduate Seminar Studies In Fiction I	3
ENGLISH 5550I	Graduate Seminar In Dramatic Literature I	3
ENGLISH 5551	Shakespeare Comedies And Histories	3
ENGLISH 5552	Early English Drama	3
ENGLISH 5553	Modern Drama 1880-1945	3
ENGLISH 5555A	Graduate Seminar Medieval Literature II	3
ENGLISH 5555B	Graduate Seminar Renaissance Literature II	3
ENGLISH 5555C	Graduate Seminar Neo-Classical Literature I	3
ENGLISH 5555D	Graduate Seminar In 19th-Century Literature II	3
ENGLISH 5555E	Graduate Seminar American Literature II	3
ENGLISH 5555F	Graduate Seminar In Modern Literature II	3
ENGLISH 5555G	Graduate Seminar Literary Criticism	3
ENGLISH 5555H	Graduate Seminar Studies In Fiction II	3
ENGLISH 5555I	Graduate Seminar In Dramatic Literature II	3
ENGLISH 5555J	Graduate Seminar English Language	3

Communication Studies Department

COMM-ST 339	Introduction to Film Theory	3
COMM-ST 384	Documentary Film History	3
COMM-ST 392	Topics in World Cinema	3
COMM-ST 393	Topics in Sound & Cinema	3
COMM-ST 394	Topics in Gender and Cinema	3

Theatre Department

THEATRE 400F	Special Problems In Theatre: History	1-6
THEATRE 400M	Special Problems In Theatre: Theory And Criticism	1-6
THEATRE 400N	Special Problems In Theatre: Dramaturgy	1-6
THEATRE 5506RR	French Drama And Theatre	3
THEATRE 5507	19Th-Century Continental Theatre	3
THEATRE 5508	20Th-Century Continental Theatre	3
THEATRE 5509	Russian Drama And Theatre	3
THEATRE 5510	History Of The American Theatre I	3
THEATRE 5511	History Of The American Theatre II	3
THEATRE 5512R	History Of The English Stage I	3
THEATRE 5513	History Of The English Stage II	3
THEATRE 5557	Theatre History I	3
THEATRE 5560	Theatre History II	3
THEATRE 5563	Text Analysis I	3
THEATRE 5564	Text Analysis II	3
THEATRE 5590M	Directed Graduate Studies: Theory And Criticism	3-6
THEATRE 5590N	Directed Graduate Studies: Dramaturgy	3-6

IV. 6 Hours of Thesis Portfolio: ENGLISH 5598A**V. 6 Hours Electives**

From the list of literary classes above, students complete sufficient credit hours to bring the total of all requirements to 42 credit hours. With advisor's approval, students may also select electives from other departments.

Master of Fine Arts: Creative Writing and Media Arts - Screenwriting Emphasis

Student Learning Outcomes

Students graduating from this program will:

- Show mastery of screenwriting craft through the creation of a full-length manuscript that: a) is structurally sound; b) is polished and complete; c) has a distinct voice and/or vision.
- Show evidence of effective problem-solving and revision strategies.
- Demonstrate a deliberate, masterful command of language, including: a) style; b) grammar and mechanics.
- Demonstrate, in the text or critical introduction, a proficiency in at least one genre outside of their primary field and the ability to apply the techniques of their secondary genres to the work they produce in their primary field of study.
- Demonstrate sophisticated critical analyses of literary texts, including an understanding of how a text displays a writer's artistic techniques and the ability to incorporate those techniques into their own writing.
- Demonstrate thorough knowledge of the literary traditions of their primary genre and the ability to situate their own work within current literary conversations.

Coursework

This emphasis follows the Master of Fine Arts in Creative Writing and Media Arts Program Requirements. Students must complete the following coursework for this emphasis:

I. 12 hours of craft workshop: Students choose 4 workshops in their core genre

Code	Title	Credits
Communication Studies Department		
COMM-ST 354	Introduction to Screenwriting (for MFAs: COMM-ST 5597)	3
COMM-ST 454	Advanced Screenwriting (for MFAs: COMM-ST 5598)	3
COMM-ST 457	Client-Based Media Production	3
COMM-ST 471	Advanced Media Production	3
COMM-ST 5554	Graduate Seminar: Screenwriting	3

II. 6 hours of the interdisciplinary component. Students choose at least two craft, workshop, or production courses outside their core genre in English, Theatre, or Communication Studies.

Code	Title	Credits
English		
ENGLISH 432WI/5532	Advanced Creative Writing Prose	3
ENGLISH 437WI/5537	Prose Forms	3
ENGLISH 5550K	Graduate Seminar: Creative Writing Prose	3
ENGLISH 5555N	Graduate Seminar: Prose Fiction	3
ENGLISH 435WI/5535	Advanced Creative Writing Poetry	3
ENGLISH 436WI/5536	Poetic Forms	3
ENGLISH 5555K	Graduate Seminar In Creative Writing:Poetry	3
ENGLISH 5501	Magazine Editing	3
ENGLISH 5502	Magazine Nonfiction	3
ENGLISH 475/5575	Creative Nonfiction	3
ENGLISH 5550J	Graduate Seminar: History Of The English Language	3
Theatre Department		
THEATRE 400H	Special Problems In Theatre: Playwriting	1-6
THEATRE 437	Playwriting I	3
THEATRE 438	Playwriting II	3
THEATRE 415	Beginning Directing	3
THEATRE 5516A	Technical Production for The Practitioner	3
THEATRE 5516B	Technical Production for The Practitioner	3
THEATRE 5545	Professional Acting Techniques I	3
THEATRE 5565	Introduction To Professional Directing	3
THEATRE 5578	Professional Theatre Administration	3
THEATRE 5590H	Directed Graduate Studies: Playwriting	3-6

III. 12 hours of literature courses are required. 15 hours are recommended.

Code	Title	Credits
ENGLISH 5510	Black Women Writers	3
ENGLISH 5512	Chaucer	3
ENGLISH 5513	Renaissance Literature I	3
ENGLISH 5514	Milton	3
ENGLISH 5515	Restoration And Early 18th-Century British Literature	3
ENGLISH 5516	The Romantic Period	3
ENGLISH 5517	Modern Poetry	3
ENGLISH 5518	19th-Century American Literature	3
ENGLISH 5519	Teaching Writing: Theories, Histories, Contexts, Practices	3
ENGLISH 5522	Medieval Literature	3
ENGLISH 5523	Renaissance Literature II	3
ENGLISH 5526	The Victorian Period	3
ENGLISH 5527	Contemporary Poetry	3
ENGLISH 5528	20th Century American Literature	3
ENGLISH 5534	Postcolonial Literature	3
ENGLISH 5555A	Graduate Seminar Medieval Literature II	3
ENGLISH 5555B	Graduate Seminar Renaissance Literature II	3
ENGLISH 5555C	Graduate Seminar Neo-Classical Literature I	3
ENGLISH 5555D	Graduate Seminar In 19th-Century Literature II	3
ENGLISH 5555E	Graduate Seminar American Literature II	3
ENGLISH 5555F	Graduate Seminar In Modern Literature II	3
ENGLISH 5555G	Graduate Seminar Literary Criticism	3
ENGLISH 5555H	Graduate Seminar Studies In Fiction II	3

ENGLISH 5555I	Graduate Seminar In Dramatic Literature II	3
ENGLISH 5555J	Graduate Seminar English Language	3
Communication Studies Department		
COMM-ST 339	Introduction to Film Theory	3
COMM-ST 384	Documentary Film History	3
COMM-ST 392	Topics in World Cinema	3
COMM-ST 393	Topics in Sound & Cinema	3
COMM-ST 394	Topics in Gender and Cinema	3
Theatre Department		
THEATRE 400F	Special Problems In Theatre: History	1-6
THEATRE 400M	Special Problems In Theatre: Theory And Criticism	1-6
THEATRE 400N	Special Problems In Theatre: Dramaturgy	1-6
THEATRE 5506RR	French Drama And Theatre	3
THEATRE 5507	19Th-Century Continental Theatre	3
THEATRE 5508	20Th-Century Continental Theatre	3
THEATRE 5509	Russian Drama And Theatre	3
THEATRE 5510	History Of The American Theatre I	3
THEATRE 5511	History Of The American Theatre II	3
THEATRE 5512R	History Of The English Stage I	3
THEATRE 5513	History Of The English Stage II	3
THEATRE 5557	Theatre History I	3
THEATRE 5560	Theatre History II	3
THEATRE 5563	Text Analysis I	3
THEATRE 5564	Text Analysis II	3
THEATRE 5590M	Directed Graduate Studies: Theory And Criticism	3-6
THEATRE 5590N	Directed Graduate Studies: Dramaturgy	3-6

IV. 6 Hours of Thesis Portfolio: ENGLISH 5598A

V. 6 Hours Electives

From the list of literary classes above, students complete sufficient credit hours to bring the total of all requirements to 42 credit hours. With advisor's approval, students may also select electives from other departments.

MFA in Creative Writing and Media Arts: Fiction Emphasis

Student Learning Outcomes

Students graduating from this program will:

- Show mastery of storytelling craft through the creation of a full-length manuscript of poetry, fiction that: a) is structurally sound; b) is polished and complete; c) has a distinct voice and/or vision.
- Show evidence of effective problem-solving and revision strategies.
- Demonstrate a deliberate, masterful command of language, including: a) style; b) grammar and mechanics.
- Demonstrate, in the text or critical introduction, a proficiency in at least one genre outside of their primary field and the ability to apply the techniques of their secondary genres to the work they produce in their primary field of study.
- Demonstrate sophisticated critical analyses of literary texts, including an understanding of how a text displays a writer's artistic techniques and the ability to incorporate those techniques into their own writing.
- Demonstrate thorough knowledge of the literary traditions of their primary genre and the ability to situate their own work within current literary conversations.

Coursework

This emphasis follows the Master of Fine Arts in Creative Writing and Media Arts Program Requirements. Students must complete the following coursework for this emphasis:

I. 12 hours of craft workshop: Students choose 4 workshops in their core genre

Code	Title	Credits
ENGLISH 432WI or ENGLISH 5532	Advanced Creative Writing Prose	3
ENGLISH 437WI or ENGLISH 5537	Prose Forms	3
ENGLISH 5550K	Graduate Seminar: Creative Writing Prose	3
ENGLISH 5555N	Graduate Seminar: Prose Fiction	3

II. 6 hours of the interdisciplinary component. Students choose at least two craft, workshop, or production courses outside their core genre in English, Theatre, or Communication Studies.

Code	Title	Credits
ENGLISH 5501	Magazine Editing	3
ENGLISH 5502	Magazine Nonfiction	3
ENGLISH 5532	Advanced Creative Writing: Fiction	3
ENGLISH 5535	Advanced Creative Writing: Poetry	3
ENGLISH 5536	Poetic Forms	3
ENGLISH 5537	Prose Forms	3
ENGLISH 5548	External Internship	1-3
ENGLISH 475	Creative Nonfiction	3
ENGLISH 5549A	Publication Practicum	1-3
ENGLISH 5550K	Graduate Seminar: Creative Writing Prose (recommended for fiction or nonfiction options)	3
ENGLISH 5555K	Graduate Seminar In Creative Writing:Poetry	3
ENGLISH 5555N	Graduate Seminar: Prose Fiction (recommended for fiction or nonfiction options)	3
ENGLISH 5555J	Graduate Seminar English Language	3
ENGLISH 5575	Advanced Creative Writing: Creative Nonfiction	3

Communication Studies Department

COMM-ST 354	Introduction to Screenwriting	3
COMM-ST 454	Advanced Screenwriting	3
COMM-ST 385	Documentary Production	3
COMM-ST 457	Client-Based Media Production	3
COMM-ST 471	Advanced Media Production	3
COMM-ST 5554	Graduate Seminar: Screenwriting	3

Theatre Department

THEATRE 400H	Special Problems In Theatre: Playwriting	1-6
THEATRE 437	Playwriting I	3
THEATRE 438	Playwriting II	3
THEATRE 415	Beginning Directing	3
THEATRE 5516A	Technical Production for The Practitioner	3
THEATRE 5516B	Technical Production for The Practitioner	3
THEATRE 5545	Professional Acting Techniques I	3
THEATRE 5565	Introduction To Professional Directing	3
THEATRE 5578	Professional Theatre Administration	3
THEATRE 5590H	Directed Graduate Studies: Playwriting	3-6

III. 12 hours of literature courses are required. 15 hours are recommended.

Students choose from among more than 65 literature courses listed below. Their principal focus will be in the core genre in which they plan to write their final portfolio, but they may also reach into other genres as well. With their advisor's permission, students may also choose courses from other departments.

Code	Title	Credits
ENGLISH 5508	Harlem Renaissance	3
ENGLISH 5510	Black Women Writers	3

ENGLISH 5512	Chaucer	3
ENGLISH 5513	Renaissance Literature I	3
ENGLISH 5514	Milton	3
ENGLISH 5515	Restoration And Early 18th-Century British Literature	3
ENGLISH 5516	The Romantic Period	3
ENGLISH 5517	Modern Poetry	3
ENGLISH 5518	19th-Century American Literature	3
ENGLISH 5519	Teaching Writing: Theories, Histories, Contexts, Practices	3
ENGLISH 5522	Medieval Literature	3
ENGLISH 5523	Renaissance Literature II	3
ENGLISH 5526	The Victorian Period	3
ENGLISH 5527	Contemporary Poetry	3
ENGLISH 5528	20th Century American Literature	3
ENGLISH 5534	Postcolonial Literature	3
ENGLISH 5550A	Graduate Seminar Medieval Literature I	3
ENGLISH 5550B	Graduate Seminar Renaissance Literature I	3
ENGLISH 5550C	Graduate Seminar Neo-Classical Literature I	3
ENGLISH 5550D	Graduate Seminar 19th Century Literature I	3
ENGLISH 5550E	Graduate Seminar American Literature I	3
ENGLISH 5550F	Graduate Seminar Modern Literature I	3
ENGLISH 5550G	Graduate Seminar Literary Criticism	3
ENGLISH 5550H	Graduate Seminar Studies In Fiction I	3
ENGLISH 5550I	Graduate Seminar In Dramatic Literature I	3
ENGLISH 5551	Shakespeare Comedies And Histories	3
ENGLISH 5552	Early English Drama	3
ENGLISH 5553	Modern Drama 1880-1945	3
ENGLISH 5555A	Graduate Seminar Medieval Literature II	3
ENGLISH 5555B	Graduate Seminar Renaissance Literature II	3
ENGLISH 5555C	Graduate Seminar Neo-Classical Literature I	3
ENGLISH 5555D	Graduate Seminar In 19th-Century Literature II	3
ENGLISH 5555E	Graduate Seminar American Literature II	3
ENGLISH 5555F	Graduate Seminar In Modern Literature II	3
ENGLISH 5555G	Graduate Seminar Literary Criticism	3
ENGLISH 5555H	Graduate Seminar Studies In Fiction II	3
ENGLISH 5555I	Graduate Seminar In Dramatic Literature II	3
ENGLISH 5555J	Graduate Seminar English Language	3
Communication Studies Department		
COMM-ST 339	Introduction to Film Theory	3
COMM-ST 384	Documentary Film History	3
COMM-ST 392	Topics in World Cinema	3
COMM-ST 393	Topics in Sound & Cinema	3
COMM-ST 394	Topics in Gender and Cinema	3
Theatre Department		
THEATRE 400F	Special Problems In Theatre: History	1-6
THEATRE 400M	Special Problems In Theatre: Theory And Criticism	1-6
THEATRE 400N	Special Problems In Theatre: Dramaturgy	1-6
THEATRE 5506RR	French Drama And Theatre	3
THEATRE 5507	19Th-Century Continental Theatre	3
THEATRE 5508	20Th-Century Continental Theatre	3
THEATRE 5509	Russian Drama And Theatre	3
THEATRE 5510	History Of The American Theatre I	3
THEATRE 5511	History Of The American Theatre II	3

THEATRE 5512R	History Of The English Stage I	3
THEATRE 5513	History Of The English Stage II	3
THEATRE 5557	Theatre History I	3
THEATRE 5560	Theatre History II	3
THEATRE 5563	Text Analysis I	3
THEATRE 5564	Text Analysis II	3
THEATRE 5590M	Directed Graduate Studies: Theory And Criticism	3-6
THEATRE 5590N	Directed Graduate Studies: Dramaturgy	3-6

IV. 6 Hours of Thesis Portfolio: ENGLISH 5598A

V. 6 Hours Electives

From the list of literary classes above, students complete sufficient credit hours to bring the total of all requirements to 42 credit hours. With advisor's approval, students may also select electives from other departments.

Minor in Creative Writing

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate a thorough understanding of poetics or storytelling craft through the production of creative works that are structurally sound, polished, and complete.
- Demonstrate effective problem-solving and revision strategies in the composition of poems or stories.
- Demonstrate a strong, deliberate command of style, grammar, and mechanics.
- Demonstrate a general knowledge of literary history, especially the literary traditions of their chosen genre.
- Demonstrate the ability to analyze texts critically and the ability to recognize how a text displays a writer's artistic decisions.
- Demonstrate a working vocabulary with which to discuss the technical and aesthetic aspects of their craft.

Program Requirements

The Minor in Creative Writing is designed for students who are eager to give focused attention to developing their talents in poetry, fiction, or creative nonfiction writing.

To graduate with a Minor in Creative Writing, students must achieve a grade-point average of at least 2.0 in the 21-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement.

Program of Study

Code	Title	Credits
Introductory Literature Course		3
CLASSICS 119	Myth and Literature	
CLASSICS 210	Foundations Of Ancient World Literature I	
ENGLISH 120	Literary Monstrosities	
ENGLISH 123	True Lives: Autobiographical Arts and Acts	
ENGLISH 126	Popular Literature	
ENGLISH 203	Introduction to Journalism	
ENGLISH 207	World Literature in English	
ENGLISH 214	Introduction To Fiction	
ENGLISH 215	Introduction To Poetry	
ENGLISH 216	The Craft of Creative Writing	
ENGLISH 242	Women Writing/Women Reading	
ENGLISH 273	Science Fiction	
ENGLISH 278	Asian American Literature	
Writing Courses		
300-level Writing Courses		3
ENGLISH 312	Creative Writing I Fiction	
ENGLISH 339	Introduction to Screenwriting	
400-level Writing Courses		6

ENGLISH 432WI	Advanced Creative Writing Prose
ENGLISH 435WI	Advanced Creative Writing Poetry
ENGLISH 436WI	Poetic Forms
ENGLISH 437WI	Prose Forms
ENGLISH 449B	Publication Practicum
ENGLISH 475	Creative Nonfiction

Additional writing courses from the 300- or 400-level courses listed above 3

With approval from an advisor and the director of creative writing, the following may also qualify as writing courses:

ENGLISH 429B	Advanced Screenwriting
ENGLISH 442/THEATRE 437	Playwriting I
ENGLISH 443/THEATRE 438	Playwriting II

Language, Literature, Rhetoric 6

CLASSICS 300CY	Ancient World in Cinema
CLASSICS 340AWI	Classical Literature In Translation
COMM-ST 323	Concepts of the Hero in Ancient Literature and World Cinema
ENGLISH 305WI	Theory And Practice Of Composition
ENGLISH 308	Rhetorics of New Media
ENGLISH 309WI	Rhetorics of Public Memory
ENGLISH 311	American Literature I
ENGLISH 317	British Literature I
ENGLISH 318	Bible As Literature
ENGLISH 320	Structure Of English
ENGLISH 321	American Literature II
ENGLISH 323	Shakespeare
ENGLISH 327	British Literature II
ENGLISH 330	History Of The English Language
ENGLISH 331	African American Literature I
ENGLISH 355	The Novel Before 1900
ENGLISH 365WI	Contemporary Novel
ENGLISH 404	Old English
ENGLISH 431	18th-Century British Literature
ENGLISH 433	Histories Of Writing, Reading, And Publishing
ENGLISH 441	Girls And Print Culture
ENGLISH 445	History And Principles Of Rhetoric
ENGLISH 447	Theory and Criticism in English Studies
ENGLISH 450	Special Readings
ENGLISH 454	The Civil Rights Movement in African American Literature
or BLKS 337	The Civil Rights Movement in African American Literature
ENGLISH 455	Studies In The Novel 1740-1900
ENGLISH 456	From Field Shout to Hip Hop: African American Poetic Traditions
or BLKS 334	From Field Shout to Hip Hop: African American Poetic Traditions
ENGLISH 459	African American Migrations in Literature
or BLKS 330	African American Migrations in Literature
ENGLISH 465	Studies In The Modern Novel

Total Credits

21

Minor in English Language and Literature

Student Learning Outcomes

Students graduating from this program will:

- Create coherent academic arguments that are built upon multi-leveled textual analysis.
- Integrate close reading of primary texts.

- Engage in critical conversations.
- Present an essay in ways that reflect a sense of professional rules and conventions.

Program Requirements

The Minor in English Language and Literature is designed for students desiring a general background in literature written in English.

To graduate with a Minor in English Language and Literature, students must achieve a grade-point average of at least 2.0 in the 18-hour program described below, but no credit will be given for courses in which the grade is below C-. Students must take 12 of the 18 hours required at the 300- or 400-level. No course may fulfill more than one requirement. No courses in journalism or in expository writing may be counted toward the Minor in English. No more than one course in Creative Writing may be counted toward the Minor in English Literature. In addition to the following approved courses, students may petition to have other considered by the Director of Undergraduate Studies in English.

Program of Study

Code	Title	Credits
Select six of the following:		18
CLASSICS/ENGLISH 119	Myth and Literature	
CLASSICS 210	Foundations Of Ancient World Literature I	
CLASSICS 340AWI	Classical Literature In Translation	
COMM-ST 323	Concepts of the Hero in Ancient Literature and World Cinema	
ENGLISH 120	Literary Monstrosities	
ENGLISH 123	True Lives: Autobiographical Arts and Acts	
ENGLISH 124	Writing About Literature	
ENGLISH 126	Popular Literature	
ENGLISH 207	World Literature in English	
ENGLISH 214	Introduction To Fiction	
ENGLISH 215	Introduction To Poetry	
ENGLISH 216	The Craft of Creative Writing	
ENGLISH 242	Women Writing/Women Reading	
ENGLISH 273	Science Fiction	
ENGLISH 278	Asian American Literature	
ENGLISH 310	Introduction To Linguistics/Language Science	
ENGLISH 311	American Literature I	
ENGLISH 317	British Literature I	
ENGLISH 318	Bible As Literature	
ENGLISH 321	American Literature II	
ENGLISH 323	Shakespeare	
ENGLISH 327	British Literature II	
ENGLISH 331	African American Literature I	
ENGLISH 355	The Novel Before 1900	
ENGLISH 404	Old English	
ENGLISH 410	Black Women Writers	
ENGLISH 412	Chaucer	
ENGLISH 413	Renaissance Literature I	
ENGLISH 414	Milton	
ENGLISH 418	19th-Century American Literature	
ENGLISH 426	The Victorian Period	
ENGLISH 428	20th-Century American Literature	
ENGLISH 431	18th-Century British Literature	
ENGLISH 433	Histories Of Writing, Reading, And Publishing	
ENGLISH 440	American Culture	
ENGLISH 441	Girls And Print Culture	
ENGLISH 450	Special Readings	
ENGLISH 454	The Civil Rights Movement in African American Literature	
ENGLISH 455	Studies In The Novel 1740-1900	

ENGLISH 456	From Field Shout to Hip Hop: African American Poetic Traditions
ENGLISH 459	African American Migrations in Literature
ENGLISH 465	Studies In The Modern Novel

Total Credits

18

Minor in Manuscript, Print Culture, and Editing

Program Requirements

The Minor in Manuscript, Print Culture, and Editing examines the social, cultural, economic, and political history of the written word. It considers relationships among authors, editors, publishers, printers, illustrators, and booksellers as well as the reception of texts by readers, reviewers, and critics. This minor allows students to study the production of texts through the centuries while also gaining hands-on editing experience through internal and external internships. Students take a wide variety of courses covering a range of historical periods that have a significant emphasis on the history of reading, writing, and authorship as well as courses that focus on aspects of contemporary publishing and editing.

To graduate with a Minor in Manuscript, Print Culture, and Editing, students must achieve a grade-point average of at least 2.0 in the 18-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement.

Program of Study

Code	Title	Credits
Editing and Publishing		3
ENGLISH 320	Structure Of English	
ENGLISH 448	External Internship (must be approved by UMKC English internship coordinator)	
ENGLISH 449A	Publication Practicum	
ENGLISH 449B	Publication Practicum	
Rhetoric and Writing		3
ENGLISH 304WI	Workplace Writing	
ENGLISH 307WI	Language, Literacy, Power	
ENGLISH 308	Rhetorics of New Media	
ENGLISH 312	Creative Writing I Fiction	
ENGLISH 342WI	Women And Rhetoric	
ENGLISH 380	Composing in the Digital Age	
ENGLISH 381	Writing for Social Media	
Literary Histories of Authorship, Reading, and Publishing		3
ENGLISH 126	Popular Literature	
ENGLISH 242	Women Writing/Women Reading	
ENGLISH 355	The Novel Before 1900	
ENGLISH 404	Old English	
ENGLISH 412	Chaucer	
ENGLISH 414	Milton	
ENGLISH 418	19th-Century American Literature	
ENGLISH 431	18th-Century British Literature	
ENGLISH 433	Histories Of Writing, Reading, And Publishing	
ENGLISH 441	Girls And Print Culture	
ENGLISH 455	Studies In The Novel 1740-1900	
ENGLISH 465	Studies In The Modern Novel	
Electives		9
Select three additional courses from any sections above.		

Total Credits

18

Minor in Writing

Program Requirements

The Minor in Writing is designed for students interested in a focus on writing of all types and genres. Students select from a menu of courses in writing, rhetoric, and linguistics.

To graduate with a Minor in Writing, students must achieve a grade-point average of at least 2.0 in the 18-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement. No more than two courses in Creative Writing may be counted toward the Minor in Writing. One writing-intensive (WI) course in a discipline other than English may be counted toward the Minor in Writing.

Program of Study

Code	Title	Credits
Select six of the following:		18
ENGLISH 203	Introduction to Journalism	
ENGLISH 301WI	Writing And The Academy	
ENGLISH 305WI	Theory And Practice Of Composition	
ENGLISH 308	Rhetorics of New Media	
ENGLISH 309WI	Rhetorics of Public Memory	
ENGLISH 312	Creative Writing I Fiction	
ENGLISH 313WI	Reporting	
ENGLISH 339	Introduction to Screenwriting	
ENGLISH 429B	Advanced Screenwriting	
ENGLISH 432WI	Advanced Creative Writing Prose	
ENGLISH 435WI	Advanced Creative Writing Poetry	
ENGLISH 436WI	Poetic Forms	
ENGLISH 437WI	Prose Forms	
ENGLISH 442/THEATRE 437	Playwriting I	
ENGLISH 443/THEATRE 438	Playwriting II	
ENGLISH 445	History And Principles Of Rhetoric	

Total Credits

18

Teacher Certification in English

Program Requirements

Certification as a middle school (grades 5-9) or secondary (grades 9-12) English teacher in either Kansas or Missouri requires that a student complete specific requirements in English and the School of Education. A separate application for teacher education is required. For further information about the program, consult the School of Education section of this catalog or contact the Education Student Services Office at (816) 235-2234.

Department of Foreign Languages and Literatures

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 frn-lg@umkc.edu
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Mailing Address:

University of Missouri-Kansas City
 Department of Foreign Languages and Literatures
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 711 E. 51 Street
 Kansas City, MO 64110-2499

Department Chair:

Kathy Krause

Professors Emeriti:

Patricia P. Brodsky, Rafael Espejo-Saavedra, Iman O. Khalil, Raymond T. Riva

Professors:

Louis Imperiale, Kathy M. Krause

Associate Professors:

K. Scott Baker (chair), Gayle Levy, Nacer Khelouz, Alice R. Reckley Vallejos, Alberto Villamandos

Assistant Professors:

Matthew Edwards

Associate Teaching Professors:

Lindsay Myers

Department Description

The Department of Foreign Languages and Literatures offers programs of study leading to the bachelor of arts degree in Languages and Literatures, with an emphasis in French Language and Literature, Spanish Language and Literature, or Classical Languages and Cultures; and graduate-level work leading to a master of arts in Romance Languages and Literatures (French and Spanish). In addition, undergraduate minors are offered in French, German, German Studies, Spanish, and Classics.

Language instruction also is offered in Arabic, Ancient Greek, Italian and Latin.

Career Implications

Aside from pursuing teaching careers, holders of degrees in foreign languages are in demand by government, the media and international business in growing numbers, as the need for increased sophistication and expertise in international affairs continues to expand. Multinational companies and organizations now view foreign language skills as an asset in a prospective employee. In the past 10 years this notion has become widespread in such areas as business, industry, commerce, civil service, education, law, communications media and health services. The changing conditions of international economics, politics and communications indicate that this trend will continue.

Higher Educational Applications

Reading knowledge of a foreign language is a requisite for many graduate degrees. Foreign language proficiency, moreover, is gaining increasing importance on all levels of university instruction as curricula are internationalized. Scholars and professionals in many fields have long recognized the need for, and advantages of, foreign language competency for improved international communication and effective conduct of basic and applied research.

Special Resources

Credit by Exam

Beginning-level courses (110, 120) are not applicable toward requirements for the major. College credit for them may be earned by examination.

CLEP credit is available for French, German or Spanish (110 and 120). Contact Testing Services to arrange for the exam. A passing score is necessary to receive credit. (No more than 30 of a student's total hours may be earned by examination, and students with senior standing cannot earn credit via CLEP.)

Departmental testing or "Credit by Examination," is also available for 211-level and 221-level credit. Students should first speak to the appropriate language advisor. The form is available online here (http://www.umkc.edu/registrar/forms/credit_by_exam.pdf). A minimum grade of C is necessary to receive credit.

Study Abroad

UMKC has exchange and study agreements with other institutions in many parts of the world. Students have an opportunity to spend a year or a semester of study at a number of universities around the globe, including at the University of Seville in Spain, the University of Lyon II in France, the University of Klagenfurt in Austria and the University of Veracruz in Xalapa, Mexico. Summer programs are held at the University of Buenos Aires, Argentina; the University of Granada, Spain; and the University of Lyon II, France.

The department encourages students to travel and study abroad on our programs or those offered by any accredited American university. It should be noted, however, that the department must approve in advance any courses taken abroad for major or graduate credit. Interested students should contact the appropriate departmental advisor.

Language Resource Center

A modern facility housing audio, video and computer equipment and both general use and specialized software is located in 109 Scofield Hall. The purpose of the lab is to supplement and support in-class foreign language learning. Tutoring services for students of French, German and Spanish are

provided free of charge. Conversation hours are also held in the Language Resource Center. All language students are encouraged to take advantage of the resources of the LRC.

Requirements for Teacher Certification in Foreign Languages

Certification as a Foreign Language teacher (K-12) in either Kansas or Missouri requires that a student complete specific requirements in Spanish, French or German and the School of Education. A separate application for teacher education is required. For further information about the program, contact Dr. Reckley Vallejos, reckleya@umkc.edu, and the School of Education at (816) 235-2234.

Faculty

Current Faculty

K. Scott Baker

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Alberto Villamandos

Associate Professor of Spanish

Chair of the Foreign Languages and Literatures Department

Licenciatura (University of Navarra, Spain); M.A., Ph.D. (University of Ottawa, Canada)

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Professors Emeriti**Patricia P. Brodsky**

Professor Emerita of German

B.A. (University of Iowa); M.A., Ph.D. (University of California, Berkeley)

Rafael Espejo-Saavedra

Professor Emeritus of Spanish

B.A., M.A. (Occidental College); Ph.D. (University of California, Los Angeles)

Iman Osman Khalil

Associate Professor Emerita of German

M.A., Dr.Phil. (University of Munich)

Raymond T. Riva

Professor Emeritus of Spanish

B.A., Ph.D. (University of Illinois); A.M. (Middlebury College)

Undergraduate**Undergraduate Degrees:**

- Bachelor of Arts: Languages and Literatures (Emphasis in Classical Languages and Cultures) (p. 811)
- Bachelor of Arts: Languages and Literatures (Emphasis in French) (p. 816)
- Bachelor of Arts: Languages and Literatures (Emphasis in Spanish)
- Bachelor of Arts: Languages and Literatures (Emphasis area in International Studies)
- Minors in French, German, Spanish, or Classics (p. 832)
- Minor in German Studies (p. 833)

Graduate**Graduate Degrees:**

- Master of Arts in Romance Languages (p. 830)

Arabic Courses

ARABIC 110 Elementary Arabic I Credits: 5

Fundamentals of the language, essentials of conversation, grammar, practical vocabulary, useful phrases, and the ability to understand, read and write simple classical Arabic.

ARABIC 110 - MOTR LANG 105: Foreign Language I



ARABIC 120 Elementary Arabic II Credits: 5

Continuation of ARABIC 110.

ARABIC 120 - MOTR LANG 106: Foreign Language II



ARABIC 211 Second Year Arabic I Credits: 3

Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.

ARABIC 221 Second Year Arabic II Credits: 3

Continuation of ARABIC 211.

ARABIC 280 Special Intermediate Arabic Topics I Credits: 1-3

Instruction of Arabic on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.

ARABIC 290 Special Intermediate Arabic Topics II Credits: 1-3

Continuation of ARABIC 280. May not be repeated for credit.

French Courses

FRENCH 110 Elementary French I Credits: 3

The goals of this course are an ability to speak and to understand simple (spoken) French as well as to read and write simple prose.

FRENCH 110 - MOTR LANG 101: French I

**FRENCH 120 Elementary French II Credits: 3**

Continuation of FRENCH 110.

FRENCH 120 - MOTR LANG 102: French II

**FRENCH 211 Second Year French I Credits: 3**

Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.

FRENCH 221 Second Year French II Credits: 3

Continuation of FRENCH 211.

Prerequisites: FRENCH 211.

FRENCH 280 Special Intermediate French Topics I Credits: 1-4

Instruction of French on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses.

FRENCH 290 Special Intermediate French Topics II Credits: 1-4

Continuation of FRENCH 280.

FRENCH 301 Introduction to French Literary Studies Credits: 3

An introduction to the study of French literature and techniques of textual criticism. Readings include representative works from various periods. Strongly recommended for all majors, to be taken before or concurrently with other upper-level courses. Taught in French.

Prerequisites: FRENCH 221.

FRENCH 304 French Literature and Culture II Credits: 3

An introduction to the history of French literature from 1800 to the present stressing historical and cultural context, the major literary movements and the developments of the various genres and historical periods. Selected readings of the works of major authors of the period. Taught in French.

Prerequisites: FRENCH 221.

FRENCH 315 Intermediate Composition and Conversation I Credits: 3

Grammar review, practice in speaking and writing French, emphasis on writing. Required for major.

Prerequisites: FRENCH 221.

FRENCH 325 Intermediate Conversation and Composition II Credits: 3

Grammar review, practice in speaking and writing French; emphasis on speaking. Required for major.

Prerequisites: FRENCH 221.

FRENCH 340WI French Texts in Translation Credits: 3

Seminar on French texts in translation. Class will be conducted in English and no knowledge of French is necessary. May be taken for major credit.

FRENCH 351 Introduction to French Phonetics Credits: 3

Introduction to the fundamentals of pronunciation and intonation patterns in modern French.

Prerequisite: FRENCH 221.

FRENCH 352 French Civilization II: Contemporary French Civilization Credits: 3

An in-depth survey of contemporary French culture, including major historical events and movements that have shaped modern France, as well as geography, the political system, family life and education, economics, etc.

Prerequisites: FRENCH 221.

FRENCH 354 French Civilization III: Lyon, Crossroads of France and Europe Credits: 3

An introduction to French culture and civilization through the history, geography, culture and arts of Lyon and its region. Offered during the Study Abroad Program in Lyon.

Prerequisites: FRENCH 221.

FRENCH 380 Special Topics Credits: 1-3

Treatment of a particular aspect of literature, language, or culture normally not offered through regular courses. May be repeated for credit when the topic changes.

Prerequisites: FRENCH 221.

FRENCH 414 Medieval Literature & Culture Credits: 3

Selected topics in medieval French literature and culture. Emphasis will be placed on the cultural and historical contexts surrounding text production in the Middle Ages. May be repeated for credit when the topic changes.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 415 Advanced Conversation and Composition I Credits: 3

Practice in speaking and writing French, with attention to advanced grammar topics and the elements of style.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 417 Renaissance French Literature and Culture Credits: 3

Selected topics in Renaissance (16th c.) French literature and culture. May be repeated for credit when the topic changes.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 424 19th-Century French Literature Credits: 3

Selected readings in various genres from Romanticism through Symbolism.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 426 20th- and 21st-Century French Literature and Culture Credits: 3

Selected readings from the Belle Epoque to the contemporary period. Special attention given to historical, cultural, and theoretical perspectives on the texts. May be repeated for credit when the topic changes.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 449 Survey of French Theater Credits: 3

A survey of the major French playwrights and their plays from the 17th through the 21st centuries. Historical and cultural influences will be covered as well as the specificities of the genre from the perspective of how the plays are performed and how we read them.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 472 Francophone Studies Credits: 3

Study of different national Francophone literatures. Reading may include writers from Quebec, Haiti, Africa, Louisiana, Vietnam, the French Indies, etc.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 473 The Francophone World Credits: 3

This course is an introduction to a large spectrum of Francophone literatures cultures around the world with a focus on North and West Africa, Belgium, Quebec, French Antilles and Haiti.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 480 Special Topics Credits: 1-3

Each time this course is offered a particular author, genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 490 Special Readings Credits: 1-3

Intensive readings in field or literary figure to be selected by the student in consultation with the instructor. Available to advanced students of French; available only when student cannot take regularly scheduled courses.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 499 Senior Seminar (Capstone) Credits: 3

Required for major. Covers seminal works of French literature in their historical and cultural context. Course content varies, but will include such elements as geography, politics, folklore, history of the language, architecture, art and music.

Prerequisites: FRENCH 315 or FRENCH 325.

FRENCH 5500CF Courts and Culture in the Middle Ages Credits: 3

This cluster course offers an interdisciplinary approach to the study of the Middle Ages, focusing on medieval cultures in Europe. Arranged around a series of themes, the cluster will read a variety of documentary and literary texts to investigate not only the "high culture" of the courts but also the interaction of people from various social backgrounds in Western Europe.

Prerequisites: admission to the graduate program in Romance Languages.

FRENCH 5512 17th-century French Literature Credits: 3

Selected readings in the literature of the 17th century, with an emphasis on non-dramatic works.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5513 18th-century French Literature Credits: 3

Emphasis on philosophical and social significance. Authors may include Marivaux, Beaumarchais, LeSage, L'Abbe Prevost, Montesquieu, Rousseau, Diderot.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5514 Medieval Literature Credits: 3

Selected readings in various genres including epic, romance, theater and lyric. Emphasis will be placed on the intertextual relations and the cultural and historical context surrounding text production in the Middle Ages.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5517 16th-century French Literature Credits: 3

Selected readings in prose and poetry from Marot through Astree. Authors may include Rabelais, Ronsard, du Bellay, Montaigne, Marguerite de Navarre.

FRENCH 5520 Non-Dramatic 17th-century French Literature Credits: 3

Evaluation and reading of the works of Malherbe and contemporaries, of Descartes and Pascal and contemporaries, and of the great authors at the height of the classical period.

FRENCH 5524 19th-century French Literature Credits: 3

Selected readings in various genres from Romanticism through symbolism.

FRENCH 5540 Medieval Romance Credits: 3

The various movements of French medieval romance from the 12th through 15th centuries with an emphasis on the 12th and 13th centuries. Analysis of literary technique and socio-historical context will be stressed. No knowledge of Old French is assumed.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5543 Early French Theater Credits: 3

An examination of the development of French theater from Late Antiquity through the Renaissance, including religious and secular drama. The focus is on literary analysis of the dramatic texts, with some consideration of theater history and dramaturgy.

Prerequisites: Admission to the MA in Romance Languages Literature program.

FRENCH 5544 Renaissance Poetry Credits: 3

French Poetry from the Grand Rhetoriqueurs through the Pleiade. Study of poetic forms, major poets and schools, and different approaches to analyzing poetry.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5545 Epistolarity and the Novel Credits: 3

Explorations of the genre through the analysis of 17th- and 18th-century French novels. Introduced by a theoretical review.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5546 17th-century French Drama Credits: 3

The classical period: Emphasis on Corneille, Racine and Moliere.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5547 19th-century French Poetry Credits: 3

The study of the poetry and dominant poetic movements of the 19th century, with special attention given to different approaches to its analysis.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5548 20th century French Theater Credits: 3

Analysis of major currents of French theater of the 20th Century, with emphasis upon the postwar period and its movements.

FRENCH 5552 Medieval Poetry Credits: 3

A study of medieval poetry including religious and secular poetry, Provençal and Old French lyric, the influence of poetry in other genres such as romance and theater, later medieval poetry of the 14th and 15th centuries, as well as a discussion of the origins of the lyric.

Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5553 Lyon, Crossroads of France and Europe Credits: 3
Lyon, Crossroads of France and Europe

FRENCH 5554 The Intellectual Origins of the French Revolution Credits: 3
Study of philosophical and political texts by Montesquieu, Rousseau, Voltaire, Diderot, etc. on government, society, language, freedom and equality. Critical study of the Enlightenment.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5555 Fin-De-Siecle and Belle Epoque Credits: 3
Study of the literary, cultural and historical context of this time period in French history, for example: Symbolism, Decadence, and the years 1900-1914.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5556 20th-century French Poetry Credits: 3
The study of 20th-century poetry with special consideration given to different approaches to its analysis.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5561 20th century French Narrative Credits: 3
The analysis of major currents in French 20th-century narrative, especially fiction and film. Courses will be organized around narrative themes or historical events and will include social and cultural components.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5563 19th-century French Fiction Credits: 3
Studies in the birth, development, and variation of French Romanticism. Readings include de Stael, Senancour, Constant, Hugo, Stendhal and Merimee. The advent of realism and naturalism in France. Readings include Balzac, Flaubert, Daudet, De Maupassant, and Zola.

FRENCH 5570 Studies in Critical Thought Credits: 3
Various currents of 20th-century literary criticism and their political and historical contexts.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5571 Autobiography Credits: 3
Analysis of autobiographies and autobiographical texts such as diaries and memoirs together with theoretical texts on the genre. The concentration of different periods or issues may change from semester to semester, i.e. the art of autobiography as practiced by 20th-century writers, especially women.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5572 Francophone Studies Credits: 3
Study of different national Francophone literatures. Reading may include writers from Quebec, Haiti, Africa, Louisiana, Vietnam, the French Indies, etc.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5580 Special Topics Credits: 1-3
Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

FRENCH 5589 Survey of French Theater Credits: 3
A survey of the major French playwrights and their plays from the 17th through the 21st centuries. Historical and cultural influences will be covered as well as the specificities of the genre from the perspective of how the plays are performed and how we read them.

FRENCH 5590 Directed Studies in French Literature Credits: 1-3
Intensive readings in a field or literary figure to be selected by the student in consultation with the instructor. Available only when student cannot take regularly scheduled courses.

Foreign Languages Courses

FRN-LNG 180 Special Elementary Foreign Languages Topics I Credits: 2-5
Instruction in foreign languages at the elementary level. Essentials of grammar, basic conversation and reading, practical vocabulary. May include introduction of new methods of foreign language teaching, special texts, and languages not offered through regular courses.

FRN-LNG 190 Special Elementary Foreign Languages Topics II Credits: 2-5
Special Elementary Foreign Languages Topics II.

FRN-LNG 230 Themes in World Cultures Credits: 3
Introduction to themes, topics, and traditions in world cultures with emphasis on historical or contemporary transnational and global issues.

FRN-LNG 231 Themes in World Languages Credits: 3
A survey of the world's human languages with a focus on typology, geography and sociolinguistics.

FRN-LNG 280 Special Intermediate Foreign Languages Topics I Credits: 1-4

Instruction in foreign languages at the second-year intermediate level. Further development of comprehension and communicative skills. Readings of moderate difficulty and grammar review. May include introduction of new methods of foreign language teaching, special texts and topics, and new languages not offered through regular courses.

FRN-LNG 290 Special Intermediate Foreign Languages Topics II Credits: 1-4

Continuation of FRN-LNG 280.

FRN-LNG 302 Love and Death in European Medieval Literature Credits: 3

This course explores the intertwined themes of love and death in medieval European literature. Students will read key works from the medieval European traditions in English and will also be introduced to key concepts in the comparative study of medieval culture.

FRN-LNG 380 Special Topics Credits: 1-3

Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

FRN-LNG 459 Foreign Languages Teacher Education Seminar Credits: 3

Supports the culminating Foreign Languages student teaching experiences, and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Peer and mentor collaboration in the analytical process are fundamental to the course objectives.

FRN-LNG 470A Internship in Foreign Languages Credits: 1-3

Intern experience under faculty supervision involving the use of the appropriate foreign language with a local firm, non-profit organization, etc. students will compile a portfolio of their work under the direction of the internship supervisor to be submitted for evaluation by their chosen faculty mentor.

Prerequisites: Junior standing.

FRN-LNG 470B School/Education Related Internship in Foreign Languages Credits: 1-3

Intern experience under faculty supervision involving the use of the appropriate foreign language at a local school. Students will keep a journal in the foreign language.

FRN-LNG 480 Special Topics Credits: 1-3

Each time this course is offered a particular genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

FRN-LNG 494 Methods of Teaching Foreign Languages Credits: 3

Teaching methods and materials for beginning and advanced classes in French, German, and Spanish. Modern language teaching methodology and material will be evaluated and demonstrated, together with effective use of the Language Resource Center, tapes, slides, film strips, and other audio-visual materials. Does not count toward a major in foreign language.

FRN-LNG 5899 Required Graduate Enrollment Credit: 1

German Courses

GERMAN 110 Elementary German I Credits: 3

The goals of this course are an ability to speak and to understand simple (spoken) German as well as to read and write simple prose.

GERMAN 110 - MOTR LANG 105: Foreign Language I

**GERMAN 120 Elementary German II Credits: 3**

Continuation of GERMAN 110.

GERMAN 120 - MOTR LANG 106: Foreign Language II

**GERMAN 211 Second-Year German I Credits: 3**

Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.

GERMAN 221 Second-Year German II Credits: 3

Continuation of GERMAN 211.

Prerequisites: GERMAN 211.

GERMAN 280 Special Intermediate German Topics I Credits: 1-4

Instruction of German on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses.

GERMAN 290 Special Intermediate German Topics II Credits: 1-4
Continuation of GERMAN 280.

GERMAN 301 Introduction to Literary Studies Credits: 3

An introduction to the study of the different genres of German literature and techniques of criticism. Readings include representative works of major authors from various periods. Strongly recommended for all majors. To be taken before or concurrently with other literature courses. Taught in German.

Prerequisites: GERMAN 221.

GERMAN 315 Intermediate Conversation and Composition I Credits: 3

Practice in speaking and writing German; emphasis on idiomatic usage. Required for major.

Prerequisites: GERMAN 221.

GERMAN 325 Intermediate Conversation and Composition II Credits: 3

Continuation of GERMAN 315. Required for major.

Prerequisites: GERMAN 221.

GERMAN 330 Graphic Narratives Credits: 3

In this class, we will read graphic narratives with a dual focus: we will investigate the literary character of these narratives and explore the ways in which text and illustration help us learn German.

GERMAN 380 Special Topics Credits: 1-3

Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

Prerequisites: GERMAN 221.

GERMAN 415 Advanced Conversation and Composition I Credits: 3

Practice in speaking and writing German, with attention to the elements of style. First semester required of all majors and second semester recommended. Both semesters required of prospective high school teachers. Either or both semesters may be repeated. No more than six hours of credit may be applied toward a degree.

Prerequisites: GERMAN 221.

GERMAN 420 German Enlightenment Drama Credits: 3

This course covers plays, dramatic theories and theater history in the German-speaking countries 1730-1780. Emphasis will be placed on the theater as a bourgeois instrument of public discourse.

Prerequisites: GERMAN 221.

GERMAN 453 Women's Voices in Germany and Austria Credits: 3

The course focuses on the role of women in German and Austrian society from the Roman era to the present, primarily through the examination of literary texts by women.

Prerequisites: GERMAN 221.

GERMAN 480 Special Topics Credits: 1-3

Each time this course is offered a particular author, genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

Prerequisites: GERMAN 221.

GERMAN 490 Special Readings Credits: 1-3

Intensive readings in a field or literary figure to be selected by the student in consultation with the instructor. Available only to advanced students of German when students cannot take regularly scheduled courses.

Prerequisites: GERMAN 221.

GERMAN 499 Senior Seminar (Capstone) Credits: 3

Required for major. Covers seminal works of German literature in their historical and cultural context. Course content varies, but will include such elements as geography, politics, folklore, history of the language, architecture, art and music.

Prerequisites: GERMAN 221.

Greek Courses

GREEK 110 Elementary Ancient Greek I Credits: 3

The goal of this course is an ability to read classical Greek. The student will be introduced to the fundamentals of grammar and the basic vocabulary of the language and will do exercises in the reading and writing of sentences. Continuous passages of Greek will be presented by the end of the semester.

GREEK 110 - MOTR LANG 105: Foreign Language I



GREEK 120 Elementary Ancient Greek II Credits: 3

A continuation of the study of the grammar and vocabulary of classical Greek, with an increasing emphasis on developing skills in translation. By the middle of the semester students will be introduced to selections from Plato, Herodotus or Homer.

Prerequisites: Greek 110 or MOTR Equivalent.

GREEK 120 - MOTR LANG 106: Foreign Language II



GREEK 211 Intermediate Ancient Greek I Credits: 3

Instruction of Greek on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.

Prerequisites: Greek 120 or MOTR Equivalent.

GREEK 221 Intermediate Ancient Greek II Credits: 3

Continuation of GREEK 211. May not be repeated for credit.

Prerequisites: Greek 211 or MOTR Equivalent.

GREEK 301 Herodotus Credits: 3

Selected readings in Ancient Greek from Herodotus' Histories.

Prerequisites: GREEK 211.

GREEK 302 Homer Credits: 3

Selected readings in Ancient Greek from Homer's Iliad or Odyssey.

Prerequisites: GREEK 211.

GREEK 310 Selected Readings in Ancient Greek and Rhetoric Credits: 3

Selected readings in Ancient Greek from works by Plato, Aristotle, or the Attic Orators.

Prerequisites: GREEK 211.

GREEK 311 Drama and Lyric Poetry Credits: 3

Selected readings in Ancient Greek from plays by Aeschylus, Sophocles, Euripides, or the Lyric Poets.

Prerequisites: GREEK 211.

GREEK 312 Greek Narrative Prose Credits: 3

Selected readings in Ancient Greek from Herodotus, Thucydides, Xenophon, Lucian, etc.

Prerequisites: GREEK 211.

GREEK 490 Special Readings in Greek Credits: 1-3

Intensive readings in period or genre or literary figure to be selected by the student in consultation with the instructor. Available only to advanced Greek students.

Italian Courses

ITALIAN 110 Elementary Italian I Credits: 3

Intended to give the student the ability to read prose of ordinary difficulty and to understand and speak simple Italian.

ITALIAN 110 - MOTR LANG 105: Foreign Language I



ITALIAN 120 Elementary Italian II Credits: 3

Continuation of ITALIAN 110.

Prerequisites: ITALIAN 110.

ITALIAN 120 - MOTR LANG 106: Foreign Language II



ITALIAN 211 Second Year Italian I Credits: 3

Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.

Prerequisites: ITALIAN 120.

ITALIAN 221 Second Year Italian II Credits: 3

Prerequisites: ITALIAN 211.

ITALIAN 280 Special Intermediate Italian Topics I Credits: 1-3

Instruction of Italian on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.

Prerequisites: ITALIAN 110, ITALIAN 120.

ITALIAN 290 Special Intermediate Italian Topics II Credits: 1-3

May not be repeated for credit.

Prerequisites: ITALIAN 280.

Latin Courses

LATIN 110 Elementary Latin I Credits: 3

Elementary Latin I introduces students with no previous Latin experience to the fundamentals of Latin grammar. The course is continued with LATIN 120.

LATIN 110 - MOTR LANG 105: Foreign Language I



LATIN 120 Elementary Latin II Credits: 3

Elementary Latin II is a continuation of LATIN 110. This course focuses on the fundamentals of Latin grammar and morphology, and students will read longer Latin passages.

Prerequisites: LATIN 110 or MOTR Equivalent.

LATIN 120 - MOTR LANG 106: Foreign Language II



LATIN 211 Second Year Latin Readings I Credits: 3

This course introduces students to extended readings from Roman authors in Latin. Students' knowledge of basic Latin grammar, vocabulary, and morphology will be reviewed and reinforced.

Prerequisites: LATIN 120 or MOTR Equivalent.

LATIN 221 Second Year Latin Readings II Credits: 3

Prerequisites: LATIN 211 or MOTR Equivalent.

LATIN 280 Special Intermediate Latin Topics I Credits: 2-4

Instruction of Latin on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.

Prerequisites: LATIN 120.

LATIN 290 Special Intermediate Latin Topics II Credits: 2-4

Continuation of LATIN 280. May not be repeated for credit.

LATIN 301 Virgil Credits: 3

Selected readings in Classical Latin from the works of Virgil.

Prerequisites: LATIN 211.

LATIN 302 Ovid Credits: 3

Selected readings in Classical Latin from Ovid's *Metamorphoses*.

Prerequisites: LATIN 211.

LATIN 314 Lyric and Elegiac Poetry Credits: 3

Selected readings in Classical Latin from Catullus, Horace, Martial, Ovid, etc.

Prerequisites: LATIN 211.

LATIN 490 Special Readings In Latin Credits: 1-3

Intensive readings in period or genre or literary figure to be selected by the student in consultation with the instructor. Available only to advanced Latin students.

Spanish Courses

SPANISH 110 Elementary Spanish I Credits: 3

The goals of this course are an ability to speak and to understand simple (spoken) Spanish as well as to read and write simple prose.

SPANISH 110 - MOTR LANG 103: Spanish I



SPANISH 120 Elementary Spanish II Credits: 3

Continuation of SPANISH 110.

SPANISH 120 - MOTR LANG 104: Spanish II



SPANISH 211 Second Year Spanish I Credits: 3

Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.

SPANISH 216 Spanish For The Health Sciences Credits: 3

This course will enable the student to converse with Hispanic patients and/or hospital personnel in situations such as admissions, patient care, lab work as ordered by a physician or dentist, emergency room procedures, etc. In addition, medical readings in Spanish will give professional and paraprofessional students an increased vocabulary related to the many fields within the health sciences. This course will satisfy one semester of the AS language requirement.

SPANISH 221 Second Year Spanish II Credits: 3

Continuation of SPANISH 211.

SPANISH 280 Special Intermediate Spanish Topics I Credits: 1-4

Instruction of Spanish on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses.

SPANISH 290 Special Intermediate Spanish Topics II Credits: 1-4

Continuation of SPANISH 280.

Prerequisite: SPANISH 221.

SPANISH 301 Introduction to Literary Studies Credits: 3

Emphasis will be placed on the study of literary theory and the philosophical ideas behind the literary movements, their relations and differences. A representative work or works of each genre will be thoroughly studied and analyzed. Critical reports will be written about different features of the literary works under consideration. Strongly recommended for all majors, to be taken before 400-level literature courses.

Prerequisites: SPANISH 221.

SPANISH 315 Intermediate Conversation And Composition I Credits: 3

Grammar review, practice in speaking and writing Spanish; emphasis on idiomatic usage and practical vocabulary. Required for major.

Prerequisites: SPANISH 221.

SPANISH 316 Spanish for Health Sciences II Credits: 3

The purpose of this class is to progressively develop the ability to communicate well with native speakers in a medical setting. Communicative and cultural goals are achieved through listening, speaking, reading and writing in the Spanish language.

Prerequisites: SPANISH 216 or SPANISH 221.

SPANISH 325 Intermediate Conversation And Composition II Credits: 3

Continuation of SPANISH 315. Required for major.

Prerequisites: SPANISH 221.

SPANISH 351 Latin American Civilization Credits: 3

Historical development of Latin America. Readings from representative literary works.

Prerequisites: SPANISH 221.

SPANISH 365 The Search for Mexican Identity Credits: 3

The goal of the course is to familiarize the student with the poignant search for self awareness and definition witnessed in the letters and fine arts of Mexico in the 20th-century. Readings will include works by Vasconcelos, Reyes, Ramos, Paz, Rulfo and Fuentes, and will be complemented by slide presentations of pertinent works by major artists.

Prerequisites: SPANISH 221.

SPANISH 374 Spanish Literature and Culture II Credits: 3

A study of the development of Spanish peninsular literature and cultures from 1700 to present.

Prerequisites: SPANISH 221.

SPANISH 380 Special Topics Credits: 1-3

Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

SPANISH 384 Spanish American Literature and Cultures II Credits: 3

The 19th and 20th-centuries. Selected readings from prose and poetry of Spanish-American writers.

Prerequisites: SPANISH 221.

SPANISH 403 History of the Spanish Language Credits: 3

An introduction to the history of the Spanish language from Latin to the present, with an overview of dialects in the Peninsula and in the Americas.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 414 Early 20th Century Peninsular Literature Credits: 3

Selected topics in early 20th century Spanish literature and culture. May be repeated for credit when the topic changes.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 415 Advanced Conversation And Composition I Credits: 3

Continued practice in speaking and writing Spanish, with attention to the elements of style. Continued in SPANISH 425. First semester required of all majors and second semester recommended. Both semesters required of prospective high school teachers. Either or both semesters may be repeated with the consent of the instructor and the Spanish section head. No more than six hours credit may be applied towards a degree.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 425 Advanced Conversation And Composition II Credits: 3

Continuation of SPANISH 415. See SPANISH 415. Required for teacher certification in Spanish.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 426 Golden Age Spanish Literature Credits: 3

Selected readings in Spanish Golden Age literature and culture. May be repeated for credit when the topic changes.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 427 Pre-Columbian And Spanish Colonial Literature Credits: 3

A study of the pre-Columbian works in drama, narrative, and poetry (Popol Vuh, Apu-Ollantay, Incan and Aztec poetry) leading into a survey of Spanish-American colonial literature.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 428 Contemporary Spanish Poetry Credits: 3

A comprehensive and intensive study of 20th-century Spanish poetry. Poets and poetry will be studied in the light of literary movements, foreign influences, political tendencies and philosophical ideas.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 436 Spain's Transition to Democracy: Literature and Film Credits: 3

This course reviews the cultural production between the death of Francisco Franco in 1975 and the entrance in the European Union in film, literature and music, within its historical and political context.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 453 Spanish-American Short Story Credits: 3

A study of Spanish-American short stories from Romanticism to the present.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 480 Special Topics Credits: 1-3

Each time this course is offered a particular genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 490 Special Readings Credits: 1-3

Intensive readings in field or literary figure to be selected by the student in consultation with the instructor. Available, by permission only, to advanced students of Spanish; available only when student cannot take regularly scheduled courses.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 499 Senior Seminar (Capstone) Credits: 3

Required for major. Covers seminal works of Peninsular and Latin American literature in their historical and cultural context. Course content varies, but will include such elements as geography, politics, folklore, history of the language, architecture, art and music. To be taken during final Fall Semester of residence.

Prerequisites: SPANISH 315 or SPANISH 325.

SPANISH 5503 History of the Spanish Language Credits: 3

An introduction to the history of the Spanish language from Latin to the present, with an overview of dialects in the Peninsula and in the Americas.

Prerequisites: SPANISH 325 or higher grammar class.

SPANISH 5514 Spanish Literature Credits: 3

Selected readings in Spanish narrative, poetry, drama and philosophical essay from the beginning of the 20th Century to the Avant-Garde movements in the 1930's.

SPANISH 5516 Medieval Spanish Literature Credits: 3

A study of selected medieval masterpieces in their Old Spanish form, with special emphasis on Romances, the Cantar de Mio Cid La Celestina, El Corbacho, Libro del buen amor, etc. Includes a short history of the Spanish language.

SPANISH 5519 Federico Garcia Lorca Credits: 3

A study in depth of the poetry and drama of Federico Garcia Lorca.

SPANISH 5520 Cervantes' Don Quixote, Part I Credits: 3

An intensive reading of the first part of Cervantes' novel, Don Quixote.

SPANISH 5521 Cervantes' Don Quixote, Part II Credits: 3

An intensive reading of the second part of Cervantes' novel, Don Quixote. Part One is not a prerequisite.

SPANISH 5526 Golden Age Drama Credits: 3

A study in depth of the creation of national theater by Lope de Vega and his followers.

SPANISH 5527 Pre-Columbian and Spanish Colonial Literature Credits: 3

A study of pre-Columbian works in drama, narrative, and poetry (Popol Vuh, Apu-Ollantay, Incan and Aztec poetry) along with a survey of Spanish-American colonial literature.

SPANISH 5528 Contemporary Spanish Poetry Credits: 3

A comprehensive and intensive study of 20th-century Spanish poetry. The poets and their poetry will be studied in the light of literary movements, foreign influences, political tendencies and philosophical ideas.

SPANISH 5529 Novel of the Mexican Revolution Credits: 3

The revolution as the principal focus of 20th-century Mexican fiction. The course will examine both the evolving understanding of the event/process and the sophistication of narrative technique employed in its presentation. Among the writers to be studied are Azuela, Guzman, Lopez y Fuentes, Yanez, Revueltas, Rulfo and Fuentes.

SPANISH 5530 Spanish Mysticism Credits: 3

An examination of the development of mysticism in Oriental and Occidental civilizations, with emphasis on the great periods of mystic experience as reflected in the literary production of the Spanish Golden Age. Readings could include the works of Fray Luis de Granada, Fray Luis de Leon, Saint John of the Cross and Saint Teresa of Avila.

SPANISH 5531 The Golden Age Novel Credits: 3

A study of major prose works of the Golden Age. Possible topics include authorship, innovative narrative techniques, textual strategies and metafiction issues. Readings could include works by Alfonso Martinez de Toledo, Diego de San Pedro, Fernando de Rojas, Francisco Delicado, Cervantes, and Lope de Vega.

SPANISH 5532 Pastoral Literature Credits: 3

A study of the development of pastoral literature during the Spanish Golden Age. Possible texts: Juan del Encina's Eclogues, Montemayor's Los siete libros de la Diana and Cervantes' Galatea. These works will be examined within their historical and cultural context.

SPANISH 5533 Cervantes' Exemplary Novels Credits: 3

A study of Cervantes' Exemplary Novels within the context of 17th Century Spain. Attention will be paid to interpretive possibilities and how knowledge of historical contexts might influence readings of this rich and varied cultural output.

SPANISH 5534 The Picaresque Novel Credits: 3

A study of the development of picaresque fiction during the Spanish Golden Age. The course deals with novelists principally active during the Baroque period such as Mateo Aleman, Francisco Lopez de Ubeda, Miguel de Cervantes, and Francisco de Quevedo.

SPANISH 5535 Peninsular Poetry Credits: 3

This course is a survey of poetics and poetry in Spain from the Reconquest to the present, with emphasis on sociohistorical contexts and movements. It examines theoretical and methodological approaches to literary analysis and also provides practical experience in exploring poetic texts. Students will analyze a wide spectrum of poems, while discussing the cultural philosophical, linguistic, political and ethical considerations that surround the reception of a text.

SPANISH 5536 Spain's Transition to Democracy: Literature and Film Credits: 3

This course reviews the cultural production between the death of Francisco Franco in 1975 and the entrance in the European Union, in film, literature and music, within its historical and political context.

SPANISH 5550 Modern Classics of Latin American Literature Credits: 3

The goal of the course is to familiarize the student with the principal Latin American writers of the modern period. The focus will be dual: the progressive sophistication of literary technique, and the refinement of social conscience. Among the authors to be studied are: Asturias, Borges, Carpentier, Cortazar, Donoso, Fuentes, Garcia Marques, Paz, Rulfo, and Vargas Llosa. Pre requisite: SPANISH 315 or SPANISH 325.

SPANISH 5553 Spanish-American Short Story Credits: 3

A study of Spanish-American short stories from Romanticism to the present.

SPANISH 5580 Special Topics Credits: 1-3

Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

SPANISH 5580D Special Topics Credits: 1-3**SPANISH 5590 Directed Studies in Spanish & Latin American Literature Credits: 1-3**

Intensive readings in a field or literary figure to be selected by the student in consultation with the instructor. Available by permission of graduate advisor or instructor, as appropriate, only when student cannot take regularly scheduled courses.

Bachelor of Arts: Languages and Literatures

General Information

Undergraduate Advisors

French: Gayle Levy

(816) 235-2820, levyg@umkc.edu (myersll@umkc.edu)

German: K. Scott Baker

(816) 235-2823, bakerks@umkc.edu

Spanish: Alberto Villamandos

(816) 235-2324, villamandosa@umkc.edu

Classics: Jeff Rydberg-Cox

(816) 235-2560, rydbergcoxj@umkc.edu

Initial Advising and Placement

A language placement exam is strongly recommended for all students with previous foreign language experience in French, German or Spanish. The placement exam or the recommendation of a foreign language advisor will best determine a student's level, contributing to his or her success. Contact the department office for more information. Placement test website: <https://cas.umkc.edu/foreignlanguages/student-resources/placement-exam/>

Consultation with an advisor is recommended for students who intend to major or minor in foreign languages.

Transfer Credit

Transfer students normally may expect to continue their foreign language study at the next comparable level. On consultation with their advisors or the course instructors, and after taking the placement exam, students may be advised to do either remedial or more advanced coursework. No more than nine hours of transfer credit for 200- to 400-level courses are normally allowed toward degree requirements. Usually a maximum of six transfer credits can be applied to the minor.

Credit for study at a foreign institution will be granted, provided the courses proposed for study abroad have been approved in advance by a departmental advisor and endorsed by the department chair. When advance endorsement for credit is not obtained from the department, the credit is subject to approval by the department chair.

In cases where students have been engaged in an extended period (e.g., a year) of formal study at an approved academic institution abroad, transfer credit of more than nine hours may be granted, if approved by the department chair.

Credit by Examination

Beginning-level courses (110, 120) are not applicable toward requirements for the major. College credit for them may be earned by examination.

CLEP credit is available for French, German or Spanish (110 and 120). Contact Testing Services to arrange for the exam. A passing score is necessary to receive credit. (No more than 30 of a student's total hours may be earned by examination, and students with senior standing cannot earn credit via CLEP)

Departmental testing or "Credit by Examination," is also available for 211-level credit. Students should first speak to the appropriate language advisor. The form is available online here (http://www.umkc.edu/registrar/forms/credit_by_exam.pdf). A minimum grade of C is necessary to receive credit.

Attendance and Course Level

Class attendance

The nature of language acquisition is such that regular attendance, throughout the semester, is expected of all students enrolled for credit.

Course Levels

Course levels are generally indicated by the first digit of the course number. For example, 100-level courses are first-year courses, 200-level classes represent second-year courses, etc. Accordingly, students entering a 200-level French course must have completed FRENCH 110 and FRENCH 120, their equivalent, or show proof of second-year skill-level (such as Placement Test score). Successful completion of a second-year course (normally 211 and 221, their equivalent, or proof of appropriate skill-level) is required of all students who want to enroll in 300- or 400-level courses. Exceptions must have the approval of the student's foreign language advisor.

The Department of Foreign Languages and Literatures offers a program of study leading to the bachelor of arts in Languages and Literatures with emphases in French, Spanish or Classics.

Learning outcomes are aligned with national and state standards on language and cultural understanding, and on national standards for language skill as reflected in the American Council on the Teaching of Foreign Language proficiency guidelines.

Emphasis Areas

Classical Languages and Cultures (p. 811)

French Language and Literature (p. 816)

Spanish Language and Literature (p. 826)

International Studies (p. 820)

Bachelor of Arts: Languages and Literatures - Classical Languages and Cultures Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement

at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Attain advanced reading, writing, listening and speaking proficiency in the language studied.
- Obtain a broad base of knowledge and perspectives on the Classical world, or on French-, German- or Spanish-speaking civilizations, and of their respective cultures—literature, the arts, socio-historical, political and economic structures, etc.—within a variety of interpretive frameworks.
- Understand and articulate cultural practices and process as dynamic elements in the construction of identity, and to appreciate and encourage cultural diversity in human endeavor.
- Understand aspects of language and culture in the world as part of all human communication, and within interdisciplinary contexts.
- Develop skills in critical thinking and analysis, including, but not limited to, textual analysis.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above)		3
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		13

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Total: 36 credits at or above the 200-level

The Language and Literatures major consists of two parts: an Emphasis and a Breadth Requirement.

Language and Literatures majors must complete 30 credit hours at or above the 200-level in one emphases.

Code	Title	Credits
Coursework at 100-level or higher:		9
ART-HIST 201	From Cave Paintings to Cathedrals	
ENGLISH 120	Literary Monstrosities	
Any GREEK, LATIN, or CLASSICS course at 100-level or higher		
Coursework at 300-level or higher:		9
ANCH 302	Archaeology of Ancient Disasters	
ANCH 307	Frauds, Myths and Mysteries in Archaeology	
COMM-ST 323	Concepts of the Hero in Ancient Literature and World Cinema	
ENGLISH 318	Bible As Literature	
PHILOS 310WI	Ancient Philosophy	
Any GREEK, LATIN, or CLASSICS course at 300-level or higher		
Coursework at 400-level or higher:		9
ENGLISH 445	History And Principles Of Rhetoric	
HISTORY 469	Archeology and Biblical History	
HISTORY 470	Ancient Egypt	
HISTORY 471	Ancient Greece	
HISTORY 472	Ancient Rome	
HISTORY 474	Late Antiquity: The Transformation of the Mediterranean World (200–600 AD)	
PHILOS 430	Plato	
PHILOS 431	Aristotle	
Breadth Requirement (see below):		6
CLASSICS 499	Senior Tutorial	3
Total Credits		36

Breadth Requirement

The Breadth Requirement may be met by completing one of the following:

- 1. A second Language and Literatures emphasis;
- 2. A minor in another foreign language offered by the Department;
- 3. Six (6) credit hours of coursework at the 200-level or higher among foreign language courses outside the Emphasis (including courses taught in English). These classes must focus on language, literary or cultural studies. Appropriate courses offered by other departments (e.g. History of Latin America) can fulfill the breadth requirement with the prior approval of the undergraduate advisor.

Other Requirements and Regulations

- 1. A capstone course is required for the completion of the B.A. in Languages and Literatures.
- 2. Higher-level courses may be substituted for lower-level coursework, e.g. a 300-level course can be taken instead of a 200-level course. A minimum of two 400-level courses is required for each Emphasis in addition to the Capstone, 499.
- 3. A 2.0 grade-point-average in Languages and Literatures courses is required for graduation.
- 4. Study abroad is strongly recommended for all departmental majors and minors, but not required for degree completion.
- 5. Native speakers studying their own languages will complete a minimum of 21 credit hours in courses numbered 300 and above, but normally not including 315 or 325, and they will complete the Breadth Requirement. A native speaker is defined as a person who speaks the target language fluently and who has completed formal schooling through the secondary school level, or equivalent, in the target language.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		38

Minimum GPA: 2.0

Total Credit Hours: 120

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
GEFSE 101		3 1XX/2XX/3XX Classical Major Elective ^{CC}	3
ENGLISH 110		3 ENGLISH 225	3
COMM-ST 110, 140, or 277		3 MATH 116	3
GECRT-AH 101		3 GECRT-SS 101	3
Foreign Language Requirement (110 or higher, GREEK or LATIN recommended) ^{CC}		3 Foreign Language Requirement (120 or higher, GREEK or LATIN recommended) ^{CC}	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
1XX/2XX/3XX Classical Major Elective ^{CC}		3 1XX/2XX/3XX/4XX Classical Major Elective ^{CC}	3
GECUE 201		3 GECDV 201	3
GECRT-SC 101		3 HISTORY 101, 102, or POL-SCI 210	3

Foreign Language course (211, GREEK or LATIN recommended)	3	Lab Science ^{LO}	1
General Elective	3	General Elective	3
		General Elective	3
	15		16
Third Year			
Fall Semester	Credits	Spring Semester	Credits
3XX/4XX Classical Major Elective		3 3XX/4XX Classical Major Elective	3
3XX/4XX Classical Major Elective		3 4XX Classical Major Elective	3
General Elective (3XX/4XX if needed)		3 Languages & Literatures Breadth course	3
General Elective		3 General Elective (3XX/4XX if needed)	3
General Elective		3 General Elective	3
	15		15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
4XX Classical Major Elective		3 4XX Classical Major Elective	3
Languages & Literatures Breadth course		3 3XX/4XXWI Writing Intensive course	3
CLASSICS 499		3 General Elective (3XX/4XX if needed)	3
General Elective (3XX/4XX if needed)		3 General Elective	3
General Elective		3 General Elective	2
	15		14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Arts: Languages and Literatures - French Language and Literature Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Attain advanced reading, writing, listening and speaking proficiency in the language studied.
- Obtain a broad base of knowledge and perspectives on the Classical world, or on French-, German- or Spanish-speaking civilizations, and of their respective cultures—literature, the arts, socio-historical, political and economic structures, etc.—within a variety of interpretive frameworks.
- Understand and articulate cultural practices and process as dynamic elements in the construction of identity, and to appreciate and encourage cultural diversity in human endeavor.
- Understand aspects of language and culture in the world as part of all human communication, and within interdisciplinary contexts.
- Develop skills in critical thinking and analysis, including, but not limited to, textual analysis.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		

Critical Thinking in Arts & Humanities (GECRT-AH)	3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)	3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)	3
Culture & Diversity Course (GECDEV)	3
Civic & Urban Engagement Course (GECUE)	3
Total Credits	30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above)		3
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		13

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Total: 36 credits at or above the 200-level

The Language and Literatures major consists of two parts: an Emphasis and a Breadth Requirement.

Language and Literatures majors must complete 30 credit hours at or above the 200-level in one emphases.

Code	Title	Credits
Two French 200-level courses or higher		6
FRENCH 315	Intermediate Composition and Conversation I	3
FRENCH 325	Intermediate Conversation and Composition II	3
FRENCH 415	Advanced Conversation and Composition I	3
Two 300-level French courses or higher		6

FRENCH 301	Introduction to French Literary Studies	
FRENCH 304	French Literature and Culture II	
FRENCH 351	Introduction to French Phonetics	
Three 400-level French courses		9
FRENCH 417	Renaissance French Literature and Culture	
FRENCH 424	19th-Century French Literature	
FRENCH 426	20th- and 21st-Century French Literature and Culture	
FRENCH 480	Special Topics	
Breadth Requirement (see below)		6
Total Credits		36

Breadth Requirement

The Breadth Requirement may be met by completing one of the following:

1. A second Language and Literatures emphasis;
2. A minor in another foreign language offered by the Department;
3. Six (6) credit hours of coursework at the 200-level or higher among foreign language courses outside the Emphasis (including courses taught in English). These classes must focus on language, literary or cultural studies. Appropriate courses offered by other departments (e.g. History of Latin America) can fulfill the breadth requirement with the prior approval of the undergraduate advisor.

Other Requirements and Regulations

1. A capstone course is required for the completion of the B.A. in Languages and Literatures.
2. Higher-level courses may be substituted for lower-level coursework, e.g. a 300-level course can be taken instead of a 200-level course. A minimum of two 400-level courses is required for each Emphasis in addition to the Capstone, 499.
3. A 2.0 grade-point-average in Languages and Literatures courses is required for graduation.
4. Study abroad is strongly recommended for all departmental majors and minors, but not required for degree completion.

Native speakers studying their own languages will complete a minimum of 21 credit hours in courses numbered 300 and above, but normally not including 315 or 325, and they will complete the Breadth Requirement. A native speaker is defined as a person who speaks the target language fluently and who has completed formal schooling through the secondary school level, or equivalent, in the target language.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		38

Minimum GPA: 2.0

Total Credit Hours: 120

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
FRENCH 211 ^{CC}		3 FRENCH 221 ^{CC}	3
GEFSE 101		3 MATH 116 or STAT 115	3

ENGLISH 110	3	ENGLISH 225	3
COMM-ST 110, 140, or 277	3	GECRT-SS 101	3
GECRT-AH 101	3	HISTORY 101, 102, or POL-SCI 210	3
	15		15

Second Year

Fall Semester	Credits	Spring Semester	Credits
FRENCH 315 ^{CC}		3 FRENCH 325 ^{CC}	3
FRENCH 301, 303, or FRENCH 304 (or any FRENCH 3XX/4XX Major Elective)		3 FRENCH 301, 303, or FRENCH 304 (or any FRENCH 3XX/4XX Major Elective)	3
GECRT-SC 101		3 GECUE 201	3
GECDV 201		3 Lab Science ^{LO}	1
General Elective		3 General Elective	3
		General Elective	3
	15		16

Third Year

Fall Semester	Credits	Spring Semester	Credits
FRENCH 415		3 FRENCH 4XX Major Elective	3
Languages & Literatures Breadth course		3 Languages & Literatures Breadth course	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
	15		15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
FRENCH 4XX Major Elective		3 FRENCH 4XX Major Elective	3
3XX/4XX General Elective		3 3XX/4XXWI Writing Intensive course	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	2
	15		14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.

- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

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816-235-1148

Bachelor of Arts: Languages and Literatures - International Studies Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

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Student Learning Outcomes

Students graduating from this program will:

- Be able to apply interdisciplinary perspectives to analyze ideas using diverse frames of reference and cultural complexity
- Students will attain at least Intermediate-mid reading, writing, listening and speaking proficiency in a foreign language (according to the ACTFL proficiency levels)
- Students will draw on their knowledge of their selected region to identify and describe at least two dimensions – historical, political, social, cultural, economic – of specific international issues.
- Students will present and discuss their research in compelling, coherent, clear analytical arguments

International Studies

The International Studies program fosters cultural and political literacy while also developing foreign language proficiency. Students will advance their language skills in French, German or Spanish, and gain knowledge of political structures and international relations in general and in a global region of their choice. The program straddles both Foreign Languages and Political Science departments while also offering students a broad array of interdisciplinary courses across several other departments. Intercultural competencies form the core of the program, and students are required to take part in a study abroad program or do an internship in a local organization or business that has international connections. If you are interested in the world beyond the United States, this program is for you!

International Studies Undergraduate Advisor

Contact **Dr. Scott Baker** for more information and major advising.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
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College of Arts & Sciences Degree Requirements

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Code	Title	Credits
	Writing Intensive Course (300-level or above)	3
	Foreign Language (3rd Semester Level)	9
	Laboratory Science Experience	1
Total Credits		13

Major Requirements

The B.A. in Languages and Literatures with an emphasis in International Studies (INTS) requires 36 credits at or above the 200-level, with at least 9 hours numbered 400-level or higher. At least 12 hours in the major must be earned at UMKC.

Students may double count up to 12 credit hours from their major toward a minor in French, German, or Spanish. Students choosing to double-major in INTS and another emphasis area in Languages & Literatures may double count up to 18 credit hours. Students should consult the applicable catalog section to review applicability to minors in political science, economics, history, anthropology, or philosophy.

Code	Title	Credits
Introductory Courses		6
POL-SCI 220	Introduction To Comparative Politics	
POL-SCI 230	International Relations	
Coursework in the same foreign language at the 200-level or above		12
Courses selected from Political and Economic Awareness (Politics)		6
ECON 402	Labor and the Global Political Economy ^W	
ECON 406WI	History Of Economic Thought ^W	
ECON 412	International Trade And Development ^W	
ECON 442	International Finance ^W	
MGT 370	International Management ^W	
POL-SCI 304	Politics of Developing Countries ^W	
POL-SCI 316	Terrorism And Political Violence ^W	
POL-SCI 355	Politics In Eastern And Central Europe ^{EU}	
POL-SCI 357	Western European Politics ^{EU}	
POL-SCI 404	Conflict Resolution ^W	
POL-SCI 418	International Conflict and Cooperation ^W	
Courses selected from Social and Cultural Awareness (Culture)		6
ANTHRO 305	Language and Culture ^W	
ANTHRO 373	Anthropology of Religion ^W	
ANTHRO 358	Culture and Society ^W	
ANTHRO 407	Writing Culture: The Craft of Ethnography ^W	
ART-HIST 201	From Cave Paintings to Cathedrals ^{EU}	
ART-HIST 202	From Michelangelo to Modernism ^{EU}	
ART-HIST 315	Arts Of African and New World Cultures ^{AF,LA}	
ART-HIST 319	Asian Art ^{AS}	
CONSVTY 351	History of Music in Western Civilization I ^{EU}	
CONSVTY 352	History of Music in Western Civilization II ^{EU}	
ENV-DSN 250	History of the Designed Environment I ^{EU}	
ENV-DSN 251	History of the Designed Environment II ^{EU}	
ENV-DSN 252	History of the Designed Environment III ^{EU}	
FRENCH 301	Introduction to French Literary Studies ^{EU}	
FRENCH 304	French Literature and Culture II ^{EU}	
FRENCH 354	French Civilization III: Lyon, Crossroads of France and Europe ^{EU}	
FRENCH 415	Advanced Conversation and Composition I ^{EU}	
FRENCH 417	Renaissance French Literature and Culture ^{EU}	
FRENCH 424	19th-Century French Literature ^{EU}	
FRENCH 426	20th- and 21st-Century French Literature and Culture ^{EU}	
FRENCH 473	The Francophone World ^{AF}	

FRENCH 480	Special Topics ^{EU,W}
GERMAN 301	Introduction to Literary Studies ^{EU}
GERMAN 420	German Enlightenment Drama ^{EU}
GERMAN 453	Women's Voices in Germany and Austria ^{EU}
HISTORY 201	European History to 1600 ^{EU}
HISTORY 202	European History since 1600 ^{EU}
HISTORY 206	World History To 1450 ^W
HISTORY 208	World History since 1450 ^W
HISTORY 307A	History of Christianity from the Middles Ages to Present ^{EU}
HISTORY 404	Women and Gender in Latin America ^{LA}
HISTORY 406	Modern Latin America ^{LA}
HISTORY 411A	Medieval Civilization I ^{EU}
HISTORY 411B	Medieval Civilization II ^{EU}
HISTORY 412A	Medieval Women & Children ^{EU}
HISTORY 414	Reformation ^{EU}
HISTORY 416R	The French Revolution and Napoleon ^{EU}
HISTORY 430RA	'We Are The Dead': The Great War Experience Through its Artifacts ^{EU}
HISTORY 431R	Medieval England, 1066 To 1485 ^{EU}
HISTORY 433R	History of Britain 1603-1832 ^{EU}
HISTORY 436R	Modern German History ^{EU}
HISTORY 471	Ancient Greece ^{EU}
HISTORY 472	Ancient Rome ^{EU}
HISTORY 474	Late Antiquity: The Transformation of the Mediterranean World (200–600 AD) ^{EU}
PHILOS 310WI	Ancient Philosophy ^{EU}
PHILOS 320WI	History of Modern Philosophy ^{EU}
PHILOS 431	Aristotle ^{EU}
SPANISH 301	Introduction to Literary Studies ^{EU}
SPANISH 351	Latin American Civilization ^{LA}
SPANISH 365	The Search for Mexican Identity ^{LA}
SPANISH 374	Spanish Literature and Culture II ^{EU}
SPANISH 380	Special Topics ^{EU,LA}
SPANISH 403	History of the Spanish Language ^{EU,LA}
SPANISH 414	Early 20th Century Peninsular Literature ^{EU}
SPANISH 427	Pre-Columbian And Spanish Colonial Literature ^{LA}
SPANISH 428	Contemporary Spanish Poetry ^{EU}
SPANISH 436	Spain's Transition to Democracy: Literature and Film ^{EU}
SPANISH 453	Spanish-American Short Story ^{LA}
SPANISH 480	Special Topics ^{EU}
SPANISH 499	Senior Seminar (Capstone) ^{EU}

Select additional coursework in one of the two awareness areas above not already completed (Politics or Culture) 6

International Experience (see details below)

Total Credits 36

Selected Geographic Region in Politics and Culture Courses

The 18 credit hours of Politics and Culture courses should include 9 credit hours that focus on the same world area (Africa, Asia, Europe, Latin America). A list of courses in each area are available from your major advisor.

AF	Africa Region
AS	Asia Region
EU	European Union Region
LA	Latin America Region
W	World Region (applicable to any region, with approval of International Studies Advisor)

International Experience

The International Experience must be an immersion experience in the foreign culture and language, taken outside the student’s country of origin and approved by the student’s major advisor. The requirement can be fulfilled in one of the following ways:

- A for-credit internship at a company, government agency, or non-profit organization involving significant use of the foreign language (3 credits or more)
- A UMKC faculty-led study abroad program of at least 6 weeks.
- A study abroad experience of a semester or longer.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		38

Minimum GPA: 2.0

Total Credit Hours: 120

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC’s Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program’s individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student’s responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
POL-SCI 220 or 230		3 POL-SCI 220 or 230	3
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110 ^{CC}		3 STAT 115 or MATH 116	3
GECRT-AH 101		3 GECRT-SS 101	3
Foreign Language Requirement (110 or higher) ^{CC}		3 Foreign Language Requirement (120 or higher) ^{CC}	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
Social/Cultural or Political/Economic focus Major Elective		3 Political/Economical focus Major Elective ^{CC}	3
COMM-ST 110, 277, or 140		3 GECUE 201	3
GECDV 201		3 GECRT-SC 101	3
HISTORY 101, 102, or POL-SCI 210		3 Foreign language course (221 or higher)	3
Foreign Language course (211 or higher) ^{CC}		3 General Elective	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
Foreign language course (315 or higher)		3 Foreign language course (325 or higher)	3
Social/Cultural focus Major Elective		3 4XX Political/Economic focus Major Elective	3
General Elective (3XX/4XX if needed)		3 4XX Social/Cultural focus Major Elective	3
General Elective		3 General Elective (3XX/4XX if needed)	3
General Elective		3 General Elective	3
		Lab Science ^{LO}	1
		15	16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
4XX Social/Cultural or Political/Economic focus Major Elective		3 3XX/4XX Writing Intensive course (if not yet completed) or General Elective	3
Internship (if International Experience requirement not previously fulfilled) or General Elective		3 General Elective (3XX/4XX if needed)	3
General Elective (3XX/4XX if needed)		3 General Elective (3XX/4XX if needed)	3
General Elective (3XX/4XX if needed)		3 General Elective	3
General Elective		3 General Elective	2
		15	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Arts: Languages and Literatures - Spanish Language and Literature Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Attain advanced reading, writing, listening and speaking proficiency in the language studied.
- Obtain a broad base of knowledge and perspectives on the Classical world, or on French-, German- or Spanish-speaking civilizations, and of their respective cultures—literature, the arts, socio-historical, political and economic structures, etc.—within a variety of interpretive frameworks.
- Understand and articulate cultural practices and process as dynamic elements in the construction of identity, and to appreciate and encourage cultural diversity in human endeavor.
- Understand aspects of language and culture in the world as part of all human communication, and within interdisciplinary contexts.
- Develop skills in critical thinking and analysis, including, but not limited to, textual analysis.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		

Critical Thinking in Arts & Humanities (GECRT-AH)	3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)	3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)	3
Culture & Diversity Course (GECDV)	3
Civic & Urban Engagement Course (GECUE)	3
Total Credits	30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above)		3
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		13

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Total: 36 credits at or above the 200-level

The Language and Literatures major consists of two parts: an Emphasis and a Breadth Requirement.

Language and Literatures majors must complete 30 credit hours at or above the 200-level in one emphases.

Code	Title	Credits
Two Spanish 200-level courses or higher		6
SPANISH 315 or SPANISH 316	Intermediate Conversation And Composition I Spanish for Health Sciences II	3
SPANISH 325	Intermediate Conversation And Composition II	3
SPANISH 415	Advanced Conversation And Composition I	3

Two 300-level Spanish courses or higher		6
SPANISH 351	Latin American Civilization	
SPANISH 365	The Search for Mexican Identity	
SPANISH 374	Spanish Literature and Culture II	
SPANISH 380	Special Topics	
Two 400-level Spanish courses		6
SPANISH 403	History of the Spanish Language	
SPANISH 414	Early 20th Century Peninsular Literature	
SPANISH 425	Advanced Conversation And Composition II	
SPANISH 427	Pre-Columbian And Spanish Colonial Literature	
SPANISH 428	Contemporary Spanish Poetry	
SPANISH 436	Spain's Transition to Democracy: Literature and Film	
SPANISH 453	Spanish-American Short Story	
SPANISH 480	Special Topics	
Breadth Requirement (see below)		6
SPANISH 499	Senior Seminar (Capstone)	3
Total Credits		36

Breadth Requirement

The Breadth Requirement may be met by completing one of the following:

- 1. A second Language and Literatures emphasis;
- 2. A minor in another foreign language offered by the Department;
- 3. Six (6) credit hours of coursework at the 200-level or higher among foreign language courses outside the Emphasis (including courses taught in English). These classes must focus on language, literary or cultural studies. Appropriate courses offered by other departments (e.g. History of Latin America) can fulfill the breadth requirement with the prior approval of the undergraduate advisor.

Other Requirements and Regulations

- 1. A capstone course is required for the completion of the B.A. in Languages and Literatures.
- 2. Higher-level courses may be substituted for lower-level coursework, e.g. a 300-level course can be taken instead of a 200-level course. A minimum of two 400-level courses is required for each Emphasis in addition to the Capstone, 499.
- 3. A 2.0 grade-point-average in Languages and Literatures courses is required for graduation.
- 4. Study abroad is strongly recommended for all departmental majors and minors, but not required for degree completion.
- 5. Native speakers studying their own languages will complete a minimum of 21 credit hours in courses numbered 300 and above, but normally not including 315 or 325, and they will complete the Breadth Requirement. A native speaker is defined as a person who speaks the target language fluently and who has completed formal schooling through the secondary school level, or equivalent, in the target language.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		38

Minimum GPA: 2.0

Total Credit Hours: 120

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
SPANISH 211 ^{CC}		3 SPANISH 221 or 216 ^{CC}	3
GEFSE 101		3 MATH 116 or STAT 115	3
ENGLISH 110		3 ENGLISH 225	3
COMM-ST 110, 140, or 277		3 GECRT-SS 101	3
GECRT-AH 101		3 HISTORY 101, 102, or POL-SCI 210	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
SPANISH 315 or 316 ^{CC}		3 SPANISH 325 ^{CC}	3
GECDV 201		3 GECUE 201	3
GECRT-SC 101		3 Lab Science ^{LO}	1
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		General Elective	3
		15	16

Third Year

Fall Semester	Credits	Spring Semester	Credits
SPANISH 415		3 SPANISH 3XX/4XX Major Elective	3
SPANISH 3XX/4XX Major Elective		3 SPANISH 4XX Major Elective	3
3XX/4XX General Elective		3 Languages & Literatures Breadth course	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
SPANISH 499		3 SPANISH 4XX Major Elective	3
Languages & Literatures Breadth course		3 3XX/4XXWI Writing Intensive course	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	2
		15	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.

- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Master of Arts: Romance Language and Literature

Student Learning Outcomes

Students graduating from this program will:

- Students demonstrate Written Proficiency in the chosen language. More specifically, the writing proficiency objective is for students to attain at least an Advanced level of writing as outlined by the American Council on the Teaching of Foreign Languages (2012). These writers meet "work and/or academic writing needs" on a variety of topics generally with "precision and detail."
- Students demonstrate Oral Proficiency in their chosen language by attaining an Advanced level of speaking as outlined by the American Council on the Teaching of Foreign Languages (2012). These speakers are able to "engage in conversation in a clearly participatory manner in order to communicate information on autobiographical topics, as well as topics of community, national, or international interest. The topics are handled concretely by means of narration and description in the major time frames of past, present and future. These speakers can also deal with a social situation with an unexpected complication. The language of Advanced-level speakers is abundant, the oral paragraph being the measure of Advanced-level length and discourse. "
- Students demonstrate advanced competency in cultural and textual analysis, including appropriately sophisticated research and documentation skills. Students can effectively describe, analyze and critically evaluate multiple topics in support of an original thesis. Students can search, find and accurately identify appropriate sources for a chosen topic. They can effectively analyze, evaluate and summarize other people's thinking about a particular topic. They consistently and accurately cite relevant research. The demonstration of this competency is most often in the target language.
- Students demonstrate thematic knowledge of the culture(s) of their chosen language, including but not necessarily limited to the literature in that language. Students demonstrate a significant grasp of the history of Spanish or French-speaking countries and/or peoples and they can discuss in some depth their culture(s) and cultural production, including literary texts.

The master of arts degree program provides necessary training in French or Spanish language and literature for those who want to teach those languages at the secondary school or junior college level. It also serves students who plan to continue with studies at the doctoral level. Other employment opportunities can be found in government, business and industry, publishing houses, foundations, etc.

Admission Requirements

A bachelor's degree from an accredited institution with a 3.0 (B) grade-point average in the subject area and a 2.75 overall GPA is required for admission.

The Graduate Record Examination (Advanced Achievement) is recommended, and two letters of recommendation are required. Students' transcripts with accompanying data are carefully evaluated.

Applicants with inadequate preparation may be required to make up deficiencies by taking more than the standard 30 hours of coursework.

Courses taken prior to admission into a graduate program will not count for graduate credit.

Requirements for Retention

If students' graduate grade-point averages fall below 3.0 (B), they may take coursework only on the 300 and 400 levels until a 3.0 graduate grade-point average has been achieved. Coursework completed under this condition will not count toward the master's degree.

Advising

Students interested in pursuing a master's degree in Romance languages should meet with the appropriate principal graduate advisor before beginning studies:

French: Nacer Khelouz

(816) 235-5996, khelouznacer@umkc.edu (levyg@umkc.edu)

Spanish: Louis Imperiale

(816) 235-2822, imperialel@umkc.edu

In consultation with the advisor, a course of study will be planned listing the courses that will satisfy requirements for the degree. Prior to registration at least once each year, candidates must meet with their advisors for approval of their course programs. They also must seek their advisor's endorsement whenever a change in the agreed course of study is necessary.

M.A. Degree Requirements

1. Students must earn 30 graduate credit hours to complete the M.A. in Romance Languages. Of these credits, at least 21 hours must be at the graduate level (courses numbered 5500 and above). When appropriate and/or necessary, students may count up to 9 hours of 400-level courses taken while enrolled as a graduate student towards the M.A. A minimum GPA of 3.0 is required in all graduate work. Students must take courses in a variety of areas, genres and periods in order to achieve both breadth and depth of knowledge. See below for specific course and distribution requirements for each emphasis area (Spanish & French). Students must obtain approval of their study programs by the graduate advisor for their area at least once a year.
2. Students must demonstrate ability to read, speak and write, idiomatically and with accuracy, the language in which the M.A. degree is being pursued.
3. Final Examination: Students must take a final examination consisting of both written and oral sections. See details below for each emphasis area.
4. Second Language Proficiency: In addition to the mastery of the target language, students must demonstrate a reading knowledge of a second language in one of the following ways:
 - Taking a reading examination in French, Spanish, Italian, German or Latin administered or approved by the department or given by the Educational Testing Service.
 - Achieving a grade of 3.0 (B) or better in a 211 (3 credit hour), or equivalent, language course.
 - Achieving a grade of 2.0 (C) or better in each of two 300-level courses or in one 400-level literature or civilization course taught in the second language.

M.A. in Romance Languages: French Interest Area

Student Learning Outcomes

Students graduating with an M.A. in romance languages will:

- Obtain specialized knowledge of either Hispanic or French and Francophone cultures, especially of their literatures as foundational paradigms for inquiry into language and cultural phenomena.
 - Develop skill in reflective inquiry.
 - Analyze cultural products, process and perspectives with a variety of interpretive strategies.
 - Attain superior reading, writing, listening and speaking proficiency in the primary language studied, and intermediate reading proficiency in the secondary language studied.
1. Distribution of courses
 - a. Students will choose courses covering five out of the seven following periods or fields:
 - i. Medieval/Early Modern
 - ii. Renaissance
 - iii. 17th and 18th Centuries
 - iv. 19th Century
 - v. 20th and 21st Centuries
 - vi. Linguistics or Pedagogy
 - vii. Francophonie
 - b. In addition, as part of their 30 credit hours of study, students will take one course in advanced French stylistics.
 2. Exams. The final exam will be comprised of a written and an oral portion.
 - a. Written exam
 - i. In consultation with the French faculty, students will draw up a list of eight subjects covering most periods/fields and one *explication de texte* of a poem.

- ii. The written exam will consist of 2-3 questions, written by the faculty and based on the subjects from the student's list. The student will have two hours in which to write the essays. No notes are allowed, but the student may consult the texts during the exam.
- b. Oral exam
On a subsequent day, the student will take the one-hour oral exam, which will consist of the *explication de texte* and follow-up questions to the written exam. The student may bring brief notes, on index cards, to help in the *explication de texte*.

M.A. in Romance Languages: Spanish Interest Area

Student Learning Outcomes

Students graduating with an M.A. in romance languages will:

- Obtain specialized knowledge of either Hispanic or French and Francophone cultures, especially of their literatures as foundational paradigms for inquiry into language and cultural phenomena.
 - Develop skill in reflective inquiry.
 - Analyze cultural products, process and perspectives with a variety of interpretive strategies.
 - Attain superior reading, writing, listening and speaking proficiency in the primary language studied, and intermediate reading proficiency in the secondary language studied.
1. Distribution of courses
 - a. Students will choose courses covering six out of the eight following periods or fields:
 - i. Medieval/Early Modern
 - ii. Golden Age
 - iii. 18th and 19th Centuries
 - iv. 20th and 21st Centuries
 - v. Spanish or Romance Linguistics
 - vi. Foreign Language Pedagogy
 - vii. Pre-Columbian / Indigenous/ Colonial Literature
 - viii. U.S.-Latino Studies
 - b. In addition, a student's coursework must include at least one course in each general category of Peninsular or Latin American.
 2. Exams. The final exam will be comprised of a written and an oral portion.
 - a. Written Exam
Questions will be based on a reading list prepared in advance by the students and their graduate advisor, based on the periods and fields covered in all their graduate courses; it will consist of 15 (out of 30 possible) identifications, two short and two long essays. The student will have four hours in which to write the essays. No notes, texts or dictionaries will be allowed.
 - b. Oral Exam
On a subsequent day, the student will take the one-hour oral exam, which will consist of a textual analysis. Prior to the exam, the student will be given a text and will have 30 minutes to prepare the analysis.

Minor: French, German, Spanish

Student Learning Outcomes

Learning outcomes are aligned with national and state standards on language and cultural understanding, and on national standards for language skill as reflected in the American Council on the Teaching of Foreign Language proficiency guidelines:

- To attain advanced reading, writing, listening and speaking proficiency in the language studied.
- To obtain a broad base of knowledge and perspectives on the Classical world, or on French-, German- or Spanish-speaking civilizations, and of their respective cultures—literature, the arts, socio-historical, political and economic structures, etc.—within a variety of interpretive frameworks.
- To understand and articulate cultural practices and process as dynamic elements in the construction of identity, and to appreciate and encourage cultural diversity in human endeavor.
- To understand aspects of language and culture in the world as part of all human communication, and within interdisciplinary contexts.
- To develop skills in critical thinking and analysis, including, but not limited to, textual analysis.

The growing need for experts in the international aspects of academic and professional fields has led to a renewed interest in the foreign language minor as a complement to a student's training in a major field. In increasing numbers, students completing baccalaureate degrees in the Henry W. Bloch School of Business and Public Administration, in the Conservatory and in other departments of The College of Arts and Sciences have selected a course of study that includes a minor in a foreign language. Majors in all fields are urged to discuss this possibility with their advisors.

Requirements for Program Minor

An academic minor in a target language requires a minimum of 18 hours consisting of six hours of 200-level courses or above plus 12 hours of courses at the 300- and 400-levels.

Code	Title	Credits
Two 200-level courses or higher:		6
Four 300-level courses or higher:		12
Total Credits		18

Minor: German Studies

Student Learning Outcomes

Students graduating from this program will:

- To attain advanced reading, writing, listening and speaking proficiency in the language studied.
- To obtain a broad base of knowledge and perspectives on the Classical world, or on French-, German- or Spanish-speaking civilizations, and of their respective cultures—literature, the arts, socio-historical, political and economic structures, etc.—within a variety of interpretive frameworks.
- To understand and articulate cultural practices and process as dynamic elements in the construction of identity, and to appreciate and encourage cultural diversity in human endeavor.
- To understand aspects of language and culture in the world as part of all human communication, and within interdisciplinary contexts.
- To develop skills in critical thinking and analysis, including, but not limited to, textual analysis.

Learning outcomes are aligned with national and state standards on language and cultural understanding, and on national standards for language skill as reflected in the American Council on the Teaching of Foreign Language proficiency guidelines:

Program Requirements

The German Studies minor consists of 18 hours selected from the list of approved courses, of which a minimum of 6 credits must be in German Language and a minimum of 9 credits must be upper-division coursework. Up to 6 credits may come from classes listed in the Associated Course List, but these courses apply only if the student's project focuses on a German topic. A capstone project is also required. A maximum of six hours may apply to both a German minor and a German Studies minor.

Approved Course Offerings

Code	Title	Credits
Foreign Languages and Literatures		
German Language:		
GERMAN 110	Elementary German I	3
GERMAN 120	Elementary German II	3
GERMAN 211	Second-Year German I	3
GERMAN 221	Second-Year German II	3
GERMAN 315	Intermediate Conversation and Composition I	3
GERMAN 325	Intermediate Conversation and Composition II	3
GERMAN 415	Advanced Conversation and Composition I	3
German Literature:		
GERMAN 301	Introduction to Literary Studies	3
German Culture and Film:		
GERMAN 453	Women's Voices in Germany and Austria	3
History		
HISTORY 436R/5536	Modern German History	3
Associated Course Offerings		
Art History:		
ART-HIST 303	World Currents of Contemporary Art	3
History:		
HISTORY 414	Reformation	3
Musicology (Conservatory):		

HISTORY 430RA	'We Are The Dead': The Great War Experience Through its Artifacts	3
Political Science:		
POL-SCI 220	Introduction To Comparative Politics	3

Gerontology

Program Director:

Joan McDowd, PhD
mcdowdj@umkc.edu
(816) 235-2490

Program Office:

Cherry Hall, Room 314
<http://cas.umkc.edu/cas> (<http://cas.umkc.edu/cas/>)

With the rapid aging of the population along with the consequences this brings to nearly every sector of our lives, it is important to prepare for the ways in which population changes will change our world. Studying gerontology can prepare students to understand and address the challenges of an aging world. UMKC offers gerontology programs at both the graduate and undergraduate levels.

For more information about Gerontology and our programs, please see our website (<http://aging.umkc.edu/academic-programs/>).

Undergraduate

- Minor in Gerontology (p. 835)

Graduate

- Graduate Certificate in Gerontology (p. 834)

Graduate Certificate in Gerontology

Student Learning Outcomes

Students graduating from this program will:

- Utilize gerontological frameworks to examine human development and aging.
- Relate biological theory and science to understanding senescence, longevity, and variation in aging.
- Relate psychological theory and science to understanding adaptation, stability, and change in aging.
- Relate social theory and science to understanding heterogeneity, inequality, and context as they relate to aging.
- Distinguish factors related to aging outcomes, both intrinsic and contextual, through critical thinking and empirical research.
- Adhere to ethical principles to guide work with and on behalf of older persons.
- Engage, through communication with older persons, their families, and the community in personal and public issues in aging.
- Engage collaboratively with others to promote integrated approaches to aging.

A graduate Gerontology certificate can be a way to begin to explore a new career or it can bring added value to an existing career. This eighteen-credit program can be taken either as a free-standing certificate or integrated with a graduate degree program at UMKC, such as the Master of Arts in Liberal Studies (p. 871). Students from such diverse fields as social work, counseling, nursing, psychology, pharmacy, dental hygiene, sociology, law, architecture, and education have completed the certificate. Students should contact the Program Director to discuss enrollment and a plan of study.

Curriculum

Code	Title	Credits
Interdisciplinary Core		
A&S 5500	Interdisciplinary Colloquium On Aging	3
Sociology Core		
SOCIOL 5550	Sociology Of Aging	3
Psychology Core		
PSYCH 5543	Adult Development And Aging	3
Health/Biology Core		
A&S 5515	The Aging Body: Causes and Consequences	3
Field Practicum		
A&S 5592	Field Practicum In Aging ¹	3

Elective(s) ²	3
Total Credits	18

¹ The practicum requirement should be enrolled in after all other core requirements are completed.

² Students should contact the Program Director to identify appropriate course(s).

Minor in Gerontology

Student Learning Outcomes

Students graduating from this program will:

- Students will be able to describe what is known about biological, psychological, and sociocultural factors involved in adult development and aging processes.
- Students will be able to describe physical, cognitive, and social role changes associated with aging and major theories associated with each.
- Students will be able to explain and analyze variations in aging due to such factors as gender, social class, race/ethnicity, LGBT status, and mental health status.
- Students will demonstrate an understanding of attitudes and stereotypes regarding aging, their sources, and potential for change (both in themselves and others).
- Students will be able to apply knowledge from their aging courses to a practice setting.

Undergraduate students in any major in the College of Arts and Sciences may seek an interdisciplinary minor in gerontology designed to increase awareness of issues of our aging population. The minor will augment a variety of career paths, including service provision, administration, psychology, the health professions, and education or research. Students should contact the Program Director to discuss the required 18-credit plan of study. The minor may also be integrated with the Bachelor of Health Sciences or the Bachelor of Liberal Arts degree.

Program Requirements

Code	Title	Credits
Sociology Core		
SOCIOL 410R	Aging In Contemporary Society	3
Psychology Core		
Consult advisor for course options.		3
Health/Biology Core		
A&S 415	The Aging Body: Causes and Consequences	3
Field Practicum		
A&S 492	Field Practicum In Aging ¹	3
Elective Courses		
Electives ²		6
Total Credits		18

¹ The practicum requirement should be enrolled in after all other core requirements are completed.

² Six elective credit hours can be taken to complete the program. Students should contact the gerontology program director to identify appropriate electives.

Department of History

Cockefair Hall, Room 203
 5121 Rockhill Road
 (816) 235-1631
 Fax: (816) 235-5723
 history@umkc.edu
<http://cas.umkc.edu/history> (<http://cas.umkc.edu/history/>)

Department Chair:
 Diane Mutti Burke

Professors Emeriti:

William B. Ashworth Jr., Jesse V. Clardy, Gary Ebersole, James S. Falls, Miriam Forman-Brunell, John T. Graham, Herman M. Hattaway, Carla L. Klausner, Dennis Merrill, Stanley B. Parsons, Lynda Payne, Patrick A. Peebles, Louis W. Potts, Joseph P. Schultz

Professors:

Andrew Stuart Bergerson, John Herron, Linda Mitchell, Diane Mutti Burke, Massimiliano Vitiello

Associate Professors:

David Freeman, Brian Frehner, Viviana Grieco, Matthew Warner Osborn

Assistant Professors:

Sandra Enríquez

Associate Teaching Professor:

Rebecca Miller Davis

Department Description

History is an essential component of a liberal arts education. Historical study enables students to understand peoples and places, societies and cultures, ideas and events. Beyond its own inherent interest, History provides important perspective on the present and makes planning for the future possible.

The department offers, at the undergraduate and graduate levels, courses in African American history; American history; ancient, medieval, and modern European history; Asian history; Classics; environmental history; Latin American history; Latinx history; public history; religious studies; the history of science; urban and social history; and women's, gender, and sexuality studies. The department is also involved in interdisciplinary courses and programs.

Desirable Preparation for Undergraduate Admission

Students wishing to major in history should acquire as broad a background as possible in subjects related to their historical interests. Both secondary school and community college courses in history should be supplemented with courses in other social sciences and the humanities. Students interested in the history of science should emphasize studies in physical and biological sciences.

The discipline is broad in scope and methods. Faculty members believe a logical and systematic selection of courses in other disciplines will complement the study of history. They encourage prospective majors to consult with them in preparing an integrated course of study.

Career Implications of the Bachelor's Degree

Among the many other fields you might consider are: business, government, journalism, law, marketing and communications, public history (e.g. museums, archives, historical societies), and publishing.

Why so many opportunities? Consider this: the study of history trains you how to think—not in a small or proscribed way, but in an expansive, analytical way. In our courses, you will discover that a flexible and perceptive mind is the most practical tool imaginable. You will become an excellent writer and communicator with the ability to research and analyze complex problems with dexterity and finesse, a skill that will help you regardless of your chosen career path.

If your interests remain in the academic world, know that our students have gone on to many top-flight colleges and universities. Recent UMKC history majors have pursued graduate study at the state universities of California, Colorado, Connecticut, Florida, Iowa, Kansas, Kentucky, Michigan, Mississippi, Nebraska, New York, Texas, and Virginia, as well as at Princeton University, Yale University, Brown University, Columbia University, Emory University, Georgetown University, Northwestern University, London School of Economics, Ohio State, Southern Methodist, Marquette, Notre Dame, University of British Columbia, Texas Tech, Queen's College-Belfast, King's College-London, and Cambridge University.

Individuals seeking careers as teachers and professional historians may pursue advanced degrees on this campus. The department offers the Master of Arts degree and participates in the Interdisciplinary Ph.D. program. Students interested in the Master of Arts degree should contact Massimiliano Vitiello, vitiellom@umkc.edu; for the Interdisciplinary Ph.D. program, contact Matthew Osborn, osbornmw@umkc.edu.

Departmental Activities

Advising

Advising is key to a meaningful and profitable course of study in the department. Students should consult with a departmental advisor regarding selection of courses and for help in academic matters. Faculty office hours are posted in the department office, located in 203 Cockefair Hall, and prospective schedules of courses are available under Student Resources (<https://cas.umkc.edu/history/student-resources/>) on the department website, <http://cas.umkc.edu/history>.

Principal Undergraduate Advisors

David Freeman, freemandf@umkc.edu; Rebecca Davis, davisrebe@umkc.edu

Principal Masters Advisor

Massimiliano Vitiello, vitiellom@umkc.edu

Interdisciplinary Ph.D. Program Advisor

Matthew Osborn, o (<https://cf1.umkc.edu/intapps/lookup/?LastName=osborn>) sbornmw@umkc.edu

Special Programs**Teaching Certification in Social Studies**

Certification as a middle school (grades 5-9) or secondary (grades 9-12) social studies teacher in either Kansas or Missouri requires that a student complete specific requirements in history, political science, economics, geography, behavioral sciences and the School of Education. A separate application for teacher education is required. For further information about the program, consult the School of Education (p. 1430) section of this catalog or contact the Education Student Services Office at (816) 235-2234.

Public History

Courses offered by the department prepare graduates for a variety of careers in historical agencies or in the study and preservation of cultural artifacts. For further information, consult Sandra Enríquez, enriquezs@umkc.edu.

The History Club

Founded in 1999 with the purpose of promoting the study of history, the History Club is open to all UMKC students, history majors and non-majors alike. The club sponsor is David Freeman, freemandf@umkc.edu.

The History Graduate Student Association

Students participating in the M.A. and Interdisciplinary Ph.D. programs are automatically members of the History Graduate Student Association (HGSA). Each year the HGSA sponsors two events: the Graduate Student Orientation and the Graduate Student Conference. The faculty advisor is David Freeman, freemandf@umkc.edu.

Phi Alpha Theta

The department sponsors a chapter of the national history honor society, Phi Alpha Theta. To qualify for membership, undergraduate students must complete a minimum of 12 semester hours (4 courses) in history, earned in the classroom, online, or through AP or transfer credits (or a combination thereof). A minimum GPA of 3.1 in history and 3.0 GPA overall are required. A student need not be a history major to apply. Graduate students should have completed a minimum of 12 semester hours toward their master's degree in history and have a GPA of better than 3.5.

Faculty

Andrew Bergerson^{2,3} Professor of History; B.A. (Cornell University); M.A., Ph. D. (University of Chicago).

Rebecca Miller Davis² Associate Teaching Professor of History; B.A., M.A. (James Madison University); Ph.D. (University of South Carolina).

Sandra Enríquez^{2,3} Assistant Professor of History; Director of Public History emphasis; B.A., M.A. (University of Texas, El Paso); Ph.D. (University of Houston).

David Freeman^{2,3} Associate Professor of History; B.A. (University of Minnesota-Duluth); M.A., Ph.D. (Emory University).

Brian Frehner^{2,3} Associate Professor of History; B.A. (University of California, Los Angeles); M.A. (University of Nevada, Las Vegas); Ph.D. (University of Oklahoma).

Viviana L. Grieco^{2,3} Associate Professor of History; B.A. (Universidad de Buenos Aires); M.A., Ph.D. (Emory University).

John Herron^{2,3} CAS Interim Executive Associate Dean; Professor of History; B.A., M.A. (Montana State University); Ph.D. (University of New Mexico).

Linda Mitchell^{2,3} Professor of History; Martha Jane Phillips Starr/Missouri Distinguished Professor of Women's and Gender Studies; B.A. (Sarah Lawrence College); M.A., Ph.D. (Indiana University).

Diane Mutti Burke^{2,3} Department Chair; Professor of History; B.A. (Dartmouth College); M.A., Ph.D. (Emory University).

Matthew Osborn^{2,3} Associate Professor of History; B.A. (University of California Santa Cruz); M.A., Ph.D. (University of California Davis).

Massimiliano Vitiello^{2,3} Professor of History; Royall Professor; M.A. (University of Rome); Ph.D. (University of Messina); postdoctoral license in medieval studies (Pontifical Institute of Mediaeval Studies-Toronto).

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

Undergraduate Undergraduate Degrees:

- Bachelor of Arts: History (p. 850)
- Minor in History (p. 861)

Graduate Graduate Degrees:

- Master of Arts: History (p. 857)
- Interdisciplinary Ph.D. in History (p. 856)

Courses

HISTORY 101 U.S. History to 1877 Credits: 3

This course offers a broad survey of American history up to 1877.

HISTORY 101 - MOTR HIST 101: American History I



HISTORY 102 U.S. History Since 1877 Credits: 3

This course covers American history from the end of Reconstruction to the present.

HISTORY 102 - MOTR HIST 102: American History II



HISTORY 201 European History to 1600 Credits: 3

This course surveys the political, social and cultural history of Europe from ancient times to 1600. Beginning with a brief description of the riverine civilizations of the ancient Near East, the course then examines the political and cultural evolution of classical Greco-Roman civilization, the medieval world, the rise of the national state, and the essential characteristics of the eras of the Renaissance and Reformation.

HISTORY 201 - MOTR WCIV 101: Western Civilization I



HISTORY 202 European History since 1600 Credits: 3

This course surveys the political, economic, social, intellectual, and cultural history of Europe from about 1600 to the present. Emphasis is given to themes of continuity and change in European culture through the experience of political, scientific and industrial revolutions, conservative reactions, liberal reforms, nation building, imperialism, two world wars, fascism, communism and the Cold War.

HISTORY 202 - MOTR WCIV 102: Western Civilization II



HISTORY 206 World History To 1450 Credits: 3

This course surveys the cultural, social, economic, and political history of the world to 1450. It studies the development of civilizations in isolation as well as the origins, nature, and consequences of global forms of interaction and exchange.

HISTORY 206 - MOTR HIST 201: World History I



HISTORY 208 World History since 1450 Credits: 3

This course surveys the social, economic, political history of the world from 1450 to the present. It studies the development of civilizations in isolation as well as the origins, nature, and consequences of global forms of interaction and exchange.

HISTORY 208 - MOTR HIST 202: World History II



HISTORY 215 Getting High: Alcohol & Drugs in American History Credits: 3

This class will investigate historical transformations in how American society has defined and responded to problematic drinking and drug use. The class will analyze what controversies surrounding various forms of intoxication indicate about the nature of American society and culture.

HISTORY 300AM Special Topics in Antiquity and Medieval History Credits: 3

This course addresses special topics in Antiquity and Medieval History. Topics are focused and specialized based on faculty interests and change from semester to semester. Special topics courses are repeatable for credit when the topic changes. See notes in Pathway each semester for the specific topic.

HISTORY 300EM Special Topics in Early and Modern European History Credits: 3

This course addresses special topics in Early and Modern European History. Topics are focused and specialized based on faculty interests and change from semester to semester. Special topics courses are repeatable for credit when the topic changes. See notes in Pathway each semester for the specific topic.

HISTORY 300HW Special Topics in World History Credits: 3

This course addresses special topics in World History. Topics are focused and specialized based on faculty interests and change from semester to semester. Special topics courses are repeatable for credit when the topic changes. See notes in Pathway each semester for the specific topic.

HISTORY 300P Special Studies Credits: 1-3**HISTORY 300PH Special Topics in Public History Credits: 3**

This course addresses special topics in Public History. Topics are focused and specialized based on faculty interests and change from semester to semester. Special topics courses are repeatable for credit when the topic changes. See notes in Pathway each semester for the specific topic.

HISTORY 300US Special Topics in United States History Credits: 3

This course addresses special topics in United States History. Topics are focused and specialized based on faculty interests and change from semester to semester. Special topics courses are repeatable for credit when the topic changes. See notes in Pathway each semester for the specific topic.

HISTORY 300WY Decade of Dissent: The 1960s Credits: 3

The social movements and conflicts that developed during the 1960s continue to define American culture. Questions of racial and gender equity, a greater willingness to challenge authority, concerns about the environment, and a new openness about issues of sexuality all developed during the sixties and remain as arenas of debate today. This course will examine the origins, contexts, and major themes of these social and cultural movements.

HISTORY 301WI Historiography and Method Credits: 3

This basic course is required of all history majors at the beginning of the junior year. Content includes: 1) what history is; 2) its value and usefulness; 3) the diversity of our fields, approaches, and methods; and 4) the techniques of preparing and writing history papers. Texts and reading are approved by the Department (i.e.: Turabian for style). Although the emphasis is general instead of particular, the instructor will be assisted by other historians representing their main special interest areas.

HISTORY 302 Colonial North America, 1492–1763 Credits: 3

This course examines European colonization in North America, from the voyage of Christopher Columbus to the eve of the American Revolution. Students will consider the Atlantic-world context of colonization, the environmental factors that shaped colonial development, and the complex interactions of European, African, and Indian peoples.

HISTORY 303 The American Revolution, 1763-1789 Credits: 3

This course examines the history of the American Revolution, from the explosive political crisis of the 1760s to the struggle over ratification of the Constitution. Students will consider the origins and conduct of the war, as well as the Revolution's far-reaching political, social, and economic consequences.

HISTORY 304 The Early American Republic, 1789–1850 Credits: 3

This class will survey major themes in the history of the early American republic, from the passage of the Constitution in 1789 to the California Gold Rush of 1849.

HISTORY 305 America, 1828-1852: The Jacksonian Period Credits: 3

An analysis of the political, social, economic, and intellectual factors in American society, 1828-1852. The period featured the presidency of Andrew Jackson, the shaping of a new democratic ideology, the culmination of manifest destiny, the quickening of the antislavery impulse, the Mexican War, the growing sectional split, and the Compromise of 1850.

HISTORY 306 America, 1850-1877: Civil War and Reconstruction Credits: 3

A survey of the political, social and economic factors leading to the dissolution of the federal union is followed by a consideration of the major features and developments of the war period. This, in turn, leads to an analysis of the major factors and relationships involved in the "reconstruction" of the federal union. The course covers the years 1850 to 1877.

HISTORY 306A History of Christianity to the Middle Ages Credits: 3

This course examines the cultural, historical and theological development of Christianity from its origins to the High Middle Ages. The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major cultural, social, institutional, and intellectual force in Western Europe with a focus on patterns of crisis and reform.

HISTORY 307A History of Christianity from the Middle Ages to Present Credits: 3

This course examines the cultural, historical and theological development of Christianity from the High Middle Ages to the present. The main themes follow the development of foundational Christian theological thought and practice into what are now mainstream Western Christian theologies, the institutional histories of Western Christianity, and the cultures of Western civilization.

HISTORY 309 World War II Film and Propaganda Credits: 3

This course examines film and propaganda, including posters, political cartoons, speeches, and other media, created in prewar or wartime conditions by both the Allies and Axis powers from 1933 to 1945 as it affected World War II.

HISTORY 334 History of Technology Credits: 3

The course examines technology as it shapes and is shaped by human society. Students will consider technology as a product of historically-specific and sometimes overlapping contexts shaped by culture, economics, natural environments, and social processes.

HISTORY 343 Oral History Credits: 3

This course focuses on the methods, theories, ethics, practices, and applications of tools in documenting and recovering the experiences of people hidden from the "traditional records." Through lectures, readings, discussions, and fieldwork, students will learn the various steps in developing a robust oral history project. Students will go out into the community to capture the histories of communities in Kansas City.

HISTORY 348 Missouri/Kansas Border Wars Credits: 3

This course explores the history of the Civil War on the Missouri/Kansas border, where residents first shed blood over the issue slavery. An exploration of this most uncivil of wars provides insight into the ways in which societies can be fragmented by ideology and ultimately rebuilt upon different lines.

HISTORY 349 Civil War in Memory and Film Credits: 3

This course explores how the era of the Civil War and Reconstruction has been portrayed in film, literature, and art, and if the popular memory of the war accurately reflects the history. We also will discuss how the understanding of this pivotal event in American History has changed over time and how cultural artifacts often say more about the time in which they were produced than the actual history of the Civil War.

HISTORY 356 Rise of the City in the U.S. Credits: 3

This course treats the background and major developments of the urbanization of the United States. Includes the American urban tradition, the scope of urbanization, colonial beginnings, urban rivalries, promotion, case studies of cities, the growth of urban services, the slum, problems of government, population trends, urban planning, and suburban growth. Consideration is also given to the methods and techniques of urban research and history of the development of this field.

HISTORY 357 The American West Credits: 3

This course deals with the relationship of the American West to the social and economic development of the United States. Major emphasis is placed on the role of the trans-Mississippi West in the economic growth of the national economy. Related cultural and political events are evaluated in the terms of the many Western frontiers. Emphasis will be placed on the Turner thesis, the Indian heritage, frontier violence, and the cow town experience.

HISTORY 358 History of the American South I Credits: 3

A study of the political, intellectual, cultural, economic, and social development of the American South up to and including the Civil War. Special topics discussed will be the plantation system, slavery, abolition, secession, the Confederacy, and the interaction of the region with the nation.

HISTORY 360R Constitutional History of the United States Credits: 3

The general question covered is: how does American society govern itself? Topics include the fusion of Anglo traditions and American environment, creation of the American republic under the Constitution of 1787, the struggle for sovereignty during the Marshall-Taney era, and the Supreme Court's utilization of the 14th Amendment to adapt the Constitution to modernity.

HISTORY 364R Nature, Culture And The Human Experience Credits: 3

This course is an introduction to various interpretations of nature with a focus on American culture and society. We will consider ideas about nature from diverse perspectives including history, literature, philosophy and religion in order to understand how human perceptions and uses shape relations with the natural world. Specific themes include such diverse topics as the aesthetic tradition, environmental thought, and environmental justice.

HISTORY 365A American Environmental History Credits: 3

This course examines the changing relationships between human beings and the natural world through time. The main argument of this course will be that American History looks very different through an environmental lens. Nature is an important category of historical analysis as well as a topic worthy of historical study itself and this course will examine themes as diverse as Native American ecology to the modern environment crusade.

HISTORY 366RR American Labor History Credits: 3

This course examines the history of work and the working class in the U.S. from 1750 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.

HISTORY 369 Women and Work in Early America Credits: 3

This course examines the ways in which gender, race, region, and class have shaped the historical experiences of American women. Students will trace women's lives from pre-European contact to 1877 through an examination of a wide variety of social, cultural, economic, and political forces and factors.

HISTORY 370 Introduction to Material Culture Credits: 3

This course will consider the ways in which material culture contributes to our understanding of history. Scholars have increasingly recognized the significance of "the things they left behind," particularly as they provide insights to the lives of those who did not leave extensive written records. Students will consider all aspects of material culture, drawing largely on examples from American history: architecture, domestic utensils and furnishings, clothing, tools, and good agricultural practices. The courses will emphasize the process of handicraft technology as well as the product, and will consider the impact of modernization upon both process and product.

HISTORY 371 American History Through Film Credits: 3

This course will move through the twentieth century and highlight major themes and developments that reveal the contours of American history as depicted in film. Students will examine the ways in which filmmakers have presented history, paying particular attention to the presentation of political, cultural, and social conflicts.

HISTORY 375 Success and Failure in Nineteenth Century America Credits: 3

This course traces the social history and cultural significance of success, failure, and poverty in nineteenth-century America. The class will investigate how diverse Americans made sense of the rapidly growing disparities of wealth that accompanied the rise of industrial capitalism.

HISTORY 379 Museums, Monuments, and American Life: An Introduction to Public History Credits: 3

This course will investigate the ways America commemorates, invokes, and misremembers its history—what scholars call public history. Students will learn the skills professionals use to communicate historical scholarship to wider audiences, and will grapple with the political and ethical issues that arise when we expand the discipline's stakeholders.

HISTORY 392A Archival Internship Credits: 1-3

Students work directly with professional archivists and other personnel at the Kansas City Federal Records Center, the Truman Library, Jackson County Historical Society, and similar facilities in the area. Emphasis will be given to areas of arrangement, description and preservation of archival materials. Each student must make individual arrangements through the department.

Prerequisites: Departmental consent.

HISTORY 392B Public History Internship Credits: 1-3

Students work directly with public history and editorial personnel at the Kansas City Museum, the Kansas City Pitch Weekly, the Truman Library, and similar facilities in the area. Depending on the institutional affiliation, emphasis will be given to museum operations and displays, editing, fund-raising, historical research and writing. Each student must make individual arrangements through the department.

Prerequisites: Departmental consent.

HISTORY 398 Black Civil Rights in the 20th and 21st Centuries Credits: 3

This course examines the fight for black civil rights in the United States in the 20th and 21st centuries, focusing on the Jim Crow period, the fight to end segregation, and the enduring problem of race in the United States.

HISTORY 400 Special Studies Credits: 1-3

Courses on subjects which are not a part of the regular department offering. The courses result from one or more of the following: (1) The expressed desire of students; (2) the broadened or refocused scholarship of a member of the history faculty; (3) the temporary presence of a scholar whose specialization is not reflected in the department's regular offerings; (4) the conclusion by the department that the course meets a community need; (5) the effort of the history faculty to provide an interdisciplinary approach to an era or topic. The course is experimental in the sense that it is a one-time offering with the potential of repetition or modification—depending upon student, faculty and community response.

HISTORY 400CW Cluster Course: Critical Issues in Women's & Gender Studies Credits: 3

What does it mean to grow up female in America? How does being female influence the body, the mind, identity? This course is an interdisciplinary exploration of the issues that have shaped the lives of American women throughout the life cycle and across the timeline. This course examines the role that culture and society have played in shaping and defining what it means to be an American girl and woman.

HISTORY 400WI Special Studies Credits: 1-3

Special studies in History. Writing Intensive.

HISTORY 404 Women and Gender in Latin America Credits: 3

This course studies gender in Latin America from the eve of conquest by the Portuguese and Spanish in the fifteenth century to the present. It examines how ideas about gender affected the lives of Latin American men and women. This course additionally analyzes how gender and race contributed to the creation of a hierarchical social order. Finally, it discusses the exercise of authority within and outside households and its impact on private and public spaces.

HISTORY 405 Colonial Latin America (From the Encounter to the Early 19th Century) Credits: 3

This course discusses the conquest and colonization of Latin American by the Spanish and the Portuguese imperial powers from the time of the encounter to the early nineteenth century. It studies the Iberian, Indigenous and African cultures and their influence in the creation of a hierarchical imperial order. Emphasis is given to the impact of the conquest, the economics of exploitation, race, sexual and gender identities and, religious and legal domination.

HISTORY 406 Modern Latin America Credits: 3

This course studies social, political, economic and cultural trends in Latin America in the nineteenth and twentieth centuries. Discussion topics include nation building after independence with an emphasis on gender and race in the creation of national identities and new forms of social stratification; integration of national economies into the world economic system; the expansion of political participation and citizenship; immigration and the tensions caused by the forces of modernization and tradition.

HISTORY 407 Latin American Crises and Opportunities Credits: 3

This course studies why Latin America has experienced in the 20th and 21st centuries recurrent economic and political crises – and why it is still a land of enormous opportunity. While this is primarily a history course, it undertakes a multidisciplinary examination of the region's strengths and weaknesses by discussing theories of economic development, political and sociological models as well as the influence of crime and violence. Case studies anchored in representative countries will be used to illustrate historical trends and theories.

HISTORY 411A Medieval Civilization I Credits: 3

This course covers the period between the decline of the Roman Empire in the West and the Investiture Controversy. Topics include the rise of Christianity and early church-state relationships; the barbarian invasions and the various Germanic kingdoms; the age of Charlemagne; monasticism and feudalism. There will also be special sessions on the civilizations of Islam and Byzantium.

HISTORY 411B Medieval Civilization II Credits: 3

Medieval Civilization II.

HISTORY 412A Medieval Women & Children Credits: 3

This course explores the roles of women in the social, economic, political and cultural environments of medieval and early modern Europe. We examine the lives of women in all areas of life, from the ordinary to the extraordinary, in urban and rural environments, from the centers of religious and political power to the margins of society. Focus will be on the world of work for urban and peasant women and on the social and legal institutions of marriage, kinship and the family. The course makes extensive use of primary sources by and about women during this period.

HISTORY 414 Reformation Credits: 3

Beginning with a description and analysis of the social, intellectual and political aspects of the later Middle Ages, the course continues with an examination of those profound religious, social and political changes which mark the 16th century as the end of the Middle Ages and the beginning of the modern secular era.

HISTORY 416R The French Revolution and Napoleon Credits: 3

Narrative history concentrating on the explosive and colorful events and personalities in France, but also showing the European and Western context and impact of the revolution and Napoleon. Illustrated accounts cover such "great days" as the storming of the Bastille, the fall of Robespierre, and Napoleon's Coup of 18 Brumaire, and great battles. Main periods are: the origins of the revolution (economic, social, political, intellectual); revolution and reconstruction (1789-92); through terror to Thermidor (Jacobins and sans-culottes); Napoleon's wars and reconstruction (France and Europe). Cinema, slides and martial music periodically. Discussion of major authors and interpretations.

HISTORY 420CC World War I in Film: The World made Modern Credits: 3

This cluster course examines World War I and its legacy through the lenses of international history and film studies. It explores the origins and conduct of the "Great War," as it was called at the time, as well as its transforming effects on the modern international relations and the ongoing process of globalization. It also examines how the war spurred the growth of an infant motion picture industry, and how movies produced during the decades that followed helped shaping popular memories of the conflict-reflecting and shaping cultural discourses regarding the myth or reality of modern civilizational progress; the ethics of modern weaponry; the individual's placed in mass society; constructions of class, race, and gender; and the meaning of national identity in a globalizing world. The class will draw on selected history texts and an array of films and film clips.

HISTORY 425R European Criminal Justice History, 500-1900 Credits: 3

This course will survey European crime, criminal procedure, policing and punishment between 500 and 1900. Particular attention will be given to changing methods of proof (oaths, ordeals, juries); changing type of criminal activity (banditry, vagrancy, witchcraft, professional theft) and changing penal strategies (the stocks, breaking on the wheel, the workhouse, the prison, the penitentiary). English experiences are emphasized.

HISTORY 428B Gender & Medicine: Patients & Practitioners From Antiquity to Present Credits: 3

This course explores, in a selective fashion, the role of women in Western medicine both as health care providers and patients. The subject of the history of medicine is too broad to be covered comprehensively in a semester, and so we will focusing on diseases or physical conditions which were believed to be limited to women—childbirth, certain mental health conditions, reproductive health, breast cancer— as well as the increasing marginalization of women within the profession of health care providers to those branches concerned primarily with "women's problems."

HISTORY 430RA 'We Are The Dead': The Great War Experience Through its Artifacts Credits: 3

World War One was the "war to end all wars"; all previous wars were indeed eclipsed by its scale of destruction. And yet, it was a war that initiated a century of continual bloodshed and crimes against humanity. This course will explore the causes, nature and consequences of the Great War of 1914-18. It will be taught on different themes each Winter semester at the National World War One Memorial Museum at Liberty Memorial.

HISTORY 431R Medieval England, 1066 To 1485 Credits: 3

Beginning with the Norman conquest of England in 1066, this course traces the history of Medieval England through the establishment of the Tudor dynasty. Covered will be such items as the rise of the Angevin Empire, the conflict between monarch nobility, the evolution of Parliament, as well as the Anglo-French rivalry which culminated in the Hundred Years' War.

HISTORY 432R Tudor England, 1485-1603 Credits: 3

This course covers England from the accession of Henry VII, the first Tudor, to the death of Elizabeth I in 1603 Topics to be covered are: transformation of England into a modern state, the Reformation, the role of Parliament, conflicts with European powers, especially Spain, etc.

HISTORY 433R History of Britain 1603-1832 Credits: 3

This course surveys the history of Britain from the the rise of the Stuart dynasty through the Industrial Revolution, with particular emphasis on the cultural aspects of political, social, economic, and military changes. Topics include: the domination of the aristocracy; the rise of the Navy; the exploration of the Pacific; the monarchy of George III; the loss of the American colonies; the wars with Napoleon; the Agricultural and early Industrial Revolutions; and the social changes they brought in both Britain and the Empire.

HISTORY 436R Modern German History Credits: 3

This course traces the history of Central Europe from the fall of Bismarck to the reunification of Germany one century later. It will ask students to think critically about the relationship between state and society, elites and 'ordinary' Germans, in the various German-speaking regimes that existed over the course of this era: two empires, two interwar republics, two fascist dictatorships, and three post-fascist republics. All assigned readings will be in English; a background knowledge of European history is recommended.

HISTORY 437AWI Imperial Germanies, 1848-1918 Credits: 3

This course traces the history of German-speaking Central Europe from the Revolutions of 1848 to the collapse of the Hohenzollern and Habsburg empires at the end of World War One. It will ask students to think critically about the relationship between state and society and the role played by 'elite' and 'ordinary' people in shaping German history. This reading and writing intensive course will be run as a seminar. Final grades will be based on a portfolio of assignments of which students will select what they consider to be the best examples of their work.

Prerequisites: HISTORY 202, HISTORY 208.

HISTORY 437BWI First German Republics, 1917-1935 Credits: 3

This course traces the history of the two German Republics during the inter-war years—the First Austrian Republic and the so-called Weimar Republic—from the peace movements of the First World War to the solidification of fascist dictatorships. It will ask students to think critically about the relationship between state and society and the role played by "elite" and "ordinary" people in shaping German history. This reading-and writing-intensive course will be run as a seminar. Final grades will be based on a portfolio of assignment of which students will select what they consider to be the best portfolio of assignments of which students will select what they consider to be the best examples of their work.

Prerequisites: HISTORY 202, HISTORY 208, RooWriter.

HISTORY 437DWI Cold War Germanies, 1941-1991 Credits: 3

This course traces the history of the three postwar German Republics— the Second Austrian Republic, the German Democratic Republic, and the Federal Republic of Germany — from the initial plans of the Allies for postwar reconstruction to the Reunification of Germany in 1991. It will ask students to think critically about relationship between state and society and the role played by 'elite' and 'ordinary' people in shaping, and in the remembering, of German history. This reading-and writing-intensive course will be run as a seminar. Final grades will be based on a portfolio of assignments of which students will select what they consider to be the best examples of their work.

Prerequisites: HISTORY 202, HISTORY 208, RooWriter.

HISTORY 444R Islam and the Arabs: The Formative Period Credits: 3

The first semester of a three-semester sequence begins with a brief overview of the geography and topography of the Middle East. The course proceeds with a discussion of the conditions of pre-Islamic Arabia; the appearance of Muhammad and his mission; the rise and spread of Islam; the establishment and consolidation of the Arab dynasties in the Middle East, North Africa and Spain; Islamic institutions; and Islamic society and culture. The time span will be approximately 500 A.D. to the Mongol conquest of Baghdad in 1258.

HISTORY 445 The Ottoman Empire in the Middle East to World War I Credits: 3

The second semester of a three-semester sequence covers the transition from Arab to Turkish hegemony in most of the Middle East as well as the restoration of native Persian dynasties in Iran and their subsequent development. The emphasis is on the rise and decline of the Ottoman Turkish Empire. Attention is given to the Ottoman provinces and to the national movements of subject peoples. The course ends with an overview of World War I and the peace treaties which marked the dissolution of the Ottoman Empire.

HISTORY 446R The Middle East from World War I to the Present Credits: 3

The third semester of a three-semester sequence deals with the emergence of the modern countries of the Middle East after World War I and their history and course of development to the present day. There will be a general survey of the government and politics, economic situation, and social and cultural characteristics of each important country in the area. In addition, special topics will be discussed such as the modernization process, ideological alternatives, relations with the great powers, the economics and politics of oil, and the Arab-Israeli conflict.

HISTORY 464 Medieval Methods and Paleography Credits: 3

This course examines the methodology and historiography of Medieval Studies. Through an introduction to paleography, the study of medieval handwritings, it prepares students for advanced work in Medieval and Renaissance studies. Using an interdisciplinary approach, this course will examine the historical and cultural settings for medieval texts, their physical form and production, as well as the tradition of textual transmission in the medieval world. In addition to gaining familiarity with the many different types of primary sources, such as literary, artistic, legal, and notarial sources, students will be exposed to methods for practical archival work in various European nations.

HISTORY 468R Archaeology and the History of Antiquity Credits: 3

This course will analyze the contributions of archaeology to the understanding of ancient history. It will cover archaeological excavations and their pertinence to classical civilization in the Near East and Greece. The techniques and methodology of field archaeologists will be discussed and demonstrated. Archaeological excavations relating to the Hittite capital, to the Ugaritic tablets, to the Minoan-Mycenaean civilization and its link to the Near East will be treated.

HISTORY 469 Archeology and Biblical History Credits: 3

An examination of ancient Israel as she emerges from the ruins of the past, both lapidary and literary. Through a study of the "mute documents," artifacts man-made (storied cities, household utensils, inscribed shards from Jericho to Jerusalem) we gain an insight indispensable for Biblical studies, for ancient Near Eastern history.

HISTORY 470 Ancient Egypt Credits: 3

This course describes the political, social and cultural evolution of ancient Egypt from pre-dynastic times, with major emphasis upon the Old, Middle, and New Kingdoms (especially the 18th dynasty and the reign of Akhenaton).

HISTORY 471 Ancient Greece Credits: 3

This course begins with a survey of the pre-classical Minoan and Mycenaean civilizations and then describes the rise of prominent Greek city-states (with particular emphasis upon the evolution of Sparta and the political, social and cultural contributions of Athens). The course concludes with the rise of Macedon and Alexander's conquests and significance.

HISTORY 471P Ancient World: The Political Structure Of The Ancient World Credits: 4

The four-hour lecture period on weeknights will emphasize the historical aspects of the ancient civilizations. The lectures will be chronologically organized to focus upon their evolution from their rise to their collapse.

HISTORY 472 Ancient Rome Credits: 3

This course covers Roman history from its origins (including the Etruscans) to the decline of the imperial system. Particular emphasis is placed upon the political, social and economic developments in the Republic, the death of the Republic, the early Principate, and the factors that led to Rome's decline in the ancient world.

HISTORY 472P Ancient World: The Cul/Intellectual Dimension Of Ancient Civi Credits: 4

The four weekend periods will provide the students with a general picture of these civilizations: society, religion, economics, and culture (w.f., arts, literature, philosophy, science, etc.). Guest lecturers, slides, films and video cassettes will be used to introduce the varied aspects of these ancient peoples.

HISTORY 474 Late Antiquity: The Transformation of the Mediterranean World (200–600 AD) Credits: 3

The decline of the Roman Empire and the barbarian invasions transformed the Mediterranean and European worlds, forming the foundation of Europe and the Islamic world. Students will investigate the multicultural society of Late Antiquity and become familiar with the primary sources for the period.

HISTORY 475WI The History of Ancient Israel Credits: 3

Judaism has had a tremendous impact on our civilization and yet most Americans are only dimly aware of its origins and development. This course will trace the roots of the Jewish religion in its historical context from its beginnings through the formation of rabbinic culture. The rise of Christianity will be examined in its original Judaic context, and recent discoveries, particularly those pertaining to the Dead Sea Scrolls, will be interpreted.

Prerequisites: RooWriter.

HISTORY 476 Medieval Jewish History Credits: 3

This course covers the general period from the decline of the Roman Empire to the dawn of early modern times. It is concerned with Jewish centers of life and learning in the Diaspora, both East and West. The course considers the Jews under Islamic rule from the time of Mohammed through the Golden Age of Moorish Spain. The focus then shifts to the situation of the Jews in Christian Europe, from the period of Constantine to the expulsions from England, France and Christian Spain. The Jews in the Ottoman Empire are mentioned and the course ends with the episode of Sabbatai Zevi, the false Messiah.

HISTORY 477 Modern Jewish History Credits: 3

This course surveys modern Jewish history from the Napoleonic period to World War II. Analyzing the social status of the Jews in Medieval Europe, it proceeds towards a discussion of the growth of the national state and the breakup of the Holy Roman Empire and analyzes the growth of socialism, integral nationalism, and liberalism as they affected the Jewish communities in Europe and America. The course serves as a survey of modern political and economic trends as they affect a distinct group.

HISTORY 496 Historical Research Project Credits: 1-3

Working extensively with an individual faculty member actively engaged in his/her research, students practice the multiple facets of investigating the sources of history, developing a comprehensive analysis from such sources, and composing a persuasive interpretation.

Prerequisites: Departmental consent.

HISTORY 497 Special Topics and Readings Credits: 1-6

Intensive reading and/or research in an area selected by the student in consultation with the instructor. May be repeated for credit when the topic varies.

HISTORY 498WI Senior Capstone Credits: 3

This is the capstone course in the department and is required for majors in the senior year. It consists of tutorial sessions with a regular faculty member and independent research leading to a major paper using original source materials. Performance in this course will weigh heavily in the award of departmental honors.

Prerequisites: HISTORY 301WI.

HISTORY 5500B Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500BB Special Topics in History for Graduate Students Credits: 3

HISTORY 5500C Special Topics In History For Graduate Studies Credits: 3

HISTORY 5500CL Cluster Course:Nordic Culture Credits: 3

HISTORY 5500CP Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500CZ Special Studies History Credits: 1-3

HISTORY 5500D Special Topics in History For Graduate Studies Credits: 1-3

HISTORY 5500E Special Topics In History For Graduate Studies Credits: 3

HISTORY 5500G Special Topics in History for Graduate Students Credits: 3

HISTORY 5500GB Special Topics in History for Graduate Students Credits: 3

HISTORY 5500GR Special Topics in History for Graduate Students Credits: 3

HISTORY 5500H Special Topics In History For Graduate Students Credits: 1-3

HISTORY 5500JCA Special Topics in History for Graduate Students Credits: 3

HISTORY 5500LA Special Topics in History for Graduate Students Credits: 3

HISTORY 5500P Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500R Special Topics in History for Graduate Studies Credits: 1-3

HISTORY 5500RC Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500RD Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500RJ Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500SS Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500W Special Topics in History for Graduate Students Credits: 3

HISTORY 5500Z Special Studies: Labor In Industrial America Credits: 3

This course examines the history of work and the working class in the U.S. from 1877 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.

HISTORY 5501A Religion in America Credits: 3

An in-depth examination of selected aspects of the history of religions in America from the colonial period to the present. Special emphasis will be given to methodological issues in the study of American religious history.

HISTORY 5502 America,1000-1763: The Formative Era Credits: 3

Early American history encompasses the formative era of many institutions and attitudes which still persist in present-day America. A study of how these patterns and policies emerged will enlighten us as to our current ways our society seeks to adapt to change.

HISTORY 5503 America, 1763-1783: The Revolutionary Heritage Credits: 3

The American Revolution created American history by creating a new nation. What the American Revolution was depends to a large extent upon what Americans think they are or ought to be. The goals of this course, therefore, are twofold: (1) to probe the nature, causes and consequences of the American Revolution; (2) to assess the intentions and behavior of both the Framers of the Constitution in 1763-1783 and the inheritors of modern America.

HISTORY 5504 America, 1783-1828: The National Experience Credits: 3

HISTORY 5505 America, 1828-1852: The Jacksonian Period Credits: 3

HISTORY 5506 America, 1850-1877: Civil War and Reconstruction Credits: 3

HISTORY 5506A History of Christianity to Middle Ages Credits: 3

This course examines the historical and theological development of Christianity from its origins to the High Middle Ages. The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major social, institutional, and intellectual force with a focus on pattern of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.

HISTORY 5507 America 1877-1917: Development of Industrial America Credits: 3

HISTORY 5507A The History of Christianity from the Middle Ages to the Present Credits: 3

This course examines the historical and theological development of Christianity from the High Middle Ages to the present. The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major social, institutional and intellectual force with a focus on patterns of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.

HISTORY 5508A America 1914-1945: The Era of the World Wars Credits: 3

HISTORY 5508B America 1945-Present: Our Times Credits: 3

HISTORY 5511 Medieval Civilization I Credits: 3
Medieval Civilization I

HISTORY 5512 Medieval Civilization II Credits: 3
Medieval Civilization II

HISTORY 5512A Medieval Women & Children Credits: 3

This course explores the roles of women in the social, economic, political, and cultural environments of medieval and early modern Europe. We examine the lives of women in all areas of life, from the ordinary to the extraordinary, in urban and rural environments, from the centers of religious and political power to the margins of society. Focus will be on the world of work for urban and peasant women and on the social and legal institutions of marriage, kinship, and the family. The course makes extensive use of primary source by and about women during this period.

HISTORY 5513 Renaissance Credits: 3

HISTORY 5514 Reformation Credits: 3

HISTORY 5515B 17Th And 18Th Century European History Credits: 3

This course is designed to present the upper-division undergraduate with a firm grasp of the major intellectual, cultural, political and economic development of 17th and 18th century Europe. It considers the bitter Thirty Years War in Century Europe, the rise of the Netherlands, the fall of Italy and Spain, the rise of constitutional and absolutist styles of government, the scientific revolution, the colonization by Europeans of the Pacific and Indian Ocean Basins, Enlightenment political philosophy, the Agricultural Revolution, and the French Revolution. Also offered for undergraduates as 415B. Graduate students will be held to a higher standard in terms of additional, in-depth historiographic research, writing, and discussion.

HISTORY 5516 The French Revolution and Napoleon Credits: 3

HISTORY 5517 19th Century European History Credits: 3

This upper-division course will survey significant trends in warfare, politics, economics, social relations and culture in 19th century Europe, paying particular attention to the rise of modern ideologies and identities, world hegemony, and the social technologies of dehumanization that foreshadowed the unprecedented inhumanities of the 20th century. Graduates will be held to a higher standard in terms of additional, in-depth historiographic research, writing, and discussion.

HISTORY 5518 20th Century European History Credits: 3

This upper-division course traces the history of Europe in the 20th century. It will survey significant trends in warfare, politics, economics, social relations and culture, paying particular attention to the issues of modernity and postmodernity, imperialism and decolonization, dehumanization and genocide as well as the role of ordinary people in these systems of mass destruction. Graduate students will be held to a higher standard in terms of additional, in-depth historiographic research, writing, and discussion.

HISTORY 5519 Contemporary European History: 1950-2000 Credits: 3

This upper-division course traces the history of Europe in the period of living memory. It will survey significant trends in warfare, politics, economics social relations and culture, paying particular attention to the rise of globalization and the condition of postmodernity, decolonization and neo-colonization, European unification and everyday life. Graduate students will be held to a higher standard in terms of additional, in-depth historiographic research, writing, and discussion.

HISTORY 5521 Oral History Credits: 3

This course focuses on the methods, theories, ethics, practices, and applications of tools in documenting and recovering the experiences of people hidden from the "traditional records." Through lectures, readings, discussions, and fieldwork, students will learn the various steps in developing a robust oral history project. Students will go out into the community to capture the histories of communities in Kansas City.

HISTORY 5525R European Criminal Justice History, 500-1900 Credits: 3

This course will survey European crime, criminal procedure, policing and punishment between 500 and 1900. Particular attention will be given to changing methods of proof (oaths, ordeals, juries); changing type of criminal activity (banditry, vagrancy, witchcraft, professional theft) and changing penal strategies (the stocks, breaking on the wheel, the workhouse, the prison, the penitentiary). English experiences are emphasized.

HISTORY 5526 Modern Latin America Credits: 3

This course studies social, political, economic and cultural trends in Latin America in the nineteenth and twentieth centuries. Discussion topics include nation building after Independence with an emphasis on gender and race in the creation of national identities and new forms of social stratification; integration of national economies into the world economic system; the expansion of political participation and citizenship; immigration (national and transnational) and the tensions caused by the forces of modernization and tradition. Although the purpose of the course is to provide a general background for a large and diverse region (more than 20 countries), case studies from Argentina, Mexico and Brazil will illustrate the above-mentioned themes and will provide the basis for a comparative regional perspective.

HISTORY 5526R The Scientific Revolution 1500-1700 Credits: 3

HISTORY 5527 The Darwinian Revolution, 1650-1900 Credits: 3

HISTORY 5528A History Of The Body Credits: 3

This advanced course will explore the new field of the history of the body, with particular attention to sexuality and gender. Topics will include the history of sexualities, the body and society, body disciplines, medical practices and representations of illness, beauty, and fashion, and the relationship between sexualities and nationalisms.

HISTORY 5528B Women & Medicine: Patients & Practitioners From Antiquity-Present Credits: 3

This course explores, in a selective fashion, the role of women in Western Medicine both as health care providers and patients. The subject of the history of medicine is too broad to be covered comprehensively in a semester, and so we will focus on diseases or physical conditions which were believed to be limited to women-childbirth, certain mental health conditions, reproductive health, breast cancer-as well as the increasing marginalization of women within the profession of health care providers to those branches concerned primarily with "women's problems."

HISTORY 5531 Medieval England, 1066 to 1485 Credits: 3

HISTORY 5532 Tudor-England, 1485-1688 Credits: 3

This course covers the history of England from the accession of Henry VII in 1485 to the crowning of William and Mary in the Glorious Revolution. Its main emphasis is the Tudor dynasty 1485-1603 with special reference to the transformation of England into a modern state, Re-Reformation, the role of Parliament, etc. The course concludes with the major characteristics of the early Stuart period.

HISTORY 5533 History of Britain 1603-1832 Credits: 3

This course analyzes the rise and fall of the Stuart dynasty and the effects of civil war, rebellion, and religious turmoil on the peoples of Britain. The domination of politics and culture by the aristocracy in the eighteenth century is examined. The rise of the Navy due to constant warfare and the exploration of the Pacific are discussed. The monarchy of George III, the loss of the American colonies, and the wars with Napoleon are examined. Finally, the Agricultural and early Industrial Revolutions are considered through an analysis of the social changes they brought in Britain and the Empire

HISTORY 5534 History of Technology Credits: 3

The course examines technology as it shapes and is shaped by human society. Students will consider technology as a product of historically-specific and sometimes overlapping contexts shaped by culture, economics, natural environments, and social processes.

HISTORY 5536 Modern German History: 1890-1990 Credits: 3

This course traces history of Central Europe from the fall of Bismarck to the reunification of Germany one century later. It will ask students to think critically about the relationship between state and society, elites and 'ordinary' Germans, in the various German-speaking regimes that existed over the course of this era: two empires, two interwar republics, two fascist dictatorships, and three post-fascist republics. All assigned readings will be in English; a background knowledge of European history is recommended.

HISTORY 5537 Nazi Germany Credits: 3

Nazi Germany

HISTORY 5544 Islam & the Arabs: The Formative Period Credits: 3

HISTORY 5545 The Ottoman Empire in the Middle East to WWI Credits: 3

Cross Listings: HISTORY 445.

HISTORY 5546 The Middle East from World War I to the Present Credits: 3

HISTORY 5548 Missouri/Kansas Border Wars Credits: 3

This course explores the history of the Civil War on the Missouri/Kansas border, where residents first shed blood over the issue slavery. An exploration of this most uncivil of wars provides insight into the ways in which societies can be fragmented by ideology and ultimately rebuilt upon different lines.

Prerequisites: undergraduate degree.

HISTORY 5549 Civil War in Memory and Film Credits: 3

This course explores how the era of the Civil War and Reconstruction has been portrayed in film, literature, and art, and if the popular memory of the war accurately reflects the history. We also will discuss how the understanding of this pivotal event in American History has changed over time and how cultural artifacts often say more about the time in which they were produced than the actual history of the Civil War.

HISTORY 5552 Latin American History through the Movies Credits: 3

This course explores the national cinemas and film industries of various regions in Latin America. Students will analyze films both as artistic endeavors and as sociological documents that provide a window into the socio-historical context of the nation in question. This course will also examine the history of Latin American cinema from the beginnings of sound to present.

HISTORY 5554 Women in Modern America Credits: 3

HISTORY 5556 Rise of the City in the U.S. Credits: 3

HISTORY 5556R Kansas City: History of a Regional Metropolis Credits: 3

HISTORY 5557 The American West Credits: 3

HISTORY 5558 Black Civil Rights in the 20th and 21st Centuries Credits: 3

This course examines the fight for black civil rights in the United States in the 20th and 21st centuries, focusing on the Jim Crow period, the fight to end segregation, and the enduring problem of race in the United States.

HISTORY 5558R History of the American South Credits: 3

History of the American South

HISTORY 5559 World War II Film and Propaganda Credits: 3

This course examines film and propaganda, including posters, political cartoons, speeches, and other media, created in prewar or wartime conditions by both the Allies and Axis powers from 1933 to 1945 as it affected World War II.

HISTORY 5561R American Foreign Relations Credits: 3

HISTORY 5562J Japanese Civilization Credits: 3

A survey of Japanese civilization and cultural history from the prehistorical period to the present. Emphasis on the interplay between religion, the arts, politics, and social structure.

HISTORY 5563R Military History of the U.S. Credits: 3

Military History of the U.S.

HISTORY 5566R American Economic History Since 1865 Credits: 3

The course deals with the emergence of Industrial America since 1865. It will cover the rise to dominance of the large modern corporation, with the problem of economic and social instability and stability, with the rise of trade associations, cartels, and government regulation in an unstable economy, and with the evolution of American economic policy and national economic planning.

HISTORY 5566RR American Labor History Credits: 3

This course examines the history of work and the working class in the U.S. from 1750 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.

HISTORY 5569 Women and Work in Early America Credits: 3

This course examines the ways in which gender, race, region, and class have shaped the historical experiences of American women. Students will trace women's lives from pre-European contact to 1877 through an examination of a wide variety of social, cultural, economic, and political forces and factors.

HISTORY 5570 Introduction to Material Culture Credits: 3

HISTORY 5570R Ancient Egypt Credits: 3

HISTORY 5571 American History Through Film Credits: 3

This course will move through the twentieth century and highlight major themes and developments that reveal the contours of American history as depicted in film. Students will examine the ways in which filmmakers have presented history, paying particular attention to the presentation of political, cultural, and social conflicts.

HISTORY 5571R Ancient Greece Credits: 3

HISTORY 5572R Ancient Rome Credits: 3

HISTORY 5574 Late Antiquity: The Transformation of the Mediterranean World (200-600 AD) Credits: 3

The decline of the Roman Empire and the barbarian invasions transformed the Mediterranean and European worlds, forming the foundation of Europe and the Islamic world. Students will investigate the multicultural society of Late Antiquity and become familiar with the primary sources for the period.

HISTORY 5575 Ancient Israel Credits: 3

Judaism has had a tremendous impact on our civilization and yet most Americans are only dimly aware of its origins and development. This course will trace the roots of the Jewish religion in its historical context from its beginning through the formation of rabbinic culture. The rise of Christianity will be examined in its original Judaic context, and recent discoveries, particularly those pertaining to the Dead Sea Scrolls, will be interpreted.

HISTORY 5575R The History of Ancient Israel Credits: 3

The History of Ancient Israel

HISTORY 5576R Medieval Jewish History Credits: 3

HISTORY 5577R Modern Jewish History Credits: 3

HISTORY 5578R The Holocaust and the State of Israel Credits: 3

The Holocaust and the State of Israel

HISTORY 5579 Public History: Theory and Method Credits: 3

This course explores the theoretical and methodological challenges that surround the public preservation and presentation of history in spaces like museums and historical societies. Students will learn the skills professionals use to communicate historical scholarship to wider audiences and will grapple with the issues around expanding history's stakeholders.

HISTORY 5580 The History Of The American South I Credits: 3

A study of the political, intellectual, cultural, economic, and social development of the American South up to and including the Civil War. Special topics discussed will be the plantation system, slavery, abolition, secession, the Confederacy and the interaction of the region with the nation.

HISTORY 5581 Research Methodologies Credits: 3

An introduction to a variety of research tools and techniques including such topics as evidence, critical method, verification, bibliography, book review, computers, statistics, and archival methods.

HISTORY 5581GR How To - History I Credits: 3

This foundational course in the doing of history will use the "great books" of historical scholarship to introduce graduate students to historical questions, methods, theories, and rhetorical strategies. The goal of the course is for the student to learn how to engage in historical criticism and formulate historical questions for themselves. This required course must be taken in the first year of graduate study in history.

HISTORY 5582 Colloquium In American History I Credits: 3

These courses are designed to acquaint the graduate student with the writings and theories of major American historians. Faculty lectures are combined with student bibliographical essays and the reading of important historical works in order to prepare the student for the final examination taken upon completion of M.A. course work. Books read in the course compose a large proportion of the departmental reading list.

HISTORY 5582A How To - History II A Credit: 1

This course teaches research-proposal writing including how to ask and answer a viable question and become an autonomous researcher in a scholarly community. Students will learn about career paths and development.

Prerequisites: HISTORY 5581GR.

HISTORY 5582B How To - History II B Credit: 1

This course, the second in a two-part sequence, will introduce graduate students to professional obligations and research methodologies of academic and public historians as well as examine diverse career paths for historians. Students will focus primarily on career development curriculum and experiences.

HISTORY 5583 Colloquium In American History II Credits: 3

These courses are designed to acquaint the graduate student with the writings and theories of major American historians. Faculty lectures are combined with student bibliographical essays and the reading of important historical works in order to prepare the student for the final examination taken upon completion of M.A. course work. Books read in the course compose a large proportion of the departmental reading list.

HISTORY 5583GR Medieval Methods & Paleography Credits: 3

This course examines the methodology and historiography of Medieval and Renaissance Studies. Through an introduction to paleography, the study of handwritings, it prepares students for advanced work in these fields. Using an interdisciplinary approach, this course examines the historical and cultural settings for texts, their physical form and production, as well as the tradition of textual transmission in the medieval and early modern world. In addition to gaining familiarity with many different types of primary sources, such as literary, artistic, legal, and notarial sources, students will be exposed to methods for archival work in various European nations.

HISTORY 5584R Colloquium In European History I Credits: 3

The European History Colloquium I will examine some of the crucial problems or watersheds in European history from antiquity through the Reformation. Course requirements include weekly discussions on specific topics and a research paper or project due by the end of the semester.

HISTORY 5585 Colloquium In European History II Credits: 3

The European History Colloquium II will examine some of the crucial problems or watersheds in European history from the Reformation through the 20th century. The course seeks to provide an in-depth study of specific topics and of the associated bibliography.

HISTORY 5585GR Colloquium in U.S. History Credits: 3

Students read broadly in the historiography of a particular historical problem, place, period, or specialization in U.S. History in order to master the relevant literature and hone their skills of historical criticism.

Co-requisites: HISTORY 5581GR.

HISTORY 5586GR Colloquium in World History Credits: 3

Students read broadly in the historiography of a particular historical problem, place, period, or specialization in world history in order to master the relevant literature and hone their skills of historical criticism.

Co-requisites: HISTORY 5581GR.

HISTORY 5587R Research Seminar Credits: 3

Students in this course will produce a major research paper under the direction of the instructor: a self-contained thesis chapter, an article for publication, or the equivalent.

Prerequisites: HISTORY 5582A.

HISTORY 5587RA Research Seminar Credits: 3

HISTORY 5587RB Research Seminar Credits: 3

HISTORY 5590 History Of The American South II Credits: 3

A study of the political, intellectual, cultural, economic, and social development of the American South since the Civil War. Topics discussed will be the molding of a "New South," twentieth century internal developments and the interaction of the region with the nation.

HISTORY 5591 Archival Methods Credits: 3

HISTORY 5592 Public History Internship Credits: 1-3

HISTORY 5593 Museum Studies Credits: 3

This course is designed to acquaint students with specific careers in museums and historical agencies; to introduce students to the wide range of operating issues facing those working in the museum profession on a day-to-day basis; and to familiarize students with the organizations, reference works and resources available to develop the skills and training required for those who choose to make this their profession.

HISTORY 5594 Public History and New Media Credits: 3

This course provides students with an understanding of how new media can advance the work of cultural heritage. While contributing to an ongoing digital project, the course will consider how historians utilize digital technology to analyze primary sources as well as how museums use social media to reach broader audiences.

HISTORY 5597 Non-Thesis Research/Reading Credits: 1-6

Individual direction of student reading or research by selected, consenting faculty. This course can be taken only when faculty supervision is unavailable in colloquia or seminars.

HISTORY 5599R Thesis Credits: 1-6

A contribution to knowledge based upon extensive research and reflective of careful analysis. Before writing a thesis, the student must clear the topic and research design with the Supervisory committee.

HISTORY 5680 Doctoral Colloquium Credits: 3

This course will examine the writings and theories of major historians in a particular field of history. The authors, works and intellectual currents which form the basis of the colloquium will vary from semester to semester, depending upon the professor's expertise and design for the course.

HISTORY 5687 Doctoral Research Seminar Credits: 3

Students in this course will produce a major research paper under the direction of the instructor. This shall consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

HISTORY 5687RB Doctoral Research Seminar Credits: 3

Students in this course will produce a major research paper under the direction of the instructor. This shall consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

HISTORY 5697 Doctoral-Level Independent Reading Credits: 1-6

Individual reading under the supervision of members of the History Doctoral Faculty in preparation for the Comprehensive Examination for the Ph.D.

HISTORY 5699R Dissertation Credits: 1-15

Course credits in dissertation.

HISTORY 5899 Required Graduate Enrollment Credit: 1

HISTORY 5990 Capstone Credits: 1-6

HISTORY H497 Special Topics and Readings Credits: 1-6

Intensive reading and/or research in an area selected by the student in consultation with the instructor. May be repeated for credit when the topic varies.

Bachelor of Arts: History

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- recognize, demonstrate, and apply general knowledge of the world's civilizations and peoples as well as their political, economic, social, and cultural histories.
- relate the events in their particular historic stories to the general history of the topic; and students relate their interpretation to existing historical scholarship.
- demonstrate the ability to identify and employ primary and/or secondary sources to research a topic.
- be able to use primary and secondary sources to construct an historical interpretation, demonstrating competency in identifying a problem, posing a hypothesis, proposing a methodology, and offering an interpretation of the evidence.
- be able to compose and present clear, well-organized, properly documented, and grammatical academic prose.

The Department of History has developed a set of carefully crafted learning objectives. Simply put, history majors are expected to acquire specified levels of knowledge, perspectives and skills through the study of the past. The learning objectives are designed to help students succeed in their undergraduate history major, as independent, creative and self-directed learners. More important, they will help students to be successful in their pursuit of a career and to hold a lifelong appreciation for the humanities and social sciences.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		10

Major Requirements

The History major consists of 36 total credit hours, but no credit will be given toward the major for courses in which the grade is below C-.

Two courses, or 6 credit hours, are required in survey courses, including United States History (HISTORY 101 or HISTORY 102), European History (HISTORY 201 or HISTORY 202), or World History (HISTORY 206 or HISTORY 208). Students will select one course, or 3 credit hours, from two of these three categories (United States, European, or World) for a total of two courses, or 6 credit hours. These courses may also fulfill UMKC general education requirements.

At least four courses, or 12 credits, inside the student's interest area. The history department divides all upper division courses into five interest areas: Antiquity and Medieval; Early Modern and Modern Europe; Public History; United States; and World. All majors should select a primary interest area in order to gain an in-depth understanding of their topic. A student can also devise a thematic interest area with approval by an Undergraduate History Advisor.

Students will also take additional courses from other interest areas to enlarge the scope of their historical knowledge. At least three courses, or 9 credits, should be outside of the student's primary interest area, and at least one non-western course, or 3 credits, should be taken covering Africa, Asia, Latin America, and/or indigenous North Americans.

The final two courses, or 6 credits, come from HISTORY 301WI and HISTORY 498WI. These courses cannot be taken in the same semester and are not offered in the summer.

Independent-study courses and Internship classes may also help fulfill History electives. Enrollment in these courses is granted only by the supervising instructor.

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
Two Surveys, selecting one from two different categories:		6
Category 1: U.S. History		
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
Category 2: European History		
HISTORY 201	European History to 1600	
HISTORY 202	European History since 1600	
Category 3: World History		
HISTORY 206	World History To 1450	
HISTORY 208	World History since 1450	
At least four 300- or 400-level courses inside the student's interest area, chosen in consultation with department advisor (see below). ¹		12
At least three 300- or 400-level courses outside of the student's interest area.		9
At least one 300- or 400-level Non-Western course.		3
Methods Course:		3
HISTORY 301WI	Historiography and Method	
Capstone Course:		3
HISTORY 498WI	Senior Capstone	
Total Credits		36

¹ Students may petition for inclusion of up to 6 hours of relevant 300- and 400-level courses offered by other departments to be counted as major electives.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		44

Minimum GPA: 2.0

Total Credit Hours: 120

Interest Areas

Interest area electives may be taught on a rotation basis, please see advisor for current availability.

Code	Title	Credits
Antiquity and Medieval		12
ANCH 307	Frauds, Myths and Mysteries in Archaeology	
CLASSICS 300CY	Ancient World in Cinema	
CLASSICS 391WI	Ancient Greek and Roman Medicine	
HISTORY 300AM	Special Topics in Antiquity and Medieval History	
HISTORY 306A	History of Christianity to the Middle Ages	
HISTORY 411A	Medieval Civilization I	
HISTORY 411B	Medieval Civilization II	
HISTORY 412A	Medieval Women & Children	
HISTORY 431R	Medieval England, 1066 To 1485	
HISTORY 469	Archeology and Biblical History	
HISTORY 470	Ancient Egypt	
HISTORY 471	Ancient Greece	
HISTORY 472	Ancient Rome	
HISTORY 474	Late Antiquity: The Transformation of the Mediterranean World (200–600 AD)	

Code	Title	Credits
Early Modern and Modern Europe		12
HISTORY 300EM	Special Topics in Early and Modern European History	
HISTORY 307A	History of Christianity from the Middles Ages to Present	
HISTORY 414	Reformation	
HISTORY 416R	The French Revolution and Napoleon	
HISTORY 432R	Tudor England, 1485-1603	
HISTORY 433R	History of Britain 1603-1832	
HISTORY 436R	Modern German History	
Public History		12
ENGLISH 477DH	Studies in Digital Humanities	
HISTORY 300PH	Special Topics in Public History	
HISTORY 343	Oral History	
HISTORY 379	Museums, Monuments, and American Life: An Introduction to Public History	
HISTORY 392A	Archival Internship	
HISTORY 392B	Public History Internship	
HISTORY 430RA	'We Are The Dead': The Great War Experience Through its Artifacts	
UPD 430	Planning For Historic Preservation	
UPD 475	American Housing	
United States		12
ANCH 304	Telling Stories: History, Memory, and American Life	
ANCH 318	From Oil Gushers to Fracking: A History of American Petroleum	
HISTORY 300US	Special Topics in United States History	
HISTORY 300WY	Decade of Dissent: The 1960s	
HISTORY 303	The American Revolution, 1763-1789	
HISTORY 304	The Early American Republic, 1789–1850	
HISTORY 306	America, 1850-1877: Civil War and Reconstruction	
HISTORY 334	History of Technology	
HISTORY 348	Missouri/Kansas Border Wars	
HISTORY 349	Civil War in Memory and Film	
HISTORY 356	Rise of the City in the U.S.	
HISTORY 357	The American West	
HISTORY 358	History of the American South I	
HISTORY 365A	American Environmental History	
HISTORY 369	Women and Work in Early America	
HISTORY 371	American History Through Film	
HISTORY 398	Black Civil Rights in the 20th and 21st Centuries	
World		12
HISTORY 300HW	Special Topics in World History	
HISTORY 302	Colonial North America, 1492–1763	
HISTORY 404	Women and Gender in Latin America	
HISTORY 405	Colonial Latin America (From the Encounter to the Early 19th Century)	
HISTORY 406	Modern Latin America	
HISTORY 407	Latin American Crises and Opportunities	

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
HISTORY 101 or 102 (Constitution Course) ^{CC}		3 HISTORY 201, 202, 206, or 208 ^{CC}	3
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110		3 STAT 115 or MATH 116	3
GECRT-SS 101		3 GECRT-AH 101	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
	15		15

Second Year

Fall Semester	Credits	Spring Semester	Credits
HISTORY 3XX/4XX Interest Area Course ^{CC}		3 HISTORY 3XX/4XX Non-Interest Area Course	3
COMM-ST 110, 140, or 277		3 GECUE 201	3
GECDV 201		3 GECRT-SC 101	3
Foreign Language course (211)		3 General Elective	3
General Elective		3 General Elective	3
	15		15

Third Year

Fall Semester	Credits	Spring Semester	Credits
HISTORY 3XX/4XX Interest Area Course		3 HISTORY 301WI (or HISTORY 3XX/4XX Interest Area Course)	3

HISTORY 3XX/4XX Non-Western Course (or Non-Interest Area Course)	3	HISTORY 3XX/4XX Non-Interest Area Course (or Non-Western Course if not yet completed)	3
Lab Science ^{LO}	1	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3		
	16		15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
HISTORY 498WI (or HISTORY 301WI if not yet completed)		3 HISTORY 3XX/4XX Interest Area Course (or HISTORY 498WI if not yet completed)	3
HISTORY 3XX/4XX Interest Area Course		3 HISTORY 3XX/4XX Non-Interest Area Course (or Non-Western Course if not yet completed)	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	2
	15		14
Total Credits: 120			

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Interdisciplinary Ph.D. in History

History is an academic discipline eligible for full participation in UMKC's Interdisciplinary Ph.D. Program. Students interested in the study of history should review the School of Graduate Studies section for general and discipline-specific admission criteria, academic regulations, and degree requirements.

Master of Arts: History

This master's program is designed for students who already have completed a non-terminal baccalaureate degree with a major in history or a related field.

In this program, students will gain a broad understanding of the field of history, while developing an in-depth knowledge of historical scholarship in their areas of interest. Students may find that they develop these interests in the process of their interaction with the department faculty.

Admissions

Applications for the M.A. in History are reviewed continually during the calendar year. However, applicants must have their application completed at least six weeks prior to the desired semester of admission. To be considered for a graduate teaching assistantship or paid internship during the following academic year, and for maximum choice in coursework for the first semester, candidates intending to start in the fall term need to submit their application by February 1. There is a supplemental application for the graduate teaching assistantship and paid internship; the application forms are available under Student Resources (<https://cas.umkc.edu/history/student-resources/>) on the department website, <https://cas.umkc.edu/history/>.

Please contact the history M.A. advisor to convey your interest in applying or with questions regarding the history M.A. program. Inquiries also can be emailed to history@umkc.edu.

The History Department will consider for admission as a regular graduate student any student whose undergraduate major was history and who had a 3.0 grade point average in history courses and a 3.0 grade point average overall. Applicants who do not hold an undergraduate degree in history but whose baccalaureate program included substantial training in history and/or related subjects may be considered for regular admission.

Applying for the M.A. History Program

To the Office of Admissions (<http://www.umkc.edu/admissions/>)

- Application
- Official Transcripts and Test Scores (GRE not required)

To the History Department (<http://cas.umkc.edu/history/>)

- A two-page statement of purpose that explains your academic and professional goals, describes your academic interests (including the faculty with whom you wish to study), and presents relevant academic and work-related activities.
- A sample of your academic writing (minimum 15 pages).
- Three letters of recommendation (preferably from history professors). Letters should be on official letterhead.

It is your responsibility to confirm the receipt of all materials.

If admitted, students will be asked to sign a letter of intent to enroll.

Financial Aid

There are a limited number of graduate teaching assistantships and paid internships available. The School of Graduate Studies also administers graduate fellowships and scholarships. For all other inquiries about financial aid, contact:

Financial Aid and Scholarships Office
 Administrative Center, Room 101
 5115 Oak Street
 (816) 235-1154 (Kansas City Metro)
 1-800-775-8652 (Outside of Metro)
 Fax: (816) 235-5511
finaid@umkc.edu
<http://www.umkc.edu/finaid> (<http://www.umkc.edu/finaid/>)

Student Learning Outcomes

Students graduating from this program will:

- recognize, demonstrate, and apply in-depth knowledge of the world's civilizations and peoples as well as their political, economic, social, and cultural histories.
- relate the events in their particular historic story to the general history of the topic; and students relate their interpretations to existing historiography.
- demonstrate the ability to independently develop original scholarly inquiry, systematically researching the topic using appropriate primary and/or secondary sources.

- be able to use primary and secondary sources to independently construct an original historical interpretation: demonstrating competency in identifying a problem, posing a hypothesis, proposing a methodology, offering an interpretation of the evidence, and making an original contribution to scholarly debates.
- be able to compose and present clear, well-organized, properly documented, and grammatical prose in a form appropriate for scholarly publication.
- be able to appraise alternative readings of the past and connect them to their research in new holistic interpretations that offer new avenues for research or application to other studies.

Program Options

The Department of History offers two options leading to the Master of Arts degree—the M.A. in History and the M.A. in History with an emphasis in Public History, requiring 30 hours.

Requirements

Students seeking to fulfill either program option are required to complete the minimum number of credit hours of graduate-level work which must include the following courses with a grade of 2.67 (B-) or better:

Code	Title	Credits
For the MA in History		
Foundational Courses:		5
HISTORY 5581GR	How To - History I	
HISTORY 5582A	How To - History II A	
HISTORY 5582B	How To - History II B	
A Minimum of Three Graduate Colloquia, typically:		9
HISTORY 5585GR	Colloquium in U.S. History	
HISTORY 5586GR	Colloquium in World History	
Graduate Level Courses in Their Curriculum. ¹		12
Research Seminar:		3
HISTORY 5587R	Research Seminar	
Capstone Course:		1
HISTORY 5599R	Thesis	
HISTORY 5990	Capstone (Public History emphasis requirement)	
Total Credits		30

¹ The department encourages students to take graduate-level electives in the history department at the 5500 level. With the approval of the student's faculty advisor, however, students may take up to 6 credits at the 300-400 level if these fit with their overall program of study. Students may also take up to 9 credits in courses outside the department provided: 1) They are demonstrably graduate level courses. 2) They clearly relate to the student's program of study.

Public History Emphasis in Master of Arts in History

MA History - Public History Emphasis Website (<http://cas.umkc.edu/history/degree-options/graduate-programs/>)

Student Learning Outcomes

Students graduating from this program will:

- apply the ethical standards that govern the practice of public history in their scholarly and professional work.
- demonstrate the ability to execute a public history project.
- demonstrate the ability to interpret history for public audiences.
- demonstrate the ability to collaborate on a public history project.
- recognize, demonstrate, and apply in-depth knowledge of the world's civilizations and peoples as well as their political, economic, social, and cultural histories.
- relate the events in their particular historic story to the general history of the topic; and students relate their interpretations to existing historiography.
- demonstrate the ability to independently develop original scholarly inquiry, systematically researching the topic using appropriate primary and/or secondary sources.
- be able to use primary and secondary sources to independently construct an original historical interpretation: demonstrating competency in identifying a problem, posing a hypothesis, proposing a methodology, offering an interpretation of the evidence, and making an original contribution to scholarly debates.

- be able to compose and present clear, well-organized, properly documented, and grammatical prose in a form appropriate for scholarly publication.
- be able to appraise alternative readings of the past and connect them to their research in new holistic interpretations that offer new avenues for research or application to other studies.

Program Requirements

Code	Title	Credits
MA History Core Requirements		18
Required Field Experience, authorized by the Director of the Public History Emphasis		
HISTORY 5579	Public History: Theory and Method	3
Public History Electives:		9
HISTORY 5521	Oral History	
HISTORY 5593	Museum Studies	
HISTORY 5594	Public History and New Media	
PUB-ADM 5555A	Topics in Nonprofit Fund Raising: Organizing for Successful Fund Raising	
PUB-ADM 5555F	Topics in Nonprofit Fund Raising: Prospect Research and Proposal Writing	
UPD 430	Planning For Historic Preservation	
UPD 5526	History of Urban Planning & Design	
UPD 5743	Introduction to Historic Preservation	
Total Credits		30

Colloquia

These courses form the knowledge base for the graduate program. Students are encouraged to take as many of these as can fit into their program of study. In them, students will:

1. Read broadly and learn about the major trends in the historiography of a particular historical problem, place, period, or specialization.
2. Develop fundamental skills of the professional historian such as the ability to write academic book reviews, make conference-style presentations, and discuss among peers the work of other historians critically.

This course typically culminates in the production of a term paper and/or literature review on a subject of the student's interest that could serve as the context for a future research project.

Research Seminars

Students will produce an original work of scholarship anchored in primary sources that reflects their larger course of study. This paper will serve as the foundation of their M.A. thesis or capstone project.

Required Field Experience (for Public History emphasis)

Students pursuing the Public History emphasis must complete 200 hours of fieldwork at a cultural institution that aligns with their own professional goals. This institution could be a museum, historical society, archive, library, historic site, or cultural foundation. Public history students must receive authorization from the Director of the Public History Emphasis before beginning their field experience to ensure that it will count toward their degree.

Graduate Thesis or Capstone Course

In this course, taken near the completion of the program of study, students will complete, and defend in an oral examination, their advisor-approved thesis or capstone project. This final project can take one of three forms: a thesis, which is defined as a journal-length professional paper, based on original research using primary sources (10,000-12,000 words) (HISTORY 5599R); a public history capstone project (HISTORY 5990); or, for educators, an extensive unit plan (HISTORY 5990). See your advisor for additional guidelines about the thesis/capstone options.

Language Requirements

The M.A. in History will require demonstration of foreign language competency if the subject matter requires it. The faculty advisor will determine how this requirement should be fulfilled.

Minimum Expectations

Students must demonstrate satisfactory progress towards the completion of their degree. In all courses, students must:

1. Receive a grade of B- or higher.
2. Maintain a minimum cumulative 3.0 graduate GPA.
3. Adhere rigorously and conscientiously to academic standards of honesty.
4. Demonstrate serious commitment to scholarship and intellectual engagement.
5. Abide by all applicable requirements of the School of Graduate Studies. Please refer to the General Graduate Academic Regulations and Information (<https://catalog.umkc.edu/general-graduate-academic-regulations-information/>) section of this catalog.

In terms of administrative procedures, students must submit a program of study to the department's administrative assistant prior to the completion of 50% of applicable degree coursework. The program of study form is available on the Student Resources (<https://cas.umkc.edu/history/student-resources/>) page of the department website. Once the student completes their form, it must be approved by the faculty advisor (the faculty member who has agreed to serve as the committee chair for the student's thesis/capstone project), the other members of the supervisory committee, and the department chair.

Changes in the program of study must be approved by the student's advisor and the revised program of study must be submitted to the administrative assistant. If cumulative changes in courses or degree requirements exceed four, a new program of study should be filed.

Students who intend to complete the Public History emphasis must declare their emphasis by the completion of their 12th credit hour by forming a viable committee and completing a program of study.

Advisors and Committees

Upon their admission to the M.A. program, students will be assigned a faculty mentor. The faculty mentor:

- will serve as a personal connection to the department
- will assist the student in academic and professional matters during their study in the department
- may continue to serve as a mentor even after the student has identified a faculty advisor (their content specific instructor).

Supervisory Committee

The supervisory committee consists of three full-time, regular members of the UMKC History Department who are also members of the graduate faculty, with the student's faculty advisor serving as chair of this committee.

With the approval of the faculty advisor:

- One member of the committee may be a full-time, regular member of another UMKC department (this committee member must also be a member of the graduate faculty).
- A fourth member may be added to the committee from the adjunct graduate faculty or from the graduate faculty of another institution.

Students in the Public History emphasis are encouraged to have on their committee both a faculty advisor who specializes in the content area related to their capstone project and a faculty member who specializes in public history. Public history students are also permitted to include on their committee members of the adjunct graduate history faculty who work professionally in the field of public history in the Kansas City region.

Extenuating Circumstances

Students incapable of meeting administrative deadlines may request an extension from the M.A. advisor. These requests must be made in writing in advance of the deadlines. Incompletes will be given only when there are legitimate reasons for not completing course requirements on time, and only when there are reasonable expectations that work can be completed within the time allowed by the School of Graduate Studies (maximum of one year).

Probation

Failing any of these conditions means that the student is not making satisfactory progress towards the completion of their degree. In that case, the student will be placed on probation and will have to petition the department, through a letter to the M.A. advisor and graduate committee, for permission to resume their studies the following semester. The department will then recommend a reasonable plan for remediation. If the student fails to meet the standards set by the department, the student will be declared ineligible for enrollment and dropped from the program.

Honorary Organizations

The department sponsors a chapter of the national history honor society, Phi Alpha Theta. To be eligible for Phi Alpha Theta, graduate students should have completed a minimum of 12 semester hours towards their master's degree in history and have a GPA of better than 3.5.

Students should strongly consider membership in professional organizations for historians, such as the American Historical Association (<http://www.historians.org>) and others.

The Annual Graduate Student Conference

The History Department hosts an annual Graduate Student Conference each December. Graduate students should plan to attend as required by the program. In it, students will:

- demonstrate their expertise in a research agenda of their own creation,
- present their research to peers and faculty,
- comment constructively and critically on the research of others,
- engage critical questions in public, and
- celebrate their academic achievements that year.

History Department Graduate Student Awards

Each spring, the faculty will present three graduate student prizes: the Carla Klausner Award for the Best Original History Research Paper; the Louis Potts Award for the Best Original Research Paper on Midwestern History; and the Lynda Payne Award for the Best Public History Project. The Captain Harry S. Truman Prize is awarded annually to the best undergraduate or graduate student paper on a topic related to WWI.

Accelerated BA-MA: History

Student Learning Outcomes

Students graduating from this program will:

- Students recognize, demonstrate, and apply in depth knowledge of the world's civilizations and peoples as well as their political, economic, social, and cultural histories.
- Students relate the events in their particular historic story to the general history of the topic; and students relate their interpretations to existing historiography.
- Students demonstrate the ability to independently develop original scholarly inquiry, systematically researching the topic using appropriate primary and/or secondary sources.
- Students use primary and secondary sources to independently construct an original historical interpretation: demonstrating competency in identifying a problem, posing a hypothesis, proposing a methodology, offering an interpretation of the evidence, and making an original contribution to scholarly debates.
- Students are able to compose and present clear, well-organized, properly documented, and grammatical prose in a form appropriate for scholarly publication.
- Students are able to appraise alternative readings of the past and connect them to their research in new holistic interpretations that offer new avenues for research or application to other studies.
- Public History Emphasis Only: Students apply the ethical standards that govern the practice of public history in their scholarly and professional work.
- Public History Emphasis Only: Students demonstrate the ability to execute a public history project.
- Public History Emphasis Only: Students demonstrate the ability to interpret history for public audiences.
- Public History Emphasis Only: Students demonstrate the ability to collaborate on a public history project.

The courses offered for this program are the same as for the already existing BA and MA programs. All that will differ is the recommended order of enrolling in the courses as well as the allowance of 9 MA student credit hours to count toward the BA (substituting for History 301WI, History 498WI, and one 300/400-level elective). Please note that the BA/MA with Public History emphasis requires much of the same coursework as the BA/MA with the exception of dedicating MA elective courses to public history coursework and 200 hours of fieldwork. Attached below are sample programs of study for the BA/MA and the BA/MA with Public History emphasis programs.

Minor in History

Student Learning Outcomes

Students graduating from this program will:

- recognize, demonstrate, and apply general knowledge of the world's civilizations and peoples as well as their political, economic, social, and cultural histories

- relate the events in their particular stories about the past to the general history of the topic
- demonstrate the ability to identify and employ primary and/or secondary sources to research a historical topic
- be able to compose and present clear, well-organized, properly documented, and grammatical academic prose

Program Requirements

A minor in history may be earned with a minimum of 18 credit hours of coursework in the discipline (at least 12 of which must be at the 300- and 400-level). A maximum of 6 of the 18 credit hours may be taken in two of the survey courses. Students may petition for inclusion of up to 3 hours of relevant 300- and 400-level courses offered by other departments to be counted towards the minor. For program description and course selection, please refer to the Bachelor of Arts in History (p. 850). A history minor also may be earned online.

Code	Title	Credits
A maximum of 6 hours of survey courses may be applied to the minor.		
Category 1: U.S. History		
HISTORY 101	U.S. History to 1877 (Focus C)	3
HISTORY 102	U.S. History Since 1877 (Focus C)	3
Category 2: European History		
HISTORY 201	European History to 1600 (Focus A)	3
HISTORY 202	European History since 1600 (Focus A)	3
Category 3: World History		
HISTORY 206	World History To 1450	3
HISTORY 208	World History since 1450	3
Code	Title	Credits
Antiquity and Medieval		
ANCH 307	Frauds, Myths and Mysteries in Archaeology	
CLASSICS 300CY	Ancient World in Cinema	
CLASSICS 391WI	Ancient Greek and Roman Medicine	
HISTORY 300AM	Special Topics in Antiquity and Medieval History	
HISTORY 306A	History of Christianity to the Middle Ages	
HISTORY 411A	Medieval Civilization I	
HISTORY 411B	Medieval Civilization II	
HISTORY 412A	Medieval Women & Children	
HISTORY 431R	Medieval England, 1066 To 1485	
HISTORY 469	Archeology and Biblical History	
HISTORY 470	Ancient Egypt	
HISTORY 471	Ancient Greece	
HISTORY 472	Ancient Rome	
HISTORY 474	Late Antiquity: The Transformation of the Mediterranean World (200–600 AD)	
Code	Title	Credits
Early Modern and Modern Europe		
HISTORY 300EM	Special Topics in Early and Modern European History	
HISTORY 307A	History of Christianity from the Middles Ages to Present	
HISTORY 414	Reformation	
HISTORY 416R	The French Revolution and Napoleon	
HISTORY 432R	Tudor England, 1485-1603	
HISTORY 433R	History of Britain 1603-1832	
HISTORY 436R	Modern German History	
Code	Title	Credits
Public History		
ENGLISH 477DH	Studies in Digital Humanities	
HISTORY 300PH	Special Topics in Public History	
HISTORY 343	Oral History	

HISTORY 379	Museums, Monuments, and American Life: An Introduction to Public History
HISTORY 392A	Archival Internship
HISTORY 392B	Public History Internship
HISTORY 430RA	'We Are The Dead': The Great War Experience Through its Artifacts
UPD 430	Planning For Historic Preservation
UPD 475	American Housing

Code	Title	Credits
United States		
ANCH 304	Telling Stories: History, Memory, and American Life	
ANCH 318	From Oil Gushers to Fracking: A History of American Petroleum	
HISTORY 300US	Special Topics in United States History	
HISTORY 300WY	Decade of Dissent: The 1960s	
HISTORY 303	The American Revolution, 1763-1789	
HISTORY 304	The Early American Republic, 1789–1850	
HISTORY 306	America, 1850-1877: Civil War and Reconstruction	
HISTORY 334	History of Technology	
HISTORY 348	Missouri/Kansas Border Wars	
HISTORY 349	Civil War in Memory and Film	
HISTORY 356	Rise of the City in the U.S.	
HISTORY 357	The American West	
HISTORY 358	History of the American South I	
HISTORY 365A	American Environmental History	
HISTORY 369	Women and Work in Early America	
HISTORY 371	American History Through Film	
HISTORY 398	Black Civil Rights in the 20th and 21st Centuries	

Code	Title	Credits
World		
HISTORY 300HW	Special Topics in World History	
HISTORY 302	Colonial North America, 1492–1763	
HISTORY 404	Women and Gender in Latin America	
HISTORY 405	Colonial Latin America (From the Encounter to the Early 19th Century)	
HISTORY 406	Modern Latin America	
HISTORY 407	Latin American Crises and Opportunities	

Total Credit Hours: 18

Latinx and Latin American Studies Program

Latinx and Latin American Studies Program

Haag Hall (<http://www.umkc.edu/virtualtour/haag-hall.asp>), Room 204
 5120 Rockhill Road
 (816) 235-5854
 Fax: (816) 235-5542
<http://cas.umkc.edu/latino-studies/>

Mailing Address

University of Missouri-Kansas City
 Latinx and Latin American Studies
 Haag Hall 204
 5100 Rockhill Road
 Kansas City, MO 64110-2499

Program Description:

The mission of Latinx and Latin American Studies (LLS), a program based in the College of Arts and Sciences, is to function as a vehicle for interdisciplinary and multidisciplinary teaching, research and outreach focusing on Latinas/os-Chicanas/os in the U.S. The LLS program will provide an awareness and understanding of the wide diversity of Latino communities, cultures and backgrounds. The development and expansion of our curricula will serve to empower our students with the concepts and skills to better understand a rapidly growing Latina/o population. The LLS program will engage students, scholars and the greater Kansas City community in collaborative projects, programs and service learning efforts. These efforts will foster new curricula and advance research and outreach scholarship to create new knowledge to better understand the cultural, economic, and historical experiences and contributions of U.S. Latinas/os-Chicanas/os and their diasporic origins.

Program Activities:

- Provide all UMKC students with critical understanding of the historical, political and social context in which Latino/Chicano communities have evolved and continue to be established in the U.S., with particular attention to the greater Kansas City metropolitan area and the Midwest region. Crucial to this goal is the understanding of the transnational nature of these community ties.
- Provide access to a quality education for Latina/o students and other students interested in Latina/o-Chicana/o Studies and at the same time enhance diversity on the campus.
- Strengthen ties with UMKC Latina/o alumni
- Engage other area Latina/o professionals in LLS activities
- Strengthen ties between the UMKC and the Latino community.
- Establish UMKC as a center of teaching, learning and research on Latino/Chicano populations.
- Establish and/or strengthen alliances with local Latina/o community organizations, e.g. Guadalupe Center (KCMO), El Centro (KCK), Dos Mundos, KC Hispanic News, Mattie Rhodes Art and Counseling Center, The Mexican Consulate, Latino Writers Collective
- Create alliances/connections with local non-Latina/o organizations, e.g. Nelson-Atkins Art Museum, Kauffman Center for the Performing Arts, Kansas City Public Libraries and the Kansas City Museum

Faculty

Professors:

Miguel A. Carranza^{1,2} professor emeritus of latina/latino studies and sociology; B.A. (Kearney State College); M.A., Ph.D. (University of Notre Dame).

Associate Professor:

Theresa L. Torres^{1,2}; associate professor of latina/latino studies and sociology; B.A. (Benedictine College); M.A. (Boston College); Ph.D. (Catholic University of America).

Academic Advisor:

Norma E. Cantú

¹ Members of UMKC Graduate Faculty

² Members of UMKC Doctoral Faculty

Undergraduate

Latinx and Latin American Studies Minor

Student Learning Outcomes

Students graduating from this program will:

- Examine the role and diversity of Latinxs and the Latinx diaspora in U.S. society and its transnationalism
- Analyze and interpret the history, experiences, and contributions of Latinxs in the ongoing formation of U.S. society
- Analyze the contributions of Latinx and Latin American Studies to the cultures of the world
- Employ Latinx and Latin American Studies theories and practices to assess societal challenges and promote social justice

The minor in Latinx and Latin American Studies is comprised of 18 hours. Nine (9) credit hours must be in upper division (300 or 400) level courses. A minimum of nine (9) of the 18 hours are required in Latinx and Latin American Studies.

Code	Title	Credits
Required Coursework		3
LLS 201	Introduction to Latinx and Latin American Studies	
Elective Coursework (select from below)		15
Latinx and Latin American Studies Electives		
LLS 300	Special Topics in Latinx and Latin American Studies	
LLS/ART-HIST/BLKS 315	Arts Of African and New World Cultures	
LLS/PSYCH 320	Ethnic and Minority Perspectives in Psychology	
LLS/ANTHRO/SOCIOL 322	Race and Ethnic Relations	
LLS/URBAN ST 346	Urban Latin America	
LLS/ANTHRO/SOCIOL 348	Latinx Immigrants, Migrants, and Refugees in the U.S.	
LLS 397	Independent Readings in Latinx and Latin American Studies	
LLS 400	Advanced Special Topics in Latinx and Latin American Studies	
LLS/HISTORY 404	Women and Gender in Latin America	
LLS/HISTORY 405	Colonial Latin America (From the Encounter to the Early 19th Century)	
LLS/HISTORY 406	Modern Latin America	
LLS/HISTORY 407	Latin American Crises and Opportunities	
LLS/ART-HIST 421	Made in the USA: Latinx Art and Experience	
LLS/CJC 431	Hate & Bias Crimes	
LLS 497	Directed Research	
SPANISH 365	The Search For Mexican Identity	
SPANISH 415	Advanced Conversation And Composition I	
SPANISH 460	U.S.-Latino Literature	
Total Credits		18

Courses

LLS 201 Introduction to Latinx and Latin American Studies Credits: 3

This course addresses and examines the social, economic, and political factors that have influenced the historical experiences of Latinx in the U.S. and Latin Americans. Attention will focus on the major concepts, issues and debates in the field of Latinx and Latin American Studies. Particular consideration will be given to an analysis of and understanding as to how these factors have influenced the past and present status of Latinxs in U.S. society. Given the diversity existing within the Latinx population, the course will be comparative, cross-cultural, and interdisciplinary in nature.

LLS 300 Special Topics in Latinx and Latin American Studies Credits: 3

A variable content course offered in the area of Latinx and Latin American studies.

LLS 310 The World of Latinx Youth and Adolescents in the U.S. Credits: 3

This course will provide a general introduction and in-depth understanding to the largest group of racial/ethnic adolescents in the United States: Latinx youth. An historical examination of Latinx youth will provide a better understanding of their present status, with emphasis on their contact and interactions within social institutions. Additionally, students will analyze the experiences Latinx youth have within and among other groups in the broader social context based on past, present, and possible future interactions.

LLS 315 Arts Of African and New World Cultures Credits: 3

This historical survey of ethnographic arts examines the diasporas of African art and the influences of Africans on the arts of new world cultures (in Brazil, Surinam, Cuba, Haiti, and the United States) and Meso-American art and the influence of Meso-Americans on the arts of the Native North American cultures.

LLS 320 Ethnic and Minority Perspectives in Psychology Credits: 3

The theory, methods and content of psychology relevant to the interests and needs of ethnic minorities, and the contributions of ethnic groups and other minorities to psychology.

Prerequisites: PSYCH 210 with a C- or better.

LLS 322 Race and Ethnic Relations Credits: 3

The nature, origin and dynamics of ethnic and race relations in the U. S. and other societies. Specific attention will be given to the historical and contemporary contexts of prejudice discrimination and confrontation.

LLS 346 Urban Latin America Credits: 3

Introduction, overview, and analysis of major contemporary urban issues in Latin America.

LLS 348 Latinx Immigrants, Migrants, and Refugees in the U.S. Credits: 3

This course addresses the culture of societies of U.S. citizens, immigrants, and refugees of Latin American heritage living in the U.S. The course emphasizes recent anthropological, historical, cultural, and sociological studies.

LLS 353 Covering Urban Latinx Communities Credits: 3

This course focuses on journalistic methods of reporting Latinx communities, which are part of major urban areas. It covers topics on immigration, health care, policy, cultural diversity, race, legal issues, and education. It brings the voice of the Latinx communities into news stories. Various storytelling skills and ideas taught in this course will prepare students to cover the Latinx communities in urban areas and beyond.

LLS 397 Independent Readings in Latinx and Latin American Studies Credits: 1-3

Students will complete extensive readings in an area selected by the student with prior consultation with instructor.

LLS 400 Advanced Special Topics in Latinx and Latin American Studies Credits: 3

This course is a variable content course and offered as a result of specialized faculty interest, student demand, or the availability of a visiting expert in a field closely related to Latinx and Latin American Studies.

LLS 404 Women and Gender in Latin America Credits: 3

This course studies gender in Latin America from the eve of conquest by the Portuguese and Spanish in the fifteenth century to the present. It examines how ideas about gender affected the lives of Latin American men and women. This course additionally analyzes how gender and race contributed to the creation of a hierarchical social order. Finally, it discusses the exercise of authority within and outside households and its impact on private and public spaces.

LLS 405 Colonial Latin America (From the Encounter to the Early 19th Century) Credits: 3

This course discusses the conquest and colonization of Latin American by the Spanish and the Portuguese imperial powers from the time of the encounter to the early nineteenth century. It studies the Iberian, Indigenous and African cultures and their influence in the creation of a hierarchical imperial order. Emphasis is given to the impact of the conquest, the economics of exploitation, race, sexual and gender identities and, religious and legal domination.

LLS 406 Modern Latin America Credits: 3

This course studies social, political, economic and cultural trends in Latin America in the nineteenth and twentieth centuries. Discussion topics include nation building after independence with an emphasis on gender and race in the creation of national identities and new forms of social stratification; integration of national economies into the world economic system; the expansion of political participation and citizenship; immigration and the tensions caused by the forces of modernization and tradition.

LLS 407 Latin American Crises and Opportunities Credits: 3

This course studies why Latin America has experienced in the 20th and 21st centuries recurrent economic and political crises – and why it is still a land of enormous opportunity. While this is primarily a history course, it undertakes a multidisciplinary examination of the region's strengths and weaknesses by discussing theories of economic development, political and sociological models as well as the influence of crime and violence. Case studies anchored in representative countries will be used to illustrate historical trends and theories.

LLS 421 Made in the USA: Latinx Art and Experience Credits: 3

This course focuses on art of and by members of the U.S. Latinx community. Students in this course will engage with the politics of representation, gender, sexuality, race, class, and ethnicity in Latinx art, as well as visual and popular culture.

LLS 431 Hate & Bias Crimes Credits: 3

The purpose of this course is to examine the development and enforcement of hate crime law within our legal system. Discussion focuses on the causes and consequences of hate crimes, the constitutional issues associated with bias crime statutes, and the effectiveness of formal and informal social controls for eliminating hate and bias crimes.

LLS 497 Directed Research Credits: 1-3

Students will develop and conduct a research project in an area selected by the student under the supervision of a faculty member. Students may only enroll in 6 total credits of LLS 497 during their time at UMKC.

Prerequisites: Junior or Senior Level Standing.

Liberal Studies Program

University of Missouri - Kansas City

Liberal Studies Program

Cockefair Hall 106

5100 Rockhill Road

Kansas City, MO 64110-2499

Program Director

Scott Baker, Ph.D.; bakerks@umkc.edu

MALS Program Advisor

April Austin, Ph.D.

austinal@umkc.edu, (816) 235-6257

mals@umkc.edu (64110-2499mals@umkc.edu)

BLA Program Advisor

Erica Wolfe

wolfeem@umkc.edu, 816/235-6270

Undergraduate

Undergraduate Degrees:

- Bachelor of Liberal Arts (p. 867)

Graduate

Graduate Degree:

- Master of Arts in Liberal Studies (p. 871)

Bachelor of Liberal Arts

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Be able to identify and articulate scholarly questions based on evidence and approaches from more than one disciplinary area.
- Be able to demonstrate the ability to gather and organize scholarly literature and raw data needed to answer scholarly questions.
- Be able to demonstrate the ability to analyze and evaluate scholarly literature and raw data to answer scholarly questions.
- Be able to effectively communicate the results of their work via either expository rhetoric or a creative work to an audience that does not specialize in their area of study or share their disciplinary perspective.
- Be able to effectively craft their program of study for intellectual and professional purposes as the foundation for life-long learning.

Office Location:

Cockefair Hall 106
(816) 235-2560

Mailing Address:

University of Missouri - Kansas City
Liberal Studies Program
Cockefair Hall 106
5100 Rockhill Road
Kansas City, MO 64110-2499

Program Director:

Jeff Rydberg-Cox, Ph.D., Department of English, rydbergcoxj@umkc.edu, (816) 235-2560

Program Description

The College of Arts and Sciences offers the bachelor of liberal arts (B.L.A.) degree for individuals who seek scientific literacy, an understanding of the social sciences and an appreciation of the humanities. The B.L.A. is an alternative to the B.A./B.S. degree programs and is for individuals who do not wish to commit themselves to a specialty, whose aspirations are not served by a traditional major, and who desire maximum flexibility in course selection.

Students who have found the B.L.A. degree particularly beneficial are those who have matriculated into the six-year medical program and pursue the combined B.L.A./M.D. degrees and those students wishing to apply to the UMKC School of Law through the Early Entry Law Program.

Potential for Graduate Study

Students completing the B.L.A. degree have the potential to pursue graduate study in many areas. One option is the Master of Arts in Liberal Studies, a master's degree similar in structure to the B.L.A., which continues the tradition of interdisciplinary work in the College at the intermediate level between baccalaureate and doctoral work. Students completing the B.L.A. degree who wish to continue their education at the graduate level are strongly encouraged to seek counsel from a graduate adviser in that discipline early in their undergraduate career.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	

POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
	Writing Intensive Course (300-level or above)	3
	Laboratory Science Experience	1
Total Credits		4

BLA Requirements

Hour Requirements and Eligibility

A 2.0 GPA is required to declare intent to pursue the B.L.A. and a 2.0 overall GPA is required by the University of Missouri for graduation.

The credit/non-credit option is not available for students pursuing this degree.

Minor Requirement

Students must complete a minor offered by any interdisciplinary program or department in the University. Students may also complete a Missouri Department of Higher Education (MDHE) approved emphasis area to fulfill the minor requirement. The Black Studies Emphasis Area (p. 603) is currently the only MDHE approved emphasis area for the BLA. Students will work with the faculty adviser corresponding to the selected minor or emphasis area.

Area Requirements and Limitations Applicable to This Degree

Code	Title	Credits
	Humanities Area	18
	Natural Sciences	18
	Social Sciences Area	18
Total Credits		54

At least 36 of the total hours must be at the junior/senior (300-400) level. Twelve of these junior/senior (300-400) level hours must be taken within the BLA Area Requirements at UMKC or in the College of Arts and Sciences at UMKC. Additionally, coursework must be taken from at least two departments in each division.

Students should note that some departments within the College of Arts and Sciences (for example, geosciences and history departments) offer coursework that can be applied to more than one division. Students should consult with an advisor in selecting coursework to ensure that they receive proper credit in the various divisions required for the degree.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		29

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110		3 COMM-ST 110 or 277	3
GECRT-SS 101		3 GECRT-SC 101	3
GECRT-AH 101		3 HISTORY 101, 102, or POL-SCI 210	3
MATH 116 or STAT 115		3 General Elective	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
GECUE 201		3 GECDV 201	3
Course for required Minor		3 Course for required Minor	3
Arts/Humanities BLA Area course		3 Arts/Humanities BLA Area course	3
Social/Behavioral Science BLA Area course		3 Social/Behavioral Science BLA Area course	3
Natural Science/Math BLA Area course		3 Natural Science/Math BLA Area course	3
		Lab Science ^{LO}	1
		15	16

Third Year

Fall Semester	Credits	Spring Semester	Credits
3XX/4XX Course for required Minor		3 3XX/4XX Course for required Minor	3
Arts/Humanities BLA Area course		3 3XX/4XX Course for required Minor	3

Social/Behavioral Science BLA Area course	3	Arts/Humanities BLA Area course	3
Natural Science/Math BLA Area course	3	Social/Behavioral Science BLA Area course	3
3XX/4XX General Elective	3	Natural Science/Math BLA Area course	3
		15	15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
3XX/4XX Course for required Minor		3 3XX/4XX Arts/Humanities BLA Area course	3
3XX/4XX Arts/Humanities BLA Area course		3 3XX/4XX Social/Behavioral Science BLA Area course	3
3XX/4XX Social/Behavioral Science BLA Area course		3 Natural Science/Math BLA Area course	2
Natural Science/Math BLA Area course		3 3XX/4XX General Elective	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
		15	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Master of Arts in Liberal Studies

Program Description

The Master of Arts in Liberal Studies (MALS) degree program enables individuals to pursue interdisciplinary studies at the graduate level. Courses provide students the opportunity to extend the best experiences of baccalaureate liberal education to the graduate level.

Students admitted to the program will be encouraged to select one of the graduate certificate programs or informal focus areas listed below and will develop a program of study with the cooperation of the assigned advisor.

- Bioethics (graduate certificate)
- Black Studies (graduate certificate or informal focus area)
- Film and Media Studies (informal focus area)
- Gerontology (graduate certificate)
- Holocaust Studies (graduate certificate)
- Humanities Consortium (informal focus area)
- Medieval and Early Modern Studies (graduate certificate)
- Women's and Gender Studies (informal focus area)

Alternatively, students with a strong interest in a different interdisciplinary area of study within the College of Arts and Sciences may submit a statement indicating interest in designing an individualized plan of study. In order to ensure that courses to support a proposed individualized plan of study are available at UMKC, students who want to pursue this option should suggest a list of courses offered in the College of Arts and Sciences that could contribute to their desired area of study. Students wishing to pursue this option should contact the MALS advisor for assistance developing this list of courses.

Student diplomas will list the degree as a Master of Arts in Liberal Studies. The subject field of approved graduate certificates will be designated on a student transcript. Students pursuing informal focus areas with the Master of Arts in Liberal Studies will not have these subject designations on their transcript.

Admission to the Program

Individuals admitted to the program must have a baccalaureate or equivalent degree and mature academic interests. A minimum undergraduate 3.25 GPA is desirable but can be offset by professional and career accomplishments outside academe.

Individuals applying for admission should submit, in addition to the UMKC application, the following documents:

- a statement of purpose in the form of a personal essay of approximately 1,000 words outlining the focus area the applicant wishes to pursue, reasons for applying, and academic plans and goals. Any applicant who does not choose one of the specific certificate programs or informal focus areas listed for the MALS program should also include a statement indicating interest in designing an individualized plan of study. Such a statement should indicate the proposed area of study and a list of courses offered in the College of Arts and Sciences that would contribute to the area of study.
- a sample of recent academic writing
- 3 letters of recommendation

These documents (except the UMKC application) should be sent directly to the Master of Arts in Liberal Studies Program, UMKC, 5121 Rockhill Road, Cockeair 106, Kansas City, MO 64110.

Prior to submitting an application, prospective students should speak with the program advisor or a member of the faculty who works in their chosen focus area.

The deadline to apply for Fall Semester is March 1. The deadline to apply for Spring Semester is November 1.

Student Learning Outcomes

Students graduating from this program will:

- be able to identify and articulate scholarly problems and questions based on evidence and approaches from more than one disciplinary area at an advanced level.
- be able to gather and organize the primary source materials and raw data needed to answer these questions at an advanced level.
- be able to analyze relevant primary source materials and raw data to create a coherent answer to a scholarly problem or question at an advanced level.
- be able to critically appraise scholarly conversations in multiple fields, create a coherent interpretation, and take a critical position in these debates.
- be able to effectively communicate, at an advanced level, the results of their work via either expository prose or a creative work to an audience that does not specialize in their area of study or share their disciplinary perspective.

Requirements for Completion of the Degree

The degree is a 36 credit hour program. Generally, each participant's plan of study will consist of three parts.

Program participants begin by enrolling in A&S 5509. On completion of this required three hour introductory seminar, participants earn 30 credit hours based on the study plan associated with their graduate certificate program, informal focus area, or their individual study plan. At the conclusion of the program, individuals enroll in a required three hour capstone seminar, A&S 5520.

Please consult the MALS website at cas.umkc.edu/MALS for advising worksheets for each of the graduate certificate programs and informal focus areas that can be pursued in conjunction with the MALS.

A written thesis is not required, but individuals who wish to complete a thesis project may apply three credit hours of A&S 5540 toward their degree requirements. An individual who works well independently and who has a particular interest that lends itself to detailed research is especially encouraged to consider the thesis option. With the thesis option, the participant will select a faculty advisor who will direct the plan of study and research.

Two courses (6 hours) may be taken from another school at the university outside of the College of Arts and Sciences. No more than 12 hours at the 400-level (or 300-level when permitted by the department) may be applied to the plan of study.

Relationship of the MALS to Interdisciplinary Doctoral Degrees

The College of Arts and Sciences has a strong tradition of interdisciplinary studies at both the baccalaureate and doctoral levels.

The Master of Arts in Liberal Studies degree continues the tradition of interdisciplinary work in the college at the intermediate level between baccalaureate and doctoral work. In a few cases, students completing this degree may find the transition to doctoral work as the appropriate next step. However, students should recognize that the degree is not designed to provide students in the program with specific subject skills usually associated with targeted career objectives in traditional research areas.

Students interested in coordinating their M.A. in Liberal Studies coursework with future doctoral work at UMKC are strongly encouraged to make this intent known at the outset of their work. Without initial planning conducted with a committee of doctoral faculty, a student's master's coursework may not be appropriate to later doctoral studies.

Relationship of the MALS to Interdisciplinary Doctoral Degrees

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The Master of Arts in Liberal Studies degree continues the tradition of interdisciplinary work in the college at the intermediate level between baccalaureate and doctoral work. In a few cases, students completing this degree may find the transition to doctoral work as the appropriate next step. However, students should recognize that the degree is not designed to provide students in the program with specific subject skills usually associated with targeted career objectives in traditional research areas.

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Student Learning Outcomes

MALS Student Learning Outcomes

1. Students will be able to identify and articulate scholarly problems and questions based on evidence and approaches from more than one disciplinary area at an advanced level.
2. Students will be able to gather and organize the primary source materials and raw data needed to answer these questions at an advanced level.
3. Students will be able to analyze relevant primary source materials and raw data to create a coherent answer to a scholarly problem or question at an advanced level.
4. Students will be able to critically appraise scholarly conversations in multiple fields, create a coherent interpretation, and take a critical position in these debates.
5. Students will be able to effectively communicate, at an advanced level, the results of their work via either expository prose or a creative work to an audience that does not specialize in their area of study or share their disciplinary perspective.

Department of Mathematics and Statistics

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Mailing Address

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Department of Mathematics and Statistics
HH 206
5120 Rockhill Road

Kansas City, MO 64110-2499

Department Chair:

Majid Bani-Yaghoub

Emeriti Faculty:

George Phillip Barker, Larry Q. Eifler, James M. Foran, James H. Gillilan, Shirley A. Hill, Thomas P. Kezlan, Paul W. Liebnitz Jr., Bennie J. Pearson, Elbert M. Pirtle Jr., Hristo Voulou, Bruce R. Wenner

Professors:

Kamel Rekab, Noah H. Rhee, Liana Segal, Yong Zeng

Associate Professors:

Eric Hall, Majid Bani-Yaghoub

Teaching Professor:

Richard Delaware

Assistant Teaching Professor:

Nadeesha Mawella, Said Shehab

Assistant Professors:

Xianping Li

Lecturers:

Kristin Kathman, Stephanie Van Rhein

Department Description

The Department of Mathematics and Statistics offers coursework leading to the Bachelor of Arts and Bachelor of Science degrees in Mathematics. At the graduate level, the department offers a Master of Science degree in Mathematics and a Master of Science degree in Statistics, and participates in the UMKC School of Graduate Studies Interdisciplinary Ph.D. program. Qualified students can select Mathematics as the coordinating unit or a co-discipline when applying for admission or preparing their plans of study. See the School of Graduate Studies (p. 1589) section in the Graduate Catalog for more information about the Ph.D. program.

These programs are designed to develop the student's own knowledge of mathematics or statistics, and to provide the tools and understanding necessary for the study of other scientific and quantitative fields.

The Department of Mathematics and Statistics has an institutional membership in the American Mathematical Society.

Advising System

Advising is on an individual basis with senior mathematics faculty members. Appointments for advising may be made by contacting the department, the undergraduate advisor, the principal graduate advisor, or the interdisciplinary Ph.D. coordinator.

Library Resources

In addition to UMKC's Miller Nichols Library, the department has full access to the holdings and services of the Linda Hall Library of Science and Technology (<http://www.lindahall.org>), a privately endowed institution of international prominence. The Linda Hall Library subscribes to more than 700 mathematics journals and maintains a large and growing collection of mathematics books.

Faculty

Majid Bani-Yaghoub^{2,3}; assistant professor of mathematics; Ph.D. (Carleton University, Canada).

Richard Delaware¹; teaching professor of mathematics; B.S. (Santa Clara University); M.A. (University of Kansas); Ph.D. (University of Missouri - Kansas City).

Eric J. Hall^{2,3}; associate professor of mathematics; B.A. (Carleton College); Ph.D. (University of Michigan).

Kristin Kathman; lecturer in mathematics; B.S., M.S. (University of Missouri - Kansas City).

Xianping Li^{2,3}; assistant professor of mathematics; Ph.D. (University of Kansas).

Kamel Rekab^{2,3}; professor of statistics; M.S. (Stanford University); Ph.D. (University of Michigan).

Noah H. Rhee^{2,3}; professor of mathematics; B.S. (Seoul National University, South Korea); Ph.D. (Michigan State University).

Liana Segă^{2,3}; associate professor of mathematics; B.S. (University of Bucharest, Romania); Ph.D. (Purdue University).

Stephanie Van Rhein; lecturer in mathematics; B.S., M.S. (Missouri University of Science and Technology).

Hristo D. Voulou^{2,3}; associate professor of mathematics; M.S., Ph.D. (Sofia University, Bulgaria).

Yong Zeng^{2,3}; professor of statistics; B.S. (Fudan University, China); M.S. (University of Georgia); Ph.D. (University of Wisconsin - Madison).

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts in Mathematics and Statistics (p. 880)
- Bachelor of Science in Mathematics and Statistics (p. 885)
- Minor in Actuarial Science (p. 895)
- Minor in Mathematics (p. 896)
- Teacher Certification in Mathematics (p. 896)

Graduate

Graduate Degrees:

- Master of Science in Mathematics (p. 892)
- Master of Science in Statistics (p. 894)
- Interdisciplinary Ph.D. in Mathematics (p. 892)

Mathematics Courses

MATH 109 Precalculus Algebra Fundamentals Credits: 2

This course is required for students not meeting full placement requirements for MATH 110 (Precalculus Algebra) in order to concurrently enroll in MATH 110. Fundamental topics and skills that are necessary for success in MATH 110 will be developed in close alignment with the material covered in MATH 110 over the course of the semester. Students enrolling in this co-requisite course must remain enrolled in both courses for the semester. Students will not be permitted to withdraw from one of the courses (either MATH 109 and MATH 110) and not the other. Grades are not counted toward GPA. Does not fulfill Arts and Sciences mathematics requirement. Does not count toward graduation.

Prerequisites: ALEKS Score of 35 or higher; or ACT Math Sub-score of 18 or higher; or SAT Math Sub-score of 500 or higher.

Co-requisites: MATH 110.

MATH 110 Precalculus Algebra Credits: 3

Functions and graphs. Inverses, compositions, and transformation of functions. Solving equations, systems of equations, and inequalities. Linear, quadratic, polynomial, and rational functions. Exponential and logarithm functions and applications.

Prerequisite: MATH 100 with a grade of B- or higher; or ALEKS Score of 51 or higher; or ACT Math Sub-score of 22 or higher; or SAT Math Sub-score of 540 or higher; or concurrent enrollment in MATH 109.

MATH 110 - MOTR MATH 130: Pre-Calculus Algebra



MATH 116 Mathematics For Liberal Arts Credits: 3

A survey of elementary mathematics covering such topics as: logic, sets, counting methods, introduction to probability theory, introductory statistics, plane and coordinate geometry. The course will emphasize mathematical concepts and does not require the level of computational skill of College Algebra. Topics from the history of mathematics will be presented as well as the influence of mathematics on a variety of disciplines. Recommended preparation: Three units of high school mathematics Algebra I and higher.

MATH 116 - MOTR MATH 120: Mathematical Reasoning Modeling



MATH 120 Precalculus Credits: 5

Functions and graphs. Inverses, compositions, and transformation of functions. Solving equations and systems of equations, and inequalities. Linear, quadratic, polynomial, and rational functions. Exponential and logarithm functions and applications. Trigonometric functions, trigonometric identities, triangles. Credit will be given for either MATH 110 or MATH 120, and for either MATH 120 or MATH 125.

Prerequisites: ALEKS Score of 56 or higher; ACT Math Sub-score of 24 or higher; or SAT Math Sub-score of 580 or higher.

MATH 120 - MOTR MATH 150: Pre-Calculus**MATH 125 Trigonometry Credits: 2**

Trigonometric functions, trigonometric identities, triangles, and complex numbers. Credit will be given for either MATH 120 or MATH 125.

Prerequisites: MATH 110 with a grade of C- or higher; or ALEKS Score of 63 or higher; or ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher.

MATH 206 Brief Calculus And Matrix Algebra Credits: 3

Brief review of selected topics in algebra. Introduction to matrix algebra. Introduction to differential calculus and optimization. Applications to problems in business.

Prerequisites: MATH 110 with a grade of C- or higher; or MATH 120 or higher with a grade of C- or higher; or ALEKS Score of 63 or higher.

MATH 210 Calculus I Credits: 4

Functions and graphs, rational, trigonometric, exponential functions, composite and inverse functions, limits and continuity, differentiation and its applications, integration and its applications.

Prerequisites: MATH 120 with a grade of C- or higher; or both MATH 110 and MATH 125 both with a grade of C- or higher; or ALEKS score of 76 or higher.

MATH 220 Calculus II Credits: 4

Techniques of integration, applications of the definite integral, improper integrals, sequences and series, power series. Taylor series and convergence, analytic geometry in calculus. Recommended preparation: MATH 210 or MATH 216.

MATH 250 Calculus III Credits: 4

Vectors, solid analytic geometry, vector functions and multiple variable functions, partial derivatives, multiple integrals, line and surface integrals with applications.

Prerequisites: MATH 220 or MATH 268.

MATH 266 Accelerated Calculus I Credits: 4

An accelerated first course in calculus focusing on application of differential calculus and basic vector and matrix calculations. Enrollment in this course requires permission from the School of Computing and Engineering.

Prerequisites: MATH 120 with a grade of B or higher; or both MATH 110 MATH 125 with a grade of B or higher; or ALEKS assessment score of 76% or higher.

MATH 268 Accelerated Calculus II Credits: 3

An accelerated second course in calculus focusing on application of integral calculus, analytic geometry, and vector analysis.

Prerequisites: MATH 266; School of Computing Engineering Student.

MATH 300 Linear Algebra I Credits: 3

Linear equations, matrix algebra, real vector spaces, linear transformations, determinants, eigenvalues and eigenvectors, orthogonality, and applications.

Prerequisites: MATH 250, (or MATH 220 and COMP-SCI 191).

MATH 301 On Solid Ground: Sets and Proof Credits: 3

This course is a transition from procedural mathematics, such as calculus, to advanced mathematics where proofs are the professional language of discourse. It covers basic set theory and logic, relations and functions, and how to analyze, construct, and write clearly reasoned, well-structured elementary proofs using universal techniques. This course satisfies a state requirement for teacher certification.

Prerequisites: MATH 220.

MATH 345 Ordinary Differential Equations Credits: 3

Students will study first order equations, linear second order differential equations, Taylor series and power series solutions, Laplace transforms, elementary systems of differential equations, numerical methods, and Fourier series and boundary value problems.

Prerequisites: MATH 250.

MATH 345L Ordinary Differential Equations Lab Credit: 1

This laboratory will enable the students to numerically solve first order, second order and systems of ordinary differential equations. Topics include Curve Fitting, Parameter Estimation, Numerical Solutions of Initial and Boundary Value Problems, and Model Specification.

Prerequisites: MATH 250.

MATH 402 Advanced Analysis I Credits: 3

Numerical sequences and completeness of the real numbers, numerical series, continuity and differentiation of real-valued functions of a real variable, integration and the fundamental theorem of calculus.

Prerequisites: MATH 250, MATH 301 (with a grade of B- or better).

MATH 406 Partial Differential Equations Credits: 3

Separation of variables, boundary value problems, Fourier series and integrals, wave equation, heat equation, potential equation, problems in several dimensions, and Bessel's differential equation.

Prerequisites: MATH 345 (or E&C-ENGR 241, or MEC-ENGR 272).

MATH 407 Introduction to Complex Variables Credits: 3

Complex numbers, complex differentiation, elementary functions, contour integration and the Cauchy integral formula, Taylor series and Laurent series, residue calculus and its applications, and special functions.

Prerequisites: MATH 250 and MATH 300 (or MATH 301 or MATH 345 or E&C-ENGR 241 or MEC-ENGR 272) with a grade of B- or better.

MATH 410 Modern Algebra Credits: 3

Groups, rings, integral domains, fields and polynomial rings.

Prerequisites: MATH 300, MATH 301 (with a grade of B- or better).

MATH 412 Advanced Analysis II Credits: 3

Topics in advanced analysis such as sequences and series of functions, power series and elementary functions, Fourier series, metric spaces, analysis in Euclidean spaces, or advanced integration.

Prerequisites: MATH 402.

MATH 420 Linear Algebra II Credits: 3

The topics of MATH 300 are expanded and presented in the context of vector spaces over a field, with rigorous justification. Vector spaces and linear transformations, determinants, eigenvalues and eigenvectors, inner product spaces and orthogonality.

Prerequisites: MATH 300, MATH 301 (with a grade of B- or better).

MATH 434 Introduction to Scientific Computing Credits: 3

This course provides a comprehensive introduction to numerical methods used in scientific computing. It focuses on solving math models arising from other fields such as physics, engineering, biology, and economics. The topics include mathematical foundations, numerical linear algebra, finite difference method, finite volume method, finite element method, and parallel computing. Recommended preparation: MATH 300.

MATH 464WI History Of Mathematics Credits: 3

Topics in the History of Mathematics from Babylonian times through the invention and consolidation of Calculus, with some modern subjects as time permits. The course will emphasize proofs, ideas, and arguments as given in original sources (in translation) from around the world and throughout history. In this writing intensive course, one or two term papers, in addition to several short essays and historical proof explications are required. A field trip will be taken to the Linda Hall Library Rare Book Room. This course is of special interest to secondary mathematics teachers as well as mathematics majors. Recommended preparation: MATH 301.

MATH 469 Mathematical Modeling Credits: 3

This course introduces analytical and numerical techniques for modeling and analysis of real-world problems in areas such as economics, engineering, biology and physics. It is designed for students with basic knowledge of linear algebra and differential equations. Interdisciplinary modeling projects are the integral part of this course. Recommended preparation: MATH 300 and MATH 345.

MATH 490 Special Topics Credits: 1-3

Selected topics in various fields of mathematics. May be repeated for credit when the topic varies.

MATH 496 Internship/Practical Training in Mathematics or Statistics Credits: 1-3

This course provides an internship or other practical training arrangement using mathematics or statistics in an industrial, academic or other professional setting. Department approval of internship experience or practical experience required. Repeatable with up to a combined 3 credits toward the major. Recommended preparation: MATH 250.

MATH 5509 General Algebra I Credits: 3

Groups, rings, modules, homology, fields and Galois theory, valuations, matrices, and multilinear algebra. Continued in MATH 5519.

Prerequisites: MATH 410, MATH 420.

MATH 5510 Complex Variables I Credits: 3

The group of linear fractional transformations, complex integration, Cauchy's theorem, the maximum modulus theorem, analytic continuation, Riemann surfaces. Continued in MATH 5520.

Prerequisites: MATH 402, MATH 407.

MATH 5513 Real Variables I Credits: 3

Theory of measure with applications to analysis. Riemann and Lebesgue integration. Continued in MATH 5523.

Prerequisites: MATH 402, MATH 412.

MATH 5514 Mathematics for Secondary Teachers: Algebra and Analysis Credits: 3

Designed for secondary-school teachers. Examine high school mathematics from a higher point of view. Real and complex numbers, functions, algebraic structures of equations, integers and polynomials, number system structures; analyses of alternate approaches, extensions and applications of mathematical ideas, discussion of historical contexts and connections between ideas that may have been studied separately in different courses, relationships of ideas studied in secondary-school to those students may encounter in later study. When taken for graduate credit as Math 5514, an extra project is required.

Prerequisites: MATH 300.

MATH 5517 Matrix Theory I Credits: 3

Unitary matrices, normal matrices, Jordan canonical form, nonnegative matrices and their applications, the symmetric eigenvalue problem.

Prerequisites: MATH 420.

MATH 5519 General Algebra II Credits: 3

Prerequisites: MATH 5509.

MATH 5520 Complex Variables II Credits: 3

Prerequisites: MATH 5510.

MATH 5521 Differential Equations Credits: 3

This course offers an introduction to the qualitative theory and applications of ordinary differential equations (ODE). The presentation of the course will be a blend of fundamental theory and examples. The basic results will be proved rigorously and more advanced results will be only illustrated by examples that demonstrate when and how they may be applied.

Prerequisites: MATH 345, MATH 412, MATH 420.

MATH 5523 Real Variables II Credits: 3

Prerequisites: MATH 5513.

MATH 5524 Mathematics for Secondary Teachers: Geometry Credits: 3

Designed for secondary-school teachers. Examine high school mathematics from a higher point of view. Congruence, distance and similarity, trigonometry, area and volume, axiomatics and Euclidean geometry; analyses of alternate approaches, extensions, and applications of mathematical ideas, discussion of historical contexts and connections between ideas that may have been studied separately in different courses, relationships of ideas studied in secondary-school to those students may encounter in later study. When taken for graduate credit as Math 5524, an extra project is required.

MATH 5527 Matrix Theory II Credits: 3

Prerequisites: MATH 5517.

MATH 5532 Advanced Numerical Analysis I Credits: 3

Error Analysis, Solving Systems of Linear Equations, Solutions of Nonlinear Equations, the Least-Squares Problems, and Approximating functions. Continued in MATH 5542.

Prerequisites: MATH 402, MATH 420.

MATH 5542 Advanced Numerical Analysis II Credits: 3

Eigenvalues and Eigenvectors, Linear Programming, Optimization, Numerical Differentiation and Integration, Numerical Solution of Ordinary and Partial Differential Equations.

Prerequisites: MATH 5532.

MATH 5545 Mathematical Methods In Science And Engineering Credits: 3

This course offers applied linear algebra and Fourier analysis which are indispensable tools in science and engineering. It is designed for beginning graduate students with moderate background in linear algebra and real analysis. Many of the results that are presented in the course will be proved rigorously from mathematical point of view.

Prerequisites: MATH 402, MATH 406, and MATH 420.

MATH 5557 Functional Analysis Credits: 3

Hilbert spaces, linear operators, compact operators, Banach spaces, the Hahn-Banach theorem, the open mapping and closed graph theorems, the principle of uniform boundedness, locally convex spaces.

Prerequisites: MATH 402 and MATH 420.

MATH 5575 Stochastic Calculus for Finance Credits: 3

This course presents the basic idea and theory of stochastic calculus with the focus on the applications to finance. Topics include Brownian motion, Ito integral, Ito formula, Black-Scholes equation and formula, risk-neutral pricing, connections with partial differential equations, exotic options, American derivative securities, and term structure models for interest rates.

Prerequisites: MATH 402 and STAT 436.

MATH 5590 Special Topics Credits: 1-3

Selected topics in various fields of mathematics. May be repeated for credit when the topic varies.

MATH 5699 Research And Thesis Credits: 1-16

Doctoral dissertation.

MATH 5899 Required Graduate Enrollment Credit: 1

Statistics Courses

STAT 115 Statistical Reasoning Credits: 3

This course is intended for majors in less quantitative fields. The focus of the course will be on developing critical thinking abilities and decision making using data in everyday life. Emphasis will be on statistical reasoning underlying the methods of sampling, statistical inference in terms of evaluating the accuracy of an estimate in the context of uncertainty, drawing conclusions from data and studying relationships in data. Students will be trained to perform hands-on-analysis of real data sets using a computer package. No previous computing experience is required.

STAT 115 - MOTR MATH 110: Statistical Reasoning



STAT 235 Elementary Statistics Credits: 3

An introduction to descriptive and inferential statistics. Organization and presentation of data, averages and variations, elementary probability, random variables, special discrete distributions, normal distributions, sampling distributions, point estimation, confidence intervals, and hypothesis testing.

Prerequisites: MATH 110 with a grade of C- or higher; or MATH 120 or higher with a grade of C- or higher; or ALEKS Score of 61 or higher.

STAT 436 Introduction To Mathematical Statistics I Credits: 3

This course is the first of a calculus-based statistics sequence. It begins with basic concepts of probability, discrete and continuous distributions, expectation and variance, and ends with the central limit theorem. Recommended preparation: MATH 301 or COMP-SCI 191.

Prerequisites: MATH 220.

STAT 441 Introduction To Mathematical Statistics II Credits: 3

Sampling Distributions; point estimation; internal estimation; hypothesis testing; analysis of variance; nonparametric methods; statistical software applications; topics in Applied Statistics.

Prerequisites: STAT 436.

STAT 480 Statistical Models in Actuarial Science Credits: 3

This course covers the statistical foundation of actuarial models and their applications. Topics include survival and severity models, Kaplan-Meier and Nelson-Aalen estimators, aggregate and credibility models for insurance losses, discrete time Markov chains, ruin theory, and simulation.

Prerequisites: STAT 441.

STAT 482 Statistical Models for Life Contingencies Credits: 3

The basic statistical theory of actuarial models for life uncertainties such as time of death. Multiple life and multiple decrement models, statistical models for life and contingent insurance; last survivor, disability, withdrawal, retirement and reserving models for life insurance.

Prerequisites: STAT 441.

STAT 496 Internship/Practical Training in Mathematics or Statistics Credits: 1-3

This course provides an internship or other practical training arrangement using mathematics or statistics in an industrial, academic or other professional setting. Department approval of internship experience or practical experience required. Repeatable with up to a combined 3 credits toward the major. Recommended preparation: MATH 250.

STAT 5501 Statistical Design Of Experiments Credits: 3

This course is designed to present a variety of experimental design techniques to students with moderate mathematical and statistical background. The course includes three major components: efficient factorial designs, linear and quadratic process optimization of the location parameter, and variability reduction. Students will be trained to use the SPSS statistical software package.

Prerequisites: STAT 436.

STAT 5537 Mathematical Statistics I Credits: 3

Probability theory, distribution functions, sampling, statistical inference, topics in advanced applied statistics. Continued in STAT 5547.

Prerequisites: MATH 402.

STAT 5547 Mathematical Statistics II Credits: 3

Continuation of STAT 5537.

STAT 5551 Applied Statistical Analysis Credits: 3

Methods for analyzing data from experiments and observational studies; design-based and model-based inferences; model assessment; ANOVA; power analysis; SAS procedures.

Prerequisites: STAT 441.

STAT 5561 Time Series Analysis Credits: 3

This course is intended to present the basis knowledge (including models, methods and concepts) of time series analysis to students with a good background in intermediate mathematical statistics. Some elementary knowledge of basic linear regression analysis would be helpful but not necessary. The presentation will be balanced between theory and data analysis, with sufficient theory to understand the basis of methods and a broad variety of models and many real data examples. Case studies will be drawn from business and economics, network traffic and meteorology, and data will be analyzed by students using existing computer programs (SAS, Minitab and R). Students are also expected to understand proper use and limits of time series models.

Prerequisites: STAT 441.

STAT 5565 Regression Analysis Credits: 3

Simple linear regression; multiple linear regression; correlation analysis; model selections; checking assumptions; regression diagnostics; combating multi-collinearity; nonlinear regression.

Prerequisites: STAT 441.

STAT 5572 Multivariate Analysis Credits: 3

Random vectors; multivariate normal distributions; Hotelling's T-square distribution; Wishart distribution; inferences on one mean vector; MANOVA; inferences on covariance matrices; profile analysis.

Prerequisites: MATH 420 and STAT 441.

STAT 5575 Stochastic Calculus for Finance Credits: 3

This course presents the basic idea and theory of stochastic calculus with the focus on the applications to finance. Topics include Brownian motion, Ito integral, Ito formula, Black-Scholes equation and formula, risk-neutral pricing, connections with partial differential equations, exotic options, American derivative securities, and term structure models for interest rates.

Prerequisites: MATH 402 and STAT 436.

STAT 5576 Probability Credits: 3

Existence and extension of measure, random variable, expectation and its properties, types of convergence, law of large numbers, weak convergence, central limit theorem, and martingale.

Prerequisites: STAT 436 and MATH 5513.

STAT 5578 Advanced Mathematical Statistics Credits: 3

Exponential and location families, principles of data reduction, asymptotic distributions, advanced theory of estimation and hypothesis testing.

Prerequisites: STAT 5547.

STAT 5588 Theory of Linear Model Credits: 3

This course covers vector space, full rank linear model, general inverse, estimation under linear constraints interval estimation, hypothesis testing, distributions of quadratic forms, general distribution theory, estimability, Gauss-Markov theorem, Best Linear Unbiased Estimation (BLUE), regression on dummy variables, estimation of variance components, Scheffe and Turkey intervals, and non-full rank linear model.

Prerequisites: MATH 420, STAT 5537, and STAT 5565.

STAT 5590 Special Topics Credits: 1-3

Selected topics in various fields of mathematics. May be repeated for credit when the topic varies.

Bachelor of Arts: Mathematics and Statistics

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- write logically correct and well-structured proofs in a variety of content areas.
- translate real-world problems into mathematical or statistical language.
- demonstrate qualitative skills in analyzing and evaluating mathematical or statistical problems.
- carry out numerical computations for solving problems.
- present mathematical or statistical content effectively and professionally.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	

POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above)		3
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		13

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
MATH 120	Precalculus (satisfies Math Pathway)	5
MATH 210	Calculus I	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4
MATH 300	Linear Algebra I	3
MATH 301	On Solid Ground: Sets and Proof (a grade of B- or better is required)	3
MATH 402	Advanced Analysis I	3
MATH 410	Modern Algebra	3
or MATH 420	Linear Algebra II	
STAT 436	Introduction To Mathematical Statistics I	3
Select a minimum of 9 hours of coursework in mathematics or statistics at the 300 level or above: ¹		9
MATH 345 & 345L	Ordinary Differential Equations and Ordinary Differential Equations Lab	
MATH 406	Partial Differential Equations	
MATH 407	Introduction to Complex Variables	
MATH 434	Introduction to Scientific Computing	
MATH 464WI	History Of Mathematics	
MATH 469	Mathematical Modeling	
STAT 441	Introduction To Mathematical Statistics II	
STAT 480	Statistical Models in Actuarial Science	
STAT 482	Statistical Models for Life Contingencies	
STAT 484	Theory of Pension and Social Security	
Total Credits		41

¹ At least four of the courses at the 300 level or above must be completed in the Department of Mathematics and Statistics at UMKC.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives (Suggested Coursework Below)		36
ACCTNG 210	Introduction To Financial Accounting	
COMP-SCI 101	Problem Solving and Programming I	
COMP-SCI 101L	Problem Solving & Programming I Lab	
COMP-SCI 191	Discrete Structures I	
COMP-SCI 291	Discrete Structures II	
COMP-SCI 394R	Applied Probability	
ECON 201	Introduction to Economics I	
ECON 202	Introduction To Economics II	
ECON 425	Intermediate Economic Statistics	
DSOM 211	Business Analytics I	
DSOM 311	Business Analytics II	
FIN 325	Financial Management	
FIN 345	Investments	
GEOG 444	Spatial Data Analysis	
MKT 390	Customer Data Analytics	

Minimum GPA: 2.0 (degree and major)

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year			
Fall Semester	Credits	Spring Semester	Credits
MATH 120 ^{CC}		5 MATH 210 ^{CC}	4
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110		3 GECRT-AH 101	3
GECRT-SC 101		3 HISTORY 101, 102, or POL-SCI 210	3
		Foreign Language Requirement (110 or higher)	3
		14	16
Second Year			
Fall Semester	Credits	Spring Semester	Credits
MATH 220 ^{CC}		4 MATH 250 ^{CC}	4
COMM-ST 110, 277, or 140		3 MATH 301	3
GECRT-SS 101		3 GECUE 201	3
GECDV 201		3 General Elective (STAT 235 recommended)	3
Foreign Language course (120 or higher)		3 Foreign Language course (211)	3
		16	16
Third Year			
Fall Semester	Credits	Spring Semester	Credits
MATH 300		3 MATH 410 or STAT 441 (or any MATH or STAT 3XX/4XX Major Elective)	3
STAT 436		3 General Elective (ECON 202 for Actuarial Science minor)	3
General Elective (ECON 201 for Actuarial Science minor)		3 General Elective (STAT 441 for Actuarial Science minor)	3
Lab Science ^{LO}		1 General Elective (ACCTG 210 for Actuarial Science minor)	3
General Elective		3 General Elective	3
General Elective		3	
		16	15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
MATH 420 (or MATH or STAT 3XX/4XX Major Elective, if took MATH 410)		3 MATH 412, 469, or STAT 496 (or any MATH or STAT 3XX/4XX Major Elective)	3
MATH 402		3 3XX/4XX WI Writing Intensive course (MATH 464WI recommended)	3
MATH 406 or 407 (or any MATH or STAT 3XX/4XX Major Elective)		3 3XX/4XX General Elective (FIN 345 for Actuarial Science minor)	3
3XX/4XX General Elective (STAT 480 for Actuarial Science minor)		3 General Elective	3

3XX/4XX General Elective (FIN 325
for Actuarial Science minor)

3

15

12

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Science in Mathematics and Statistics

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- write logically correct and well-structured proofs in a variety of content areas.
- translate real-world problems into mathematical or statistical language.
- demonstrate qualitative skills in analyzing and evaluating mathematical or statistical problems.
- carry out numerical computations for solving problems.
- present mathematical or statistical content effectively and professionally.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
	Writing Intensive Course (300-level or above)	3
	Laboratory Science Experience	1
	Total Credits	4

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
MATH 120	Precalculus (satisfies Math Pathway)	5
MATH 210	Calculus I	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4
MATH 300	Linear Algebra I	3
MATH 301	On Solid Ground: Sets and Proof (a grade of B- or better is required)	3
MATH 402	Advanced Analysis I	3
MATH 410 or MATH 420	Modern Algebra Linear Algebra II	3
STAT 436	Introduction To Mathematical Statistics I	3
Select a minimum of 12 hours of coursework in mathematics or statistics at the 300-level or above: ¹		12
MATH 345 & 345L	Ordinary Differential Equations and Ordinary Differential Equations Lab	
MATH 407	Introduction to Complex Variables	
MATH 434	Introduction to Scientific Computing	
MATH 464WI	History Of Mathematics	
MATH 469	Mathematical Modeling	
STAT 441	Introduction To Mathematical Statistics II	
STAT 480	Statistical Models in Actuarial Science	
STAT 482	Statistical Models for Life Contingencies	
	Total Credits	44

¹ At least four of the courses at the 300-level or above must be completed in the Department of Mathematics and Statistics at UMKC.

Math and Science Requirements

The Bachelor of Science degree requires a minimum of 60 hours in math and science coursework. The number of credit hours needed to meet this minimum requirement are listed below.

Code	Title	Credits
Additional Math/Science Coursework		15

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		27

Minimum GPA: 2.0 (degree and major)

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses

are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
MATH 120 ^{CC}		5 MATH 210 ^{CC}	4
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110		3 GECRT-AH 101	3
GECRT-SC 101		3 HISTORY 101, 102, or POL-SCI 210	3
		STAT 235 (or any MATH or Science Elective Course)	3
		14	16

Second Year

Fall Semester	Credits	Spring Semester	Credits
MATH 220 ^{CC}		4 MATH 250 ^{CC}	4
GECDV 201		3 MATH 301	3
COMM-ST 110, 140, or 277		3 GECUE 201	3
MATH or Science Elective Course		3 GECRT-SS 101	3
Lab Science ^{LO}		1 General Elective (ECON 201 for Actuarial Science minor)	3
General Elective		3	
		17	16

Third Year

Fall Semester	Credits	Spring Semester	Credits
MATH 300		3 MATH 410 (or MATH or STAT 3XX/4XX Major Elective)	3
STAT 436		3 MATH or STAT 3XX/4XX Major Elective (MATH 469 or STAT 496 recommended)	3

MATH or Science Elective Course (MATH 406 or 407 recommended)	3	MATH or Science Elective Course (STAT 441 for Actuarial Science minor)	3
MATH or Science Elective Course	3	General Elective (FIN 325 for Actuarial Science minor)	3
General Elective (ACCTG 210 for Actuarial Science minor)	3	General Elective (ECON 202 for Actuarial Science minor)	3
	15		15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
MATH 420 (or MATH or STAT 3XX/4XX Major Elective, if took MATH 410)		3 MATH or STAT 3XX/4XX Major Elective (MATH 412 recommended)	3
MATH 402		3 3XX/4XX WI Writing Intensive course (MATH 464WI recommended)	3
MATH or STAT 3XX/4XX Major Elective (MATH 343 recommended)		3 General Elective	3
3XX/4XX General Elective (STAT 480 for Actuarial Science minor)		3 General Elective	3
3XX/4XX General Elective (FIN 345 for Actuarial Science minor)		3	
	15		12

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Science: Mathematics and Statistics / Master of Science: Mathematics - Dual Degree

Student Learning Outcomes

Students graduating from this program will:

- read, write, understand mathematical proofs, and construct mathematical proofs as appropriate.
- reason with and apply mathematical concepts, principles and methods; analyze and evaluate problems (both theoretical and practical) and plan strategies for their solution.
- work collaboratively with others on projects requiring mathematical knowledge and input, to function effectively in a professional workplace related to mathematics, or in a graduate program.
- apply logical reasoning skills towards answering theoretical and conceptual questions of the core areas of mathematics, meaning students will be able to explicate concepts, theorems, and standard proofs, provide and/or analyze relevant examples and counterexamples, and construct logically correct and mathematically rigorous proofs.
- demonstrate quantitative skills by implementing analytical or numerical techniques for a given task, as well as initiating concrete computations and approximations, and demonstrate the ability to carry them out.
- demonstrate qualitative skills, such as the ability to translate real-world problems into mathematical formulations, apply analytical or numerical strategies and techniques, provide exact or approximate solutions or partial solutions to problems as appropriate, and interpret and explain the results as well as the assumptions behind those results.
- demonstrate the ability to prepare background materials or gather data, write and produce one or more revisions seeking out peer or other reviews, and finally write a mathematics or statistics project report, an exposition of mathematics, or create and give an oral presentation tailored to a given audience.

This program offers students an opportunity to meet the full requirements of the BS and MS in a shorter time period than the separate degree programs. The students may complete a Bachelor of Science degree in Mathematics and Statistics in four years and the Master's degree in Statistics the fifth year.

Admission Requirements

1. The applicant must be a UMKC undergraduate student who has completed a minimum of 60 cumulative credit hours.
2. The applicant should complete the BS/MS application form and submit it to both the undergraduate (baniyaghoubm@umkc.edu (%28baniyaghoubm@umkc.edu)) and graduate advisors (segal@umkc.edu (%28segal@umkc.edu)).
3. The applicant must satisfactorily complete the following courses:
 - a. MATH 300 Linear Algebra I
 - b. MATH 301 On Solid Ground: Sets and Proof, or any 400-level class that has MATH 301 as a prerequisite. For instance, MATH 410, MATH 420, or MATH 402
 - c. MATH 345 Ordinary Differential Equations
4. A minimum overall GPA of 3.0 is required.
5. A minimum GPA of 3.2 in Math/Stat courses is required

B.S. Degree Requirements (total of 33 credit hours)

As listed below, there are 24 credit hours required undergraduate courses.

Code	Title	Credits
MATH 210	Calculus I	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4
MATH 300	Linear Algebra I	3
MATH 345	Ordinary Differential Equations	4
or select one of the following:		
MATH 406	Partial Differential Equations	
STAT 436	Introduction To Mathematical Statistics I	
MATH 402	Advanced Analysis I	3
MATH 410	Modern Algebra	3

The student should also take at least 9 credit hours of Math or Stat elective courses at the 400 level or above.

M.S. Degree Requirements (total of 30 credit hours)

The following core courses are required for the completion of the M.S. degree:

Code	Title	Credits
MATH 5509	General Algebra I	3
MATH 5510	Complex Variables I	3
MATH 5513	Real Variables I	3
MATH 5521	Differential Equations	3
MATH 5532	Advanced Numerical Analysis I	3
MATH 5545	Mathematical Methods In Science And Engineering	3

Also a total of 12 credit hours of Math or Stat elective courses at the 400 level or above must be completed satisfactorily.

B.S./M.S. Degree Overlap (up to 9 credit hours)

Up to 9 credit hours of 400-level Math or Stat courses in the graduate degree can overlap with the courses taken towards satisfying the requirements for the undergraduate degree.

Bachelor of Science: Mathematics and Statistics / Master of Science: Statistics - Dual Degree

Student Learning Outcomes

Students graduating from this program will:

- read, write, understand mathematical proofs, and construct mathematical proofs as appropriate.
- reason with and apply mathematical concepts, principles and methods; analyze and evaluate problems (both theoretical and practical) and plan strategies for their solution.
- work collaboratively with others on projects requiring mathematical knowledge and input, to function effectively in a professional workplace related to mathematics, or in a graduate program.
- demonstrate an understanding of basic statistical theory by being able to synthesize statistical concepts, assumptions, and theorems, and be able to explain how such theory gives rise to the common techniques of statistical analysis.
- will demonstrate the ability to communicate the results of a statistical analysis to a non-statistician both in writing and verbally, and to explain how these results pertain to the research question at hand.
- will exhibit the ability to decide on a statistical technique to apply to a given situation, demonstrate the ability to carry out that technique, either analytically or through the use of statistical software, and demonstrate the ability to assess the appropriateness of the technique that was applied.

This program offers students an opportunity to meet the full requirements of the BS and MS in a shorter time period than the separate degree programs. The students may complete a Bachelor of Science degree in Mathematics and Statistics in four years and the Master's degree in Mathematics the fifth year.

Admission Requirements

1. The applicant must be a UMKC undergraduate student who has completed a minimum of 60 cumulative credit hours.
2. The applicant should complete the BS/MS application form and submit it to both the undergraduate (baniyaghoubm@umkc.edu (%28baniyaghoubm@umkc.edu)) and graduate advisors (segal@umkc.edu (%28segal@umkc.edu)).
3. The applicant must satisfactorily complete the following courses:
 - a. MATH 300 Linear Algebra I
 - b. MATH 301 On Solid Ground: Sets and Proof, or any 400-level class that has MATH 301 as a prerequisite. For instance, MATH 410, MATH 420, or MATH 402
 - c. STAT 436 Introduction To Mathematical Statistics I
4. A minimum overall GPA of 3.0 is required.
5. A minimum GPA of 3.2 in Math/Stat courses is required.

B.S. Degree Requirements (total of 33 credit hours)

As listed below, there are 24 credit hours required undergraduate courses.

Code	Title	Credits
MATH 210	Calculus I	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4
MATH 300	Linear Algebra I	3
MATH 402	Advanced Analysis I	3
MATH 410	Modern Algebra	3
STAT 441	Introduction To Mathematical Statistics II	3
The student should also take at least 9 credit hours of Math or Stat elective courses at the 400 level or above.		

M.S. Degree Requirements (total of 30 credit hours)

The following core courses are required for the completion of the M.S. degree:

Code	Title	Credits
STAT 5501	Statistical Design Of Experiments	3
STAT 5537	Mathematical Statistics I	3
STAT 5547	Mathematical Statistics II	3
STAT 5551	Applied Statistical Analysis	3
STAT 5565	Regression Analysis	3
STAT 5572	Multivariate Analysis	3

Also a total of 12 credit hours of Math or Stat elective courses at the 400 level or above must be completed satisfactorily.

B.S./M.S. Degree Overlap (up to 9 credit hours)

Up to 9 credit hours of 400-level Math or Stat courses in the graduate degree can overlap with the courses taken towards satisfying the requirements for the undergraduate degree.

Interdisciplinary Ph.D. in Mathematics

Student Learning Objectives

Students are expected to:

- Have a broad understanding of several branches of mathematics and how they are related. Be able to read and/or listen to documents and discussions having mathematical content, with an appropriate level of understanding, and exhibit a high level of mathematical literacy.
- Be able to clearly articulate mathematical information accurately and effectively, using a form, structure and style that suits the purpose, including written and face-to-face presentation.
- Be able to independently acquire further mathematical knowledge without guidance.
- Be prepared for entry into professional schools, doctoral programs, or the job market.

Degree Requirements

UMKC offers an Interdisciplinary Ph.D. program. Students desiring to study at the doctoral level in mathematics must apply to the School of Graduate Studies. Detailed information on the general and discipline-specific requirements (p. 1589) appears in the School of Graduate Studies (p. 1538) section of this catalog. For more details visit the department Web site: <http://cas.umkc.edu/math/>. (<http://cas.umkc.edu/math/>)

Master of Science in Mathematics

Student Learning Outcomes

Students graduating from this program will:

- apply logical reasoning skills towards answering theoretical and conceptual questions of the core areas of mathematics, meaning students will be able to explicate concepts, theorems, and standard proofs, provide and/or analyze relevant examples and counterexamples, and construct logically correct and mathematically rigorous proofs.
- demonstrate quantitative skills by implementing analytical or numerical techniques for a given task, as well as initiating concrete computations and approximations, and demonstrate the ability to carry them out.
- demonstrate qualitative skills, such as the ability to translate real-world problems into mathematical formulations, apply analytical or numerical strategies and techniques, provide exact or approximate solutions or partial solutions to problems as appropriate, and interpret and explain the results as well as the assumptions behind those results.

- demonstrate the ability to prepare background materials or gather data, write and produce one or more revisions seeking out peer or other reviews, and finally write a mathematics or statistics project report, an exposition of mathematics, or create and give an oral presentation tailored to a given audience.

Degree Requirements

At least **30 credit hours** of approved coursework in the department are required. At least 18 credit hours (of the 30 minimum total credits) must be at the 5500 level in the department. Courses numbered below 400 do not carry graduate credit for mathematics and statistics graduate students. Courses numbered at the 400 level will NOT be credited to the master's degree if they were previously taken from UMKC or are equivalent (content wise) to courses previously taken from any other accredited colleges/universities for the undergraduate degree. Independent Reading courses (MATH 490 or MATH 5590 or STAT 5590) are not counted toward the degree unless approved for inclusion in the plan of study of the student prior to taking the course. Normally, more than 3 credit hours of Independent Reading will not be counted toward the master's degree.

In addition to the minimum 30 credit hours of course work, master's degree seeking students are required to attend five Departmental Graduate Seminars per semester.

Master's degree candidates are required to submit a **Master Plan of Study Form** prior to the completion of 15 credit hours of course work.

All master's degree candidates must take **six core courses** (all at the 5500 level) as follows:

Code	Title	Credits
MATH 5509	General Algebra I	3
MATH 5513	Real Variables I	3
MATH 5532	Advanced Numerical Analysis I	3
MATH 5510	Complex Variables I	3
MATH 5521	Differential Equations	3
MATH 5545	Mathematical Methods In Science And Engineering	3

The remaining 12 credit hours can be fulfilled by choosing from the 400 or 5500 level courses offered by the department. For more details about the courses offered, please refer to the departmental Web site (<http://cas.umkc.edu/math> (<http://cas.umkc.edu/math/>)).

Students have two options for completing the degree: **with thesis** or **without thesis**. The thesis option allows students to apply up to 6 Research and Thesis (MATH 5699 or STAT 5699) credit hours towards the 12 elective credit hours. Below are the additional requirements specific to each option.

For students completing a MS degree without thesis: In the last semester before graduation, the student will make an oral presentation, under the supervision of one or two faculty members. This talk will be assessed by an advisory committee.

For students completing a MS degree with thesis: Students are required to write a Master's thesis under the supervision of a graduate faculty member, give an oral presentation, and defend it before an examining committee. The examining committee is composed of a supervisor (Chair of the examining committee) and at least two other faculty members. All members of the committee need to be graduate or doctoral faculty in the department. The process of completing the thesis requirement is as follows:

- The student is required to submit a two-page proposal to the supervisory committee by the end of the 1st year.
- The student is required to provide a complete thesis to each of the examining committee members before the oral defense.
- Upon receipt of the recommendations from the examining committee members ("Thesis-Pre-Oral-Defense-Form" at <http://sgs.umkc.edu/current-students/thesis-dissertation-guidelines/>), the oral defense will be scheduled.
- After a successful oral defense followed by required revisions, the examining committee chair will forward the Master's thesis along with other forms ("Thesis-Final-Evaluation-form" and "Preliminary-Approval-by-Supervisory-Committee-Chair-1" found at <http://sgs.umkc.edu/current-students/thesis-dissertation-guidelines/>) to the School of Graduate Studies.

A student pursuing the thesis option can enroll in Research and Thesis credit hours (MATH 5699 or STAT 5699). Such classes will be counted towards the degree only if they are approved for the plan of study of the student prior to taking the class. No more than 6 credit hours combined of approved Research and Thesis and Independent Reading can be counted towards the degree.

Admission requirements

- Applicants need to hold a bachelors's degree from an accredited college or university, with a satisfactory GPA.
- If the applicant's degree is not in Mathematics or Statistics (or equivalent), then the applicant must have taken Calculus I, II, and III and at least three other Mathematics or Statistics classes beyond Calculus III, with satisfactory grades.
- Applicants need to include with their application materials a valid GRE general test score and a one page narrative outlining educational goals. Optional letters of recommendation should be sent directly to the department Principal Graduate Advisor.

- International applicants need to satisfy the requirements of the International Students Affairs Office (<http://www.umkc.edu/isao/>), including those on TOEFL or IELTS scores.

Applicants who want to apply for a GTA position in the department need to fill out the GTA application form (available on the department web site (<http://cas.umkc.edu/mathematics/>)) and have three letters of recommendation, accompanied by the "Evaluation of fitness for graduate studies" form sent directly to the department Principal Graduate Advisor.

Master of Science in Statistics

Student Learning Outcomes

Students graduating from this program will:

- demonstrate an understanding of basic statistical theory by being able to synthesize statistical concepts, assumptions, and theorems, and be able to explain how such theory gives rise to the common techniques of statistical analysis.
- will demonstrate the ability to communicate the results of a statistical analysis to a non-statistician both in writing and verbally, and to explain how these results pertain to the research question at hand.
- will exhibit the ability to decide on a statistical technique to apply to a given situation, demonstrate the ability to carry out that technique, either analytically or through the use of statistical software, and demonstrate the ability to assess the appropriateness of the technique that was applied.

Degree Requirements

At least **30 credit hours** of approved coursework in the department are required. At least 18 credit hours (of the 30 minimum total credits) must be at the 5500 level in the department. Courses numbered below 400 do not carry graduate credit for mathematics and statistics graduate students. Courses numbered at the 400 level will NOT be credited to the master's degree if they were previously taken from UMKC or are equivalent (content wise) to courses previously taken from any other accredited colleges/universities for the undergraduate degree. Independent Reading courses (MATH 490 or MATH 5590 or STAT 5590) are not counted toward the degree unless approved for inclusion in the plan of study of the student prior to taking the course. Normally, more than 3 credit hours of Independent Reading will not be counted toward the master's degree.

In addition to the minimum 30 credit hours of course work, master's degree seeking students are required to attend five Departmental Graduate Seminars per semester.

Master's degree candidates are required to submit a **Master Plan of Study Form** prior to the completion of 15 credit hours of course work.

All master's degree candidates must take **six core courses** (all at the 5500 level) as follows:

Code	Title	Credits
STAT 5501	Statistical Design Of Experiments	3
STAT 5537	Mathematical Statistics I	3
STAT 5551	Applied Statistical Analysis	3
STAT 5547	Mathematical Statistics II	3
STAT 5565	Regression Analysis	3
STAT 5572	Multivariate Analysis	3

The remaining 12 credit hours can be fulfilled by choosing from the 400 or 5500 level courses offered by the department. For more details about the courses offered, please refer to the departmental Web site (<http://cas.umkc.edu/math> (<http://cas.umkc.edu/math/>)).

Students have two options for completing the degree: **with thesis** or **without thesis**. The thesis option allows students to apply up to 6 Research and Thesis (MATH 5699 or STAT 5699) credit hours towards the 12 elective credit hours. Below are the additional requirements specific to each option.

For students completing a MS degree without thesis: In the last semester before graduation, the student will make an oral presentation, under the supervision of one or two faculty members. This talk will be assessed by an advisory committee.

For students completing a MS degree with thesis: Students are required to write a Master's thesis under the supervision of a graduate faculty member, give an oral presentation, and defend it before an examining committee. The examining committee is composed of a supervisor (Chair of the examining committee) and at least two other faculty members. All members of the committee need to be graduate or doctoral faculty in the department. The process of completing the thesis requirement is as follows:

- The student is required to submit a two-page proposal to the supervisory committee by the end of the 1st year.
- The student is required to provide a complete thesis to each of the examining committee members before the oral defense.
- Upon receipt of the recommendations from the examining committee members ("Thesis-Pre-Oral-Defense-Form" at <http://sgs.umkc.edu/current-students/thesis-dissertation-guidelines/>), the oral defense will be scheduled.

- After a successful oral defense followed by required revisions, the examining committee chair will forward the Master's thesis along with other forms ("Thesis-Final-Evaluation-form" and "Preliminary-Approval-by-Supervisory-Committee-Chair-1" found at <http://sgs.umkc.edu/current-students/thesis-dissertation-guidelines/>) to the School of Graduate Studies.

A student pursuing the thesis option can enroll in Research and Thesis credit hours (MATH 5699 or STAT 5699). Such classes will be counted towards the degree only if they are approved for the plan of study of the student prior to taking the class. No more than 6 credit hours combined of approved Research and Thesis and Independent Reading can be counted towards the degree.

Admission requirements

- Applicants need to hold a bachelors's degree from an accredited college or university, with a satisfactory GPA.
- If the applicant's degree is not in Mathematics or Statistics (or equivalent), then the applicant must have taken Calculus I, II, and III and at least three other Mathematics or Statistics classes beyond Calculus III, with satisfactory grades.
- Applicants need to include with their application materials a valid GRE general test score and a one page narrative outlining educational goals. Optional letters of recommendation should be sent directly to the department Principal Graduate Advisor.
- International applicants need to satisfy the requirements of the International Students Affairs Office (<http://www.umkc.edu/isao/>), including those on TOEFL or IELTS scores.

Applicants who want to apply for a GTA position in the department need to fill out the GTA application form (available on the department web site (<http://cas.umkc.edu/mathematics/>)) and have three letters of recommendation, accompanied by the "Evaluation of fitness for graduate studies" form sent directly to the department Principal Graduate Advisor.

Minor: Actuarial Science

Student Learning Outcomes

Students graduating from this program will:

- apply basic concepts of actuarial science and the laws of probability and statistics to solve actuarial science problems.
- apply advanced concepts of actuarial science, such as the theory of life contingencies and the theory of interest to solve actuarial science problems.
- use actuarial science software packages to complete actuarial science tasks.
- communicate the results of actuarial science quantitative analysis effectively and clearly, both in writing and orally.

Requirements for the Minor in Actuarial Science

Code	Title	Credits
Mathematics		
MATH 220 or MATH 268	Calculus II Accelerated Calculus II	4
Economics		
ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
Accounting		
ACCTNG 210	Introduction To Financial Accounting	3
Finance		
FIN 325	Financial Management	3
FIN 345	Investments	3
Statistics		
STAT 436	Introduction To Mathematical Statistics I	3
Take one of the following courses:		3
STAT 441	Introduction To Mathematical Statistics II	
STAT 480	Statistical Models in Actuarial Science	
STAT 482	Statistical Models for Life Contingencies	
Total Credits		25

Minor in Mathematics

Student Learning Outcomes

Students graduating from this program will:

- a) demonstrate reasoning skills necessary to read and understand basic mathematical proofs.
- b) construct basic mathematical or statistical models for solving real-world problems.
- c) apply well-known analytical, statistical, or numerical techniques to analyze basic models.
- d) produce a well-written technical report or assignment related to mathematics or statistics.

Program Requirements

A minor in mathematics may be obtained by completing a total of 19-20 hours of mathematics courses, including:

Code	Title	Credits
MATH 210 or MATH 266	Calculus I Accelerated Calculus I	4
MATH 220 or MATH 268	Calculus II Accelerated Calculus II	3-4
One MATH/STAT course at 200-level or above ¹		3-4
MATH 250 STAT 235	Calculus III Elementary Statistics	
Three MATH/STAT courses at the 300-level or above in the department ²		9
MATH 300	Linear Algebra I	
MATH 301	On Solid Ground: Sets and Proof	
MATH 345	Ordinary Differential Equations	
MATH 402	Advanced Analysis I	
MATH 406	Partial Differential Equations	
MATH 407	Introduction to Complex Variables	
MATH 410	Modern Algebra	
MATH 420	Linear Algebra II	
MATH 434	Introduction to Scientific Computing	
MATH 464WI	History Of Mathematics	
MATH 469	Mathematical Modeling	
STAT 436	Introduction To Mathematical Statistics I	
STAT 441	Introduction To Mathematical Statistics II	
STAT 480	Statistical Models in Actuarial Science	
STAT 482	Statistical Models for Life Contingencies	
Total Credits		19-21

¹ One of the following courses can be taken to fulfill an elective at the 200-level: E&C-ENGR 241, MEC-ENGR 272.

² One of the following courses can be taken to fulfill for the 300-level or above elective: CIV-ENGR 319, COMP-SCI 394R, E&C-ENGR 341R, PHYSICS 330.

Teacher Certification in Mathematics

Student Learning Outcomes

Students graduating with a B.A. or B.S. degree in Mathematics and Statistics are expected to:

- Be able to read, write, understand mathematical proofs, and construct mathematical proofs as appropriate.
- Be able to reason with and apply mathematical concepts, principles and methods; analyze and evaluate problems (both theoretical and practical) and plan strategies for their solution.
- Be able to work collaboratively with others on projects requiring mathematical knowledge and input, to function effectively in a professional workplace related to mathematics, or in a graduate program.

Program Requirements

Certification as a middle school (grades 5-9) or secondary school (grades 9-12) Mathematics teacher in either Kansas or Missouri requires that a student complete specific requirements both in Mathematics and in the School of Education. A separate application for teacher education is required. For further information, consult the School of Education (p. 1430) section of this catalog or contact the Education Student Services Office at (816) 235-2234.

Medieval and Early Modern Studies

Program Director:

Dr. Virginia Blanton
Professor of English Language and Literature
blantonv@umkc.edu

Graduate Certificate in Medieval and Early Modern Studies (MEMS)

The Graduate Certificate in Medieval and Early Modern Studies (MEMS) (p. 897) offers students an interdisciplinary opportunity to focus their studies in early literatures, history, and culture (ca. 500-1500). The certificate not only benefits graduate students pursuing MA, MFA, and Interdisciplinary Ph.D. degrees in traditional fields, such as Art History, English, History, and Theatre but also provides an opportunity for education professionals to pursue further study in the pre-modern period as professional development and enhancement.

Certificate Program Requirements (p. 897)

Minor in Medieval and Early Modern Studies (MEMS)

Undergraduate students in any major in the College of Arts and Sciences may seek an interdisciplinary minor in Medieval and Early Modern Studies (MEMS). The minor offers students an interdisciplinary opportunity to focus their studies in early literatures, history, and culture (ca. 500-1500). The minor may be integrated with the Bachelor of Liberal Arts (BLA) degree. Students complete an 18-credit program of study, with upper-level courses from at least two disciplines. Completion of the Medieval and Early Modern Studies minor is recorded on the student's transcript. Students must declare their intention to pursue the minor on the "Declaration of Major" form and should meet with the MEMS program director. No more than 6 credits may be transferred from another institution.

For a list of classes fulfilling the Medieval and Early Modern Studies Minor requirements each semester, please consult the MEMS program director. Courses in Medieval and Early Modern Studies are found primarily in College of Arts and Sciences, but there are also courses offered in the Conservatory. Courses that fulfill the requirements of the minor are those which focus on the medieval and early modern periods, as well as directed readings courses or independent studies courses with affiliated faculty. Special topics courses and similar offerings can be approved on a case-by-case basis by the program director.

Minor Program Requirements (p. 899)

Graduate Certificate in Medieval and Early Modern Studies

Graduate Certificate in Medieval and Early Modern Studies (MEMS)

The Graduate Certificate in Medieval and Early Modern Studies (MEMS) offers students an interdisciplinary opportunity to focus their studies in early literatures, history, and culture (ca. 500-1500). The certificate not only benefits graduate students pursuing MA, MFA, and Interdisciplinary Ph.D. degrees in traditional fields, such as Art History, English, History, and Theatre but also provides an opportunity for education professionals to pursue further study in the pre-modern period as professional development and enhancement.

Code	Title	Credits
Required Courses		
ENGLISH 5564/HISTORY 5583GR	Medieval Methods & Paleography	3
Capstone Experience or Thesis ¹		3
Electives		
Four three-hour graduate medieval or early modern courses ²		12
Total Credits		18

¹ The Capstone Experience or Thesis could be a written academic thesis or another kind of project, as developed by the student and his/her committee.

² The four elective courses must be distributed between at least two academic disciplines (e.g. English and History) and must include at least one three-credit medieval course and one three-credit early modern course.

Strongly recommended: Two Years College-level Proficiency in Latin

Admission Process

Applicants must be admitted to UMKC's School of Graduate Studies and by a graduate program in the College of Arts and Sciences. Application materials can be obtained from SGS.

Contact

Dr. Virginia Blanton, Department of English blantonv@umkc.edu (816) 235-2766

Dr. Linda E. Mitchell, Department of History mitchelli@umkc.edu (816) 235-2734

List of Courses for the Graduate Certificate in Medieval and Early Modern Studies

Courses in Medieval and Early Modern Studies are found primarily in the departments of the College of Arts and Sciences, but there is also an opportunity to collaborate with faculty members at the Conservatory. The courses that would fulfill the requirements of the graduate certificate include graduate colloquia focusing on the pre-modern period, undergraduate/graduate hybrid courses (at the 300-400 level for undergrads and 5500 for graduates), special topics courses, directed readings courses with affiliated faculty, and independent studies courses with affiliated faculty. Courses appropriate to the program will be approved on a case-by-case basis.

Code	Title	Credits
ART-HIST 5570	Seminar In Renaissance Art	3
ART-HIST 5575	Seminar In Baroque Art	3
ENGLISH 5503	Old English	3
ENGLISH 5512	Chaucer	3
ENGLISH 5513	Renaissance Literature I	3
ENGLISH 5514	Milton	3
ENGLISH 5515	Restoration And Early 18th-Century British Literature	3
ENGLISH 5522	Medieval Literature	3
ENGLISH 5523	Renaissance Literature II	3
ENGLISH 5531	Late 18th-Century British Literature	3
ENGLISH 5533	Histories Of Writing, Reading, And Publishing	3
ENGLISH 5550/5555	Graduate Seminar (where appropriate)	3
ENGLISH 5551	Shakespeare Comedies And Histories	3
ENGLISH 5552	Early English Drama	3
ENGLISH 5561	Shakespeare:Tragedies And Romances	3
ENGLISH 5562	Restoration And 18th- Century Drama	3
ENGLISH 5564/HISTORY 5583GR	Medieval Methods & Paleography	3
ENGLISH 5566CF/FRENCH 5500CF	Courts And Culture In The Middle Ages	3
FRENCH 5512	17th-century French Literature	3
FRENCH 5513	18th-century French Literature	3
FRENCH 5514	Medieval Literature	3
FRENCH 5517	16th-century French Literature	3
FRENCH 5520	Non-Dramatic 17th-century French Literature	3
FRENCH 5540	Medieval Romance	3
FRENCH 5544	Renaissance Poetry	3
FRENCH 5545	Epistolarity and the Novel	3
FRENCH 5546	17th-century French Drama	3
FRENCH 5552	Medieval Poetry	3
FRENCH 5554	The Intellectual Origins of the French Revolution	3
HISTORY 5502	America,1000-1763: The Formative Era	3
HISTORY 5506A/RELIG-ST 5506	History of Christianity to Middle Ages	3
HISTORY 5507A/RELIG-ST 5507	The History of Christianity from the Middle Ages to the Present	3
HISTORY 5511/5512	Medieval Civilization I	3
HISTORY 5512A	Medieval Women & Children	3
HISTORY 5512B	The Black Death And Late Medieval Society	3
HISTORY 5513	Renaissance	3
HISTORY 5514	Reformation	3

HISTORY 5515B	17Th And 18Th Century European History	3
HISTORY 5525R	European Criminal Justice History, 500-1900	3
HISTORY 5526R	The Scientific Revolution 1500-1700	3
HISTORY 5528B	Women & Medicine:Patients & Practitioners From Antiquity-Present	3
HISTORY 5531	Medieval England, 1066 to 1485	3
HISTORY 5532	Tudor-England, 1485-1688	3
HISTORY 5544	Islam & the Arabs: The Formative Period	3
HISTORY 5562J	Japanese Civilization	3
HISTORY 5576R	Medieval Jewish History	3
HISTORY 558X	Colloquia in History (when appropriate)	
RELIG-ST 5502	Religion & Colonialism in Latin America	3
SPANISH 5516	Medieval Spanish Literature	3
SPANISH 5519/5520	Federico Garcia Lorca	3
SPANISH 5527	Pre-Columbian and Spanish Colonial Literature	3
SPANISH 5533	Cervantes' Exemplary Novels	3
SPANISH 5534	The Picaresque Novel	3
THEATRE 5512R	History Of The English Stage I	3
CONSVTY 5547	Opera History	3
CONSVTY 5554	Music of the Medieval Era	3
CONSVTY 5555	Music Of The Renaissance	3
CONSVTY 5556	Music of the Baroque Era	3
CONSVTY 5557	Music of the Classical Era	3

Minor in Medieval and Early Modern Studies

Student Learning Outcomes

Students graduating from this program will:

- acquire knowledge about the multidisciplinary nature and interdisciplinary methods of Medieval and Early Modern Studies scholarship.
- acquire knowledge about the historical, cultural, social, political and economic contexts of these periods.
- acquire knowledge about issues of diversity, including race, class, and gender expression in these periods.
- have the skills to understand and utilize the theories and methods of the various disciplines that contribute to Medieval and Early Modern Studies.
- have the skills to think critically across multiple disciplines.
- have the skills to identify and articulate scholarly problems based on interaction with primary source materials. (Students who elect to take Latin or other vernacular languages of the medieval period will demonstrate further proficiency working with primary source materials in the original languages.)
- have the skills to communicate the results of their work effectively to others in expository prose, oral presentations, or electronic media such as films or web pages.

Undergraduate students in any major may seek an interdisciplinary minor in Medieval and Early Modern Studies (MEMS). The minor offers students an interdisciplinary opportunity to focus their studies in early literatures, history, and culture (ca. 500-1500). The minor may be integrated with the Bachelor of Liberal Arts (BLA) degree. Students complete an 18-credit program of study, with upper-level courses from at least two disciplines.

Completion of the Medieval and Early Modern Studies minor is recorded on the student's transcript. Students must declare their intention to pursue the minor on the "Declaration of Major" form and should meet with the MEMS program director. No more than 6 credits may be transferred from another institution

For a list of classes fulfilling the Medieval and Early Modern Studies Minor requirements each semester, please consult the MEMS program director. Courses in Medieval and Early Modern Studies are found primarily in College of Arts and Sciences, but there are also courses offered in the Conservatory. Courses that fulfill the requirements of the minor are those which focus on the medieval and early modern periods, as well as directed readings courses or independent studies courses with affiliated faculty. Special topics courses and similar offerings can be approved on a case-by-case basis by the program director.

Requirements:

Total of at least 18 credits at 300-400 level from approved courses, distributed as follows:

- At least 6 credits from at least two disciplines (ex: 6 cr. English, 12 cr History OR 6 cr. French, 6 cr. Spanish, 6 cr. Philosophy)
- No more than 9 credits may also count for major field
- May replace 3 credits of traditional coursework with 3 credits of independent study/directed readings

Strongly Recommended:

- The equivalent of two years of college-level coursework in Latin (i.e. successfully completion of Latin 221 at UMKC or its equivalent)
- Medieval Methods and Paleography (HISTORY 464)

Examples of courses fulfilling the requirements:

Code	Title	Credits
ART-HIST 201	From Cave Paintings to Cathedrals	3
ENGLISH 325	Arthurian Legends	3
ENGLISH 330	History Of The English Language	3
ENGLISH 413	Renaissance Literature I	3
FRN-LNG 302	Love and Death in European Medieval Literature	3
HISTORY 412A	Medieval Women & Children	3
HISTORY 414	Reformation	3
PHILOS 320WI	History of Modern Philosophy	3
THEATRE 350	Theatre History I	3
CONSVTY 351	History of Music in Western Civilization I	3

Military Science

University of Missouri-Kansas City
 Department of Military Science
 901 E 24 Terr
 Kansas City, MO 64108
 Phone: (816) 235-6873
 Email: armyrotc@umkc.edu (armyrotc@umkc.edu)

Professor of Military Science:

LTC Zachary Kerns

Senior Military Science Instructor:

MSG Nelbert Michel

Assistant Professors:

MAJ Christopher Rogers
 CPT Michael Leggett

Program Description

The Army Reserve Officers Training Corps provides college-trained officers for the U.S. Army and Army Reserve. With the exception of a five-week paid summer camp, all instruction is presented on campus. Various field training exercises are conducted to further enrich students' leadership skills.

A commission as a second lieutenant in the U.S. Army, Army Reserve or National Guard is awarded to individuals who have successfully completed the ROTC program and obtained a baccalaureate degree from UMKC. Currently, college graduates who are commissioned through ROTC are placed on either active duty, the reserves or National Guard duty, depending on their desires and on the needs of the service at the time of graduation. The length and type of obligation will depend on the scholarship awarded.

Financial Assistance

Financial assistance is available through the U.S. Army Scholarship Program. Two-, three- and four-year scholarships are awarded each year to selected students who are enrolled or will enroll in the Army ROTC program. The scholarships provide payment of tuition, fees, textbooks and a monthly payment of \$350 for freshman, \$400 for sophomores, \$450 for juniors, \$500 for seniors, not to exceed 10 months for each year of the scholarship. Non-scholarship contracted cadets in the advanced portion of ROTC receive monthly payments of \$450 for juniors and \$500 for seniors, not to exceed 10 months per year for two years. Students are furnished free textbooks for military science classes.

The Simultaneous Membership Program (SMP) allows students to be a member of a National Guard or Reserve units while enrolled in ROTC. Advanced course SMP students receive E5 pay, plus monthly payments of \$450 for juniors, and \$500 for seniors from ROTC, plus any Active Duty GI Bill entitlement.

ROTC scholarships are also available to graduate students. Please contact the ROTC Scholarship and Enrollment Officer at 816-235-1152 for more information.

Curriculum

All students are eligible to take Military Science 100- and 200-level courses without any military obligation. However, Military Science 300- and 400-level courses are reserved for students who have a signed contract with ROTC to become an officer upon graduation.

Undergraduate Undergraduate Program:

- Two-Year Instruction (p. 903)

Courses

MIL-SCI 102 Leadership Practicum Credits: 2

Examines leadership in basic tactical and patrolling operations, Includes a tactical application exercise and participation in physical fitness conditioning as a course requirement. Students practice leadership according to 16 principles and learn basic soldier skills.

Co-requisites: MIL-SCI 116.

MIL-SCI 112 Leadership Practicum Credits: 2

Examines advanced squad and platoon tactical operations with emphasis on patrolling operations. Topics include: leadership techniques, basic first aid, and problem-solving exercises. A tactical field application exercise and physical fitness conditioning program are included as course requirements. Students perform duties as leaders of small units.

Co-requisites: MIL-SCI 126.

MIL-SCI 116 Foundations of Officership Credit: 1

The course introduces the student to issues and competencies that are central to a commissioned officer's responsibilities. These initial lessons establish a framework for understanding officership, leadership, and Army values. Additionally, the semester addresses life skills, including physical fitness and time management. This course is designed to give the student an accurate insight into the Army profession and the officer's role in the Army.

Co-requisites: MIL-SCI 102.

MIL-SCI 126 Basic Leadership Credit: 1

This course focuses on leadership theory and decision making. "Life skills" lessons in this course include: problem solving, critical thinking, leadership theory, followership, group interaction, goal setting, and feedback mechanisms. Upon completion of this course, students are prepared to advance to more complex leadership instruction concerning the dynamics of organization. Additionally, students will be increasingly required to demonstrate knowledge of leadership fundamentals and communications (written and oral).

Co-requisites: MIL-SCI 112.

MIL-SCI 202 Leadership Practicum Credits: 2

Course examines squad and platoon offensive and defensive operations and leadership procedures in patrolling operations. Includes a tactical application exercise and participation in physical fitness conditioning as a course requirement. Students will perform various leadership roles and present classroom instruction.

Corequisite: MIL-SCI 216

MIL-SCI 212 Leadership Practicum Credits: 2

Examines advanced squad and platoon offensive and defensive operations, reaction to obstacles, and leadership procedures in patrolling operations. Includes a tactical application exercise and participation in physical fitness conditioning as a course requirement. Students will perform in various leadership roles and present classroom instruction.

Co-requisites: MIL-SCI 226.

MIL-SCI 216 Individual Leadership Series Credits: 2

This course is designed to develop within the student a knowledge of self, self-confidence and individual skills, Through experiential learning activities, students will develop problem-solving and critical-thinking skills, apply communication, feedback and conflict-resolution skills. This course delves into several aspects of communication and leadership theory. The focus of the course is on critical life skills which enable the students future success. The course concludes with a major leadership and problem-solving case study which draws upon previous instruction.

Prerequisites: MIL-SCI 126.

Co-requisites: MIL-SCI 202.

MIL-SCI 226 Leadership and Teamwork Credits: 2

This course focuses on self-development guided by knowledge of self and group processes. Experiential learning activities are designed to challenge students current beliefs, knowledge and skills. This semester takes the approach of placing students in a wide variety of group exercises designed to emphasize various leadership competencies and insights. The instructor, acting as a facilitator, helps guide student processing of the events to derive the leadership, group dynamics and problem-solving lessons that the exercises offer. Practical life skills are emphasized throughout.

Prerequisites: MIL-SCI 216.

Co-requisites: MIL-SCI 212.

MIL-SCI 302 Leadership Practicum Credits: 2

Examines squad and platoon offensive and defensive operations, the patrol leader in patrolling operations, and a tactical application exercise. Participation in physical fitness conditioning and a tactical application exercise is required. Students will perform in various leadership roles and present classroom instruction. Recommended preparation: MIL-SCI 226.

Prerequisites: Departmental consent.

Co-requisites: MIL-SCI 316.

MIL-SCI 312 Leadership Practicum Credits: 2

Familiarization with military firearms; includes assembly and disassembly; tactical communications; and the field artillery request and a tactical application exercise. Participation in physical fitness conditioning and a tactical application exercise is required. Students will perform in various leadership roles and present classroom instruction.

Prerequisites: MIL-SCI 316.

Co-requisites: MIL-SCI 326.

MIL-SCI 316 Leadership and Problem Solving Credits: 3

Following an introduction to the principles of physical fitness and healthy lifestyles, lessons will cover: the Leader Development Program, planning and conducting individual and small unit training, basic tactical principles, reasoning skills and the military-specific application of these skills in the form of the Army's troop-leading procedures. The course concludes with a detailed examination of officership, which culminates in a five-hour officership case study.

Prerequisites: MIL-SCI 226.

Co-requisites: MIL-SCI 302.

MIL-SCI 326 Leadership and Ethics Credits: 3

Continues the focus from MIL-SCI 316 on doctrinal leadership and tactical operations at the small unit level. Instructional modules include: Army branches, Army leadership, philosophy, dynamics of a group environment, oral and written presentation skills, culminating in instruction in national and Army values and ethics. This critical semester synthesizes the various components of training, leadership and team building.

Prerequisites: MIL-SCI 316.

Co-requisites: MIL-SCI 312.

MIL-SCI 397 US Military History Credits: 3

This course examines the beginnings of human military history from pre-colonial through the birth of America and into the post-Cold War era. The course focuses on the origins of tactics and techniques and emphasizes the military as an aspect of American society and its role in political, social, economic, and international environments.

Prerequisites: Departmental consent.

MIL-SCI 402 Leadership Practicum Credits: 2

Practical applications in problem analysis, decision making, planning and organization, delegation and control, and development of interpersonal skills required for effective management. Participation in physical fitness conditioning and tactical application exercise is required. Students will perform in various leadership positions and present classroom instruction.

Co-requisites: MIL-SCI 416.

MIL-SCI 412 Leadership Practicum Credits: 2

Practical applications in problem analysis, decision making, planning and organization, delegation and control, and development of interpersonal skills required for effective management, includes a tactical application exercise. Participation in physical fitness conditioning is required. Students will perform various leadership roles and conduct classroom instruction.

Prerequisites: MIL-SCI 416.

Co-requisites: MIL-SCI 426.

MIL-SCI 416 Leadership And Management Credits: 3

A series of lessons designed to enable students to make informed career decisions as they prepare for commissioning and service as Second Lieutenants. Classes concentrate on Army operations and training management, and communications and leadership skills, which support the final transition from cadet/student to Lieutenant/leader. Subjects include: The Army Training Management System, coordinating activities with staffs, and counseling skills. At the end of this semester, students should possess the fundamental skills, attributes and abilities to operate as a competent leader in the cadet battalion.

Prerequisites: MIL-SCI 326.

Co-requisites: MIL-SCI 402.

MIL-SCI 426 Officership Credits: 3

A series of lessons that provide a review of the ethical dimensions of leadership, law in leadership, organizing for military operations to include historical case studies, personnel, supply and maintenance administration and management, personal financial planning and entering the service, The semester concludes with a 12-lesson experiential exercise simulating assignment as a new Lieutenant in a unit.

Prerequisites: MIL-SCI 416.

Co-requisites: MIL-SCI 412.

MIL-SCI 497 Leadership And Management Practicum - Directed Study Credits: 1-3

Practical application in military problem analysis, decision making, planning and organization, delegation and control, and development of interpersonal skills required for effective management.

Prerequisites: Departmental consent.

Two-Year Instruction

ROTC instruction usually is presented over the four years of traditional full-time study. This also allows commissioning at the same time graduation requirements are met. However, a two-year program is available for students who were unable to take the first two years of instruction and want to earn a commission.

Department of Philosophy

434 Cherry Hall
5030 Cherry Street
(816) 235-1331
Fax: (816) 235-5193
philosophy@umkc.edu
<http://cas.umkc.edu/philosophy> (<http://cas.umkc.edu/philosophy/>)

Mailing Address

University of Missouri-Kansas City
Department of Philosophy
434 Cherry Hall
5030 Cherry Street
Kansas City, MO 64110-2499

Department Chair and Undergraduate Advisor:

Bruce Bubacz

Professors Emeriti:

George D. Gale, Jr., Edward Walter

Professors:

Bruce Bubacz, Clancy Martin

Assistant Professor:

E. Gwendolyn Nally

Associate Teaching Professor:

Adrian Switzer

Department Description

The Department of Philosophy offers a program of study leading to the bachelor of arts degree in philosophy. Courses are offered that develop critical and analytical skills, acquaint students with the history of philosophy and apply philosophy to issues of living.

Students who major in other disciplines can gain special insight into their majors with a philosophy minor. There is a focused minor on bioethics, targeted at students interested in the medical and health care professions.

Career Implications of the Degree

The dynamism of American economic life guarantees that change will be a constant, especially in employment – most people will change careers several times during their working lives. How can you prepare yourself for the inevitable challenges of your career? The most important traits that will serve you well in the twenty-first century are flexibility and discipline, the capacity to quickly assess and understand new environments, to recognize opportunities and the ability to deploy tools that will guarantee success. The study of philosophy will prepare you for the challenges of this evolving world. Studying philosophy provides you with the ability to read complex materials with care and comprehension, to write with clarity and economy and to express your ideas forcefully and succinctly. If you are interested in honing the skills that will allow you to succeed in any endeavor requiring focused thought, if you recognize that the best way to prepare for the challenging world of our knowledge-based economy is to hone your mind and sharpen your intellect, then philosophy is the major for you.

Advising System

Although all faculty members of the department are available for student advising, the department has an undergraduate advisor to whom questions about the philosophy program should be directed.

Special Services

The Philosophy Department is committed to having a strong student community, and has a very active Honors Society, Phi Sigma Tau. Events include everything from inviting guest speakers, movie nights, reading/discussion groups (both with and without faculty members) to socializing, and are open to anyone interested in philosophy. Students are highly encouraged to be active participants in both Phi Sigma Tau and departmental life in general.

Scholarly Presentations

Many visiting philosophers present scholarly papers to the Philosophy Department during the academic year. In addition, organizations such as the Kansas City Area Philosophical Association, the Central States Philosophical Association and other professional societies occasionally meet in Kansas City. Students are cordially invited to attend these activities.

Faculty

Bruce Bubacz; chair, department of philosophy; curators' professor of philosophy and professor of law; B.A. (Ripon College); M.S., Ph.D. (University of Washington-Seattle).

Clancy W. Martin^{1,2}; professor of philosophy; B.A. (Baylor University); Ph.D. (University of Texas at Austin).

E. Gwendolyn Nally; assistant professor of philosophy; B.A. (James Madison University); M.A., Ph.D. (University of Virginia).

Adrian Switzer; associate teaching professor of philosophy; B.A. (Lehigh University); M.A., Ph.D. (Loyola University Chicago).

¹ Members of UMKC Graduate Faculty

² Members of UMKC Doctoral Faculty

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts: Philosophy (p. 907)
- Minor in Philosophy (p. 911)
- Minor in Bioethics and Medical Humanities (p. 911)

Courses

PHILOS 210 Introduction to Philosophy Credits: 3

An introduction to many of the central problems of philosophy. The various dimensions of philosophy are examined as it related to our relationships with each other, our understanding of our world and our understanding of ourselves. Connections between classical philosophers and contemporary issues are explored as philosophy is considered as a deeply personal and also as a social phenomenon.

PHILOS 210 - MOTR PHIL 100: Introduction to Philosophy



PHILOS 221 Contemporary Moral Issues Credits: 3

This course offers a philosophical examination of ethical issues in contemporary society. Topics for discussion include ethical conflicts arising in business and technology, engineering, healthcare, politics, and the environment. Moral concerns addressed may include reproductive rights and technologies, warfare, capital punishment, pornography, privacy, consumerism, euthanasia, sexuality, and animal welfare.

PHILOS 221 - MOTR PHIL 102: Introduction to Ethics

**PHILOS 222 Foundations Of Logic and Scientific Reasoning Credits: 3**

This course introduces the basic concepts and methods of modern logic, beginning with premise, inference, conclusion, and argument, with emphasis on understanding and reconstructing complex patterns of reasoning, and analysis and construction of valid arguments.

PHILOS 222 - MOTR PHIL 101: Introduction to Logic

**PHILOS 250 Special Readings In Philosophy Credits: 3**

An investigation of readings on a topic, a philosophical movement, or a philosopher to be selected by the instructor. The course is designed to meet the needs of students who are interested in a specific issue or person in philosophy but do not yet possess the necessary background and skill demanded of those who have taken work beyond the introductory course (s) in philosophy.

PHILOS 310WI Ancient Philosophy Credits: 3

A survey of the central figures of classical philosophy: the pre-Socratics, Socrates, Plato, Aristotle, the Stoics, the Epicureans and other philosophers of antiquity. The contributions of major philosophers to the development of science, religion, and social and political theories are studied. Recommended preparation: PHILOS 210 and PHILOS 222.

PHILOS 320WI History of Modern Philosophy Credits: 3

A survey of the central figures of modern philosophy: Rene Descartes, Baruch Spinoza, G.W. Leibniz, Thomas Hobbes, John Locke, George Berkeley, David Hume and Immanuel Kant. In addition to the philosophical issues of the period, cultural, historical and political matters are considered. A secondary goal is the establishment of the pedigree of contemporary philosophical problems. Recommended preparation: PHILOS 210 and PHILOS 222.

PHILOS 321 Ethics Credits: 3

Attention is given to the nature of ethical ideas and the development and history of ethical theory.

Prerequisites: PHILOS 210, or PHILOS 221, or PHILOS 222.

PHILOS 325 Aesthetics Credits: 3

The basic problems of aesthetics are examined, with special emphasis on the character of the work of art, the aesthetic response of the viewer, the creative process of the artist, and the nature of aesthetic criticism. These topics are discussed in light of conflicting aesthetic theories. Recommended preparation: PHILOS 210 and PHILOS 222.

PHILOS 329 American Philosophy Credits: 3

The main trends of American thought are covered, with special emphasis on the philosophies of Peirce, James and Dewey.

Prerequisites: PHILOS 210 or PHILOS 222.

PHILOS 332 Existentialism Credits: 3

A study of the development of existentialism. Selections from the works of such thinkers as Kierkegaard, Nietzsche, Sartre, Heidegger, Camus and other related philosophers are considered. Special attention is devoted to the existential movements in literature, social science and medicine. Recommended preparation: PHILOS 222.

PHILOS 333 Social And Political Philosophy Credits: 3

A consideration of representative views of the place of man in contemporary society. Contributions in psychology, political theory, economics, sociology and anthropology are investigated philosophically with a view toward offering a critical appraisal of the nature of man in the human community.

PHILOS 335 Philosophy Of Mind Credits: 3

A study of problems arising in connection with such topics as mental phenomena, the relation of mind to body, free will and determinism, the self and personal identity, and 'thinking' machines. Classical and contemporary treatments of such concepts as 'mind', 'intention', 'sensation', 'perception', 'stimulus', etc., and their relation to action and behavior are considered. Recommended preparation: PHILOS 210 or PHILOS 222.

PHILOS 337 Philosophy Of History Credits: 3

A discussion of methodological and substantive issues, including the nature of historical explanation, whether history can be a science, and various theories of history such as those of Vico, Hegel, Marx, and Collingwood.

Prerequisites: PHILOS 210 or PHILOS 222.

PHILOS 340 Philosophy Of Law Credits: 3

An analysis of major philosophies of law, including methods of justifying legal systems through natural law, legal positivism, sociological jurisprudence, theology, etc. Contemporary legal theories are critically analyzed. Recommended preparation: PHILOS 210 or PHILOS 222.

PHILOS 370 Environmental Ethics And Policy Credits: 3

Various philosophical approaches to issues such as the value of nature, human obligations to non-human animals, species, ecosystems and future generations; environmental justice; restoration; resource use; environmental politics; and the relation between environmental issues, policy and ethics will be discussed critically.

PHILOS 430 Plato Credits: 3

Selected dialogues of Plato are studied with a view to understanding Plato's philosophy and its position in the world of Greece and antiquity. Plato's philosophy is also examined with reference to his place in the Western tradition and in modern philosophy. Recommended preparation: PHILOS 210 or PHILOS 222.

PHILOS 431 Aristotle Credits: 3

Selected portions of Aristotle's works on logic, metaphysics, science, ethics, politics, and poetics are studied with a view to understanding Aristotle's philosophy and its position in the world of Greece and antiquity. Aristotle's philosophy is examined with reference to its place in the Western tradition and in modern philosophy. Recommended preparation: PHILOS 210 or PHILOS 222.

PHILOS 448 Recent Ethical Theories Credits: 3

An analysis and investigation of modern and contemporary ethical theories. Among the theories considered are ethical relativity, the emotive theory, utilitarianism, neo Kantianism, and situation ethics.

Prerequisites: PHILOS 321.

PHILOS 451 History and Philosophy of Bioethics Credits: 3

This course will provide an overview of the history of medicine and bioethics from antiquity to the present. In addition to key historical events, the course will provide an overview of foundational ethical theories. The course will explore key events in bioethics and the responses to them in the bioethics literature.

PHILOS 480 Selected Topics Credits: 1-3

Each time this course is offered a particular philosopher or particular area of philosophy will be the topic of discussion. The course may be repeated for credit when the topic varies.

Prerequisites: PHILOS 210 or PHILOS 222.

PHILOS 480A Selected Topics Credits: 1-3

PHILOS 480B Selected Topics Credits: 1-3

PHILOS 480E Selected Topics Credits: 1-3

PHILOS 490 Special Topics And Readings Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor. May be repeated for credit when the topic varies.

Prerequisites: Departmental consent.

PHILOS 490B Special Topics And Readings Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor. By permission only. May be repeated for credit when the topic varies.

Prerequisites: PHILOS 222, PHILOS 310WI, PHILOS 320WI, PHILOS 321.

PHILOS 490F Special Topics and Readings Credits: 1-3

Intensive reading and/or research in an area selected by the student in consultation with the instructor. By permission only. May be repeated for credit when the topic varies.

Prerequisites: PHILOS 222, PHILOS 310WI, PHILOS 320WI, PHILOS 321.

PHILOS 5521 Managerial And Administrative Decision Making And Ethical Values Credits: 3

Methods of problem definition and decision making in ethics are presented with the goal of providing the student with a matrix for case review. A series of cases is offered that serve to integrate approaches to ethical reflection with management and administrative decision making. Cases are chosen on the basis of topical, curricular and conceptual relevance.

PHILOS 5540 Seminar On Philosophy And Law Credits: 2

An examination from a philosophical perspective of the historical and conceptual relationships present in the evolution, development and analysis of law. Among the systems of analysis examined will be natural law theory, legal positivism and legal realism. Ordinarily the seminar will focus on a specific area of controversy in the law.

PHILOS 5546 Ethics And Government Credits: 3

An examination of ethical issues related to government, with the primary focus on national and local governmental bodies in the United States. Ethics in the executive, legislative and judicial branches are examined. Ethical standards for elected officials and appointed public servants are reviewed. Attempts to "legislate morality" are considered. The course includes a historical review of ethics and government and an analysis of the legal implications of legislation regarding ethics in the executive branch.

PHILOS 5620 Descartes To Hume Credits: 3

PHILOS 5625 Aesthetics Credits: 3

PHILOS 5638 Philosophy Of Biology Credits: 3

PHILOS 5640 Philosophy Of Law Credits: 3

PHILOS 5690 Research In Selected Fields: Graduate Studies Credits: 3

Intensive research in an area selected by the student in consultation with the instructor. By permission only. May be repeated for credit when the topic varies.

PHILOS H310 Ancient Philosophy - Honors Credits: 3

PHILOS H321 Honors: Introduction To Ethics Credits: 3

PHILOS H332 Existentialism Credits: 3

A study of the development of existentialism. Selections from the works of such thinkers as Kierkegaard, Nietzsche, Sartre, Heidegger, Camus and other related philosophers are considered. Special attention is devoted to the existential movements in literature, social science and medicine.

Prerequisites: PHILOS 210, PHILOS 222.

PHILOS H333 Social And Political Philosophy Credits: 3

A consideration of representative views of the place of man in contemporary society. Contributions in psychology, political theory, economics, sociology and anthropology are investigated philosophically with a view toward offering a critical appraisal of the nature of man in the human community. No prerequisites.

PHILOS H370 Environmental Ethics And Policy Credits: 3

Various philosophical approaches to issues such as the value of nature, human obligations to non-human animals, species, ecosystems and future generations; environmental justice; restoration; resource use; environmental politics; and the relation between environmental issues, policy and ethics will be discussed critically.

Bachelor of Arts: Philosophy

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Have an understanding of the central figures and themes in the history of philosophy.
- Possess the critical reasoning skills necessary to effectively analyze and critique abstract concepts and arguments.
- Be able to develop and defend philosophical arguments, both orally and in writing.
- Be able to apply critical reasoning skills in a wide range of career settings.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
	Foreign Language (3rd Semester Level)	9
	Laboratory Science Experience	1
Total Credits		10

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
PHILOS 210	Introduction to Philosophy	3
PHILOS 222	Foundations Of Logic and Scientific Reasoning	3
PHILOS 310WI	Ancient Philosophy	3
PHILOS 320WI	History of Modern Philosophy	3
PHILOS 321	Ethics	3
Major Electives (at least 12 hours at 300-level or above)		15
Elective coursework offered on a regular basis includes the following:		
PHILOS 329	American Philosophy	
PHILOS 333	Social And Political Philosophy	
PHILOS 335	Philosophy Of Mind	
PHILOS 340	Philosophy Of Law	
PHILOS 370	Environmental Ethics And Policy	
PHILOS 430	Plato	
PHILOS 431	Aristotle	
PHILOS 448	Recent Ethical Theories	
Total Credits		30

No more than twelve credit hours of the 30 required hours may be at the 100- or 200-level. To graduate with a major in philosophy, students must pass all courses included in the 30 credit hours required for the major with a grade of C or higher. This requirement also applies to transfer courses.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		50

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office

of Registration and Records) and “what if” exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
PHILOS 210 or 222 ^{CC}		3 PHILOS 210 or 222 ^{CC}	3
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110		3 MATH 110, 116, or STAT 115	3
GECRT-AH 101		3 GECRT-SC 101	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
	15		15

Second Year

Fall Semester	Credits	Spring Semester	Credits
PHILOS 321		3 PHILOS 3XX/4XX Major Elective	3
COMM-ST 110, 140, or 277		3 PHILOS 3XX/4XX Major Elective	3
GECRT-SS 101		3 GECDV 201	3
GECUE 201		3 HISTORY 101, 102, or POL-SCI 210	3
Foreign Language course (211)		3 General Elective	3
	15		15

Third Year

Fall Semester	Credits	Spring Semester	Credits
PHILOS 310WI		3 PHILOS 320WI	3
PHILOS 3XX/4XX Major Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		Lab Science ^{LO}	1
	15		16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
PHILOS 3XX/4XX Major Elective		3 PHILOS 3XX/4XX Major Elective	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3

General Elective	3 General Elective	2
	15	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Minor in Bioethics and Medical Humanities

Requirements for the Minor

Students wishing to complete the interdisciplinary minor in Bioethics and Medical Humanities must complete 18 hours of coursework.

Code	Title	Credits
PHILOS 321	Ethics	3
Select one course in the History of Medicine, for example:		3
CLASSICS 391WI	Ancient Greek and Roman Medicine	
Select at least one course in Bioethics:		3
300/400 level elective courses in bioethics and medical humanities ¹		9
Elective coursework offered on a regular basis includes the following:		
PHILOS 329	American Philosophy	
PHILOS 340	Philosophy Of Law	
PHILOS 370	Environmental Ethics And Policy	
PHILOS 448	Recent Ethical Theories	
Total Credits		18

¹ From the approved course list or as approved by the program director.

Students must receive a C or better in all coursework applied toward the minor.

Minor in Philosophy

Student Learning Outcomes

Students graduating from this program will:

- Have an understanding of the central figures and themes in the history of philosophy.
- Possess the critical reasoning skills necessary to effectively analyze and critique abstract concepts and arguments.
- Be able to develop and defend philosophical arguments, both orally and in writing.
- Be able to apply critical reasoning skills in a wide range of career settings.

Program Requirements

Philosophy minors are required to complete a total of 18 credit hours, including:

Code	Title	Credits
PHILOS 210 or PHILOS 222	Introduction to Philosophy Foundations Of Logic and Scientific Reasoning	3
PHILOS 310WI	Ancient Philosophy	3
PHILOS 320WI	History of Modern Philosophy	3
Any 300- or 400-level philosophy courses		9
Elective coursework offered on a regular basis includes the following (consult advisor for additional options):		
PHILOS 329	American Philosophy	
PHILOS 340	Philosophy Of Law	
PHILOS 370	Environmental Ethics And Policy	
PHILOS 448	Recent Ethical Theories	
Total Credits		18

Students must achieve a grade of C or better in a course for it to count toward the minor. Students can work with the departmental advisor to tailor focused minors that coordinate with their major.

Department of Physics and Astronomy

Welcome

These catalog pages are here to guide you regarding the central facts of the degree programs offered by the Department of Physics and Astronomy. To learn about the student activities, faculty members, research programs, resources, and culture of the Department of Physics and Astronomy, please visit our Departmental Web Site (<http://cas.umkc.edu/physics/>).

Degree Programs

Undergraduate

The Department of Physics and Astronomy offers programs of study leading to the Bachelor of Arts (BA) and Bachelor of Science (BS). The Physics BS degree may be taken with an Emphasis in Astronomy. Through coordination with the School of Computing and Engineering, a program of study can be designed for motivated students that results in a Physics BS and an Electrical & Computer Engineering BS double degree within five years. The department also offers minors in Physics or Astronomy and provides courses for students in the School of Education to meet the requirements for Teacher Certification in Physics.

Graduate

The Department of Physics and Astronomy offers a Master of Science (MS) degree in Physics with thesis and non-thesis options through the College of Arts and Sciences. The Department of Physics is an academic discipline that is eligible for full participation in UMKC's Interdisciplinary Ph.D. (IPhD) program. Qualified students may select Physics as their coordinating unit or co-discipline when applying for admission or preparing their IPhD plan of study. (Visit the School of Graduate Studies (Catalog (p. 1538), Web (<http://sgs.umkc.edu/>)) for details about the IPhD program.)

Student Support

Advising System

Students who wish to major or minor in Physics should seek the advice of the undergraduate advisor, Professor Elizabeth Stoddard (stoddarde@umkc.edu).

Students who wish to minor in Astronomy or pursue the Physics BS with an Emphasis in Astronomy should seek the advice of the undergraduate advisor for astronomy, Professor Dan McIntosh (mcintoshdh@umkc.edu).

Students who wish to pursue graduate studies (MS / IPhD) should seek the advice of the graduate advisor, Professor Paul Rulis (rulisp@umkc.edu).

Tutoring

Tutoring is freely available for undergraduate students taking courses from the department. The tutoring room is #259, Flarsheim Hall. Ask your instructor for the tutoring schedule.

Contact

Electronic

Email: physics-astronomy@umkc.edu

Web: <http://cas.umkc.edu/physics> (<http://cas.umkc.edu/physics/>)

Office: (816) 235-1604

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Mailing Address

University of Missouri-Kansas City
Department of Physics and Astronomy
5100 Rockhill Road
Kansas City, MO 64110-2499

Physical Location

5110 Rockhill Road, Room 257
Robert H. Flarsheim Science and Technology Hall (<http://www.umkc.edu/virtualtour/flarsheim-hall.asp>)

Faculty

Physics & Astronomy Faculty

Department Chair:

Fred M. Leibsle

Undergraduate Advisor

Elizabeth P. Stoddard

Graduate Advisors:

Paul M. Rulis, Mark Brodwin

Curators' Professors:

Anthony N. Caruso

Professors:

Da-Ming Zhu

Associate Professors:

Fred M. Leibsle (chair), Elizabeth P. Stoddard, Daniel H. McIntosh, Mark Brodwin, Paul Rulis

Associate Teaching Professor:

Robert C. Riggs

Associate Research Professor:

Michelle M. Paquette

Professors Emeriti:

Paul J. Bryant, Wai-Yim Ching (Curators' Professor), Richard D. Murphy, Marvin R. Querry (Curators' Professor), John R. Urani

Associate Professors Emeriti:

James R. Beacham, Richard C. Waring

James R. Beacham; Associate Professor Emeritus of Physics; B.S., M.S., Ph.D. (Purdue University).

Mark Brodwin^{2,3}; Associate Professor of Physics; B.S. (McGill University); M.S., Ph.D. (University of Toronto).

Paul J. Bryant; Professor Emeritus of Physics; B.S. (Rockhurst College); M.S., Ph.D. (St. Louis University).

Anthony Caruso^{2,3}; Curators' Professor of Physics; B.A. (Bethany College); M.S., Ph.D. (University of Nebraska).

Fred M. Leiblsle; Chair, Associate Professor of Physics; B.S. (University of Wisconsin); Ph.D. (University of Illinois).

Daniel H. McIntosh^{2,3}; Associate Professor of Physics; B.S. (University of California, LA); Ph.D. (University of Arizona).

Richard D. Murphy; Professor Emeritus of Physics; B.A. (University of Colorado); M.A., Ph.D. (University of Minnesota).

Marvin R. Querry; former Vice Chancellor, Academic Affairs, and Curators' Professor Emeritus of Physics; B.S. (University of Missouri-Kansas City); M.S., Ph.D. (Kansas State University).

Paul Rulis^{2,3}; Associate Professor of Physics; B.S. (Virginia Tech); Ph.D. (University of Missouri-Kansas City).

Elizabeth P. Stoddard²; Associate Professor of Physics; B.A. (William Jewell College); M.S., Ph.D. (Washington University).

John R. Urani; Professor Emeritus of Physics; B.S., M.S., Ph.D. (University of Missouri-Columbia).

Richard C. Waring; Associate Professor Emeritus; B.A. (William Jewell College); M.A. (University of Arkansas).

Da-Ming Zhu^{2,3}; Professor of Physics; B.S. (University of Science and Technology of China); M.S., Ph.D. (University of Washington).

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

⁴ Located at UM-St. Louis campus

Undergraduate

Undergraduate Admissions

There are no special prerequisites for beginning either the Bachelor of Arts (BA) or the Bachelor of Science (BS) degree programs in Physics. High-school physics and a good working knowledge of algebra and arithmetic are desirable for entering the BS program. However, any deficiencies may be overcome by taking the appropriate coursework. In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for physics (Professor Elizabeth Stoddard, stoddarde@umkc.edu) or the undergraduate advisor for astronomy (Professor Dan McIntosh, mcintoshdh@umkc.edu) before beginning the major.

Students that are interested in pursuing Teacher Certification in Physics should contact the School of Education (Catalog (p. 1430), Web (<http://education.umkc.edu/>)) for admissions and advising.

Undergraduate Degrees

- Bachelor of Science: Physics (p. 926)
- Bachelor of Science: Physics with an Emphasis in Astronomy (p. 931)
- Bachelor of Science: Physics and Electrical & Computer Engineering Double Degree (p. 937)
- Bachelor of Arts: Physics (p. 922)
- Physics Minor (p. 921)
- Astronomy Minor (p. 920)
- Teacher Certification in Physics (p. 938)

Career Implications of the Bachelor's Degree in Physics

The BS/BA degree is recommended for students interested in seeking employment in any organization that requires a strong science or technology background. Graduates with a physics degree who enter fields other than science and technology generally find that the reasoning skills and quantitative problem-solving strategies that are developed in a physics program will help their career advancement.

Students that earn a BS degree in Physics are well positioned for continuing their education in graduate school and professional/medical school while those attaining a BS or BA degree in Physics are well positioned for entering the job market in virtually any field of endeavor. There are many career opportunities for holders of either the BS or BA degree in Physics including such possibilities as: researcher in a government/corporate lab, engineer (electrical, mechanical, etc.), science journalist, technology entrepreneur, financial/actuarial analyst, hardware/software developer, chemist, K-12 educator, materials scientist, meteorologist/seismologist, health practitioner, legal analyst, elected political official, etc.

Graduate

Graduate Degrees:

- Master of Science in Physics (p. 935)
- Interdisciplinary Ph.D. Program in Physics (School of Graduate Studies Catalog Section) (p. 1602)

Astronomy Courses

ASTR 150 Astronomy: Motions of the Cosmos Credits: 3

An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the fundamental laws of gravity and motion crucial to the formation of stars and planetary systems, the growth of black holes and galaxies, and the evolution of cosmic structure.

ASTR 150 - MOTR ASTR 100: Astronomy



ASTR 155 Astronomy: Starlight and Star Stuff Credits: 3

An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the interactions between light and matter crucial to the life and death of stars, the analysis of starlight and interstellar chemistry, and the interpretation of cosmic history.

ASTR 155 - MOTR ASTR 100: Astronomy



ASTR 353 Practical Astronomy Credits: 3

A practical overview of the basic methods of observational astronomy research, including the principles of telescopes, detectors and measurement theory.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

ASTR 355 Stellar Astrophysics Credits: 3

A mathematical and conceptual overview of the observed properties of stars and the fundamental astrophysics of radiative transfer, hydrostatic equilibrium, atomic processes and thermonuclear energy production that govern their structure, atmospheres and remnants.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

ASTR 356 Galaxies Credits: 3

A mathematical and conceptual overview of the observed properties and astrophysics of galaxies highlighting star formation and evolution, the interstellar medium, the Milky Way, galaxy populations and demographics, active galactic nuclei, and galaxy formation and evolution.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

ASTR 465 Cosmology Credits: 3

This course provides a foundation in both physical and observational cosmology. Students will acquire both a mathematical and conceptual understanding of the formation and dynamics of the Universe.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

Physical Science Courses

PHY-SCI 110 Foundations Of Physical Sciences I Credits: 4

Fundamental principles and concepts of the various physical and mathematical sciences, integrated by the history and philosophy of science.

PHY-SCI 110 - MOTR PHYS 110L: Essentials Physical Sciences w/Lab



PHY-SCI 110L Foundations Of Physical Sciences, Laboratory I Credit: 1

General laboratory and discussion sessions on various topics in the physical and mathematical sciences.

PHY-SCI 110L - MOTR PHYS 110L: Essentials Physical Sciences w/Lab



PHY-SCI 130 Physics of Sports Credits: 3

A course intended for liberal arts students focusing on the physics involved in different sports. Physical laws and technological developments that impact sports will be studied.

PHY-SCI 140 How Things Work Credits: 3

A course intended for liberal arts students focusing on the principles of operations, histories, and relationships of objects from our daily environment. The areas of investigation include mechanical and thermal objects, electromagnetism, light, special materials and nuclear energy.

Co-requisites: PHY-SCI 140L.

PHY-SCI 140L How Things Work Laboratory Credit: 1

Simple experiments based on everyday experiences are analyzed in terms of conceptual physics. The material includes elements of mechanics of a rigid body, elastic properties of matter, fluid dynamics, thermodynamics, electromagnetism, optics and modern physics.

Co-requisites: PHY-SCI 140.

PHY-SCI 150 Astronomy: Motions of the Cosmos Credits: 3

An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the fundamental laws of gravity and motion crucial to the formation of stars and planetary systems, the growth of black holes and galaxies, and the evolution of cosmic structure.

PHY-SCI 153L Introductory Astronomy Laboratory Credits: 2

An introductory exploration of astronomical phenomena and concepts through quantitative laboratory activities requiring data collection, analysis and interpretation. This course is open to students from all majors. Concurrent enrollment in either PHY-SCI 150 or PHY-SCI 155 is encouraged but not required.

PHY-SCI 171 Physics For Future Presidents Credits: 3

A course intended for liberal arts students focusing on the physics they need to be informed citizens in a democracy. Energy, global warming, terrorism, and health are examples of the important topics examined from the perspective of how science should inform policy.

PHY-SCI 410A Selected Topics In Contemporary Science Credits: 3**PHY-SCI 435 Selected Topics In The History Of Science Credits: 3**

Selected Topics In The History Of Science

Physics Courses

PHYSICS 130 Physics of Sports Credits: 3

A course intended for liberal arts students focusing on the physics involved in different sports. Physical laws and technological developments that impact sports will be studied.

PHYSICS 131L Backyard Physics Credit: 1

This laboratory course uses readily available ingredients to develop a conceptual understanding of the laws of nature and mathematics. Experiments can be conducted in the residence hall, apartment, park or home using everyday, inexpensive equipment and materials.

PHYSICS 140 How Things Work Credits: 3

A course intended for liberal arts students focusing on the principles of operations, histories, and relationships of objects from our daily environment. The areas of investigation include mechanical and thermal objects, electromagnetism, light, special materials and nuclear energy.

Co-requisites: PHYSICS 140L.

PHYSICS 140 - MOTR PHYS 100L: Essentials in Physics with Lab**PHYSICS 140L How Things Work Laboratory Credit: 1**

A course intended for liberal arts students focusing on the principles of operations, histories and relationships of objects from our daily environment. The areas of investigation include mechanical and thermal objects, electromagnetism, light, special materials and nuclear energy.

Co-requisites: PHYSICS 140.

PHYSICS 140L - MOTR PHYS 100L: Essentials in Physics with Lab**PHYSICS 150 Astronomy: Motions of the Cosmos Credits: 3**

An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the fundamental laws of gravity and motion crucial to the formation of stars and planetary systems, the growth of black holes and galaxies, and the evolution of cosmic structure.

PHYSICS 153L Introductory Astronomy Laboratory Credits: 2

An introductory exploration of astronomical phenomena and concepts through quantitative laboratory activities requiring data collection, analysis and interpretation. This course is open to students from all majors.

PHYSICS 155 Astronomy: Starlight and Star Stuff Credits: 3

An introductory exploration of modern topics in astronomy with an emphasis on developing conceptual models for the interactions between light and matter crucial to the life and death of stars, the analysis of starlight and interstellar chemistry, and the interpretation of cosmic history.

PHYSICS 210 General Physics I Credits: 4

Introduction to mechanics, wave motion and sound and heat and thermodynamics. Three hours lecture and two hours laboratory per week.

Co-requisites: MATH 110 or MATH 120 (or higher); ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher.

PHYSICS 210 - MOTR PHYS 150L: Physics I with Lab**PHYSICS 220 General Physics II Credits: 4**

Introduction to electricity and magnetism, light and optics and modern physics. Three hours lecture and two hours laboratory per week.

Prerequisites: PHYSICS 210.

PHYSICS 240 Physics For Scientists and Engineers I Credits: 5

Introduction to mechanics, wave motion and sound and heat and thermodynamics.

Co-requisites: MATH 210 or MATH 266.

PHYSICS 240 - MOTR PHYS 200L: Advanced Physics I with Lab**PHYSICS 250 Physics For Scientists and Engineers II Credits: 5**

Introduction to electricity and magnetism, light and optics and modern physics. Four hours lecture and two hours laboratory per week.

Prerequisites: PHYSICS 240.

Co-requisites: MATH 220 or MATH 268.

PHYSICS 310 Mechanics I Credits: 3

Advanced statics and dynamics of particles and rigid bodies including gravitation.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

PHYSICS 311 Mechanics II Credits: 3

Continuation of Mechanics I, including mechanics of continuous media, Lagranges equations, tensor algebra and theory of small vibrations.

Prerequisites: PHYSICS 310.

PHYSICS 330 Methods Of Theoretical Physics I Credits: 3

Introduction to mathematical and numerical methods used in the theoretical modeling of physical systems. Treatments of linear systems in scientific and engineering applications will be emphasized.

Prerequisites: MATH 250 or MATH 268.

PHYSICS 342 Physics of Science Fiction Credits: 3

This course will quantitatively explore the representation of physics in science fiction books, movies and television shows. Many popular science fiction concepts will be explored, spanning centuries of physics from Galileo to string theory.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 120 or MATH 125.

PHYSICS 350 Modern Physics With Engineering Applications Credits: 3

An introduction to the theories that revolutionized science and technology in the twentieth century. Topics include special and general relativity, introductory quantum mechanics and atomic structure. Inventions and applications based on these are also examined.

Prerequisites: MATH 220 or MATH 268 and PHYSICS 220 or PHYSICS 250.

PHYSICS 353 Practical Astronomy Credits: 3

A practical overview of the basic methods of observational astronomy research, including the principles of telescopes, detectors and measurement theory.

Prerequisites: PHYSICS 250 and MATH 210 or MATH 220.

PHYSICS 355 Stellar Astrophysics Credits: 3

A mathematical and conceptual overview of the observed properties of stars and the fundamental astrophysics of radiative transfer, hydrostatic equilibrium, atomic processes and thermonuclear energy production that govern their structure, atmospheres and remnants.

Prerequisites: PHYSICS 240 and PHYSICS 250, MATH 210 or MATH 220.

PHYSICS 356 Galaxies Credits: 3

A mathematical and conceptual overview of the observed properties and astrophysics of galaxies highlighting star formation and evolution, the interstellar medium, the Milky Way, galaxy populations and demographics, active galactic nuclei, and galaxy formation and evolution.

Prerequisites: PHYSICS 250 and MATH 210 or MATH 220.

PHYSICS 385L Physics of Electronics Credits: 3

An introduction to the solid state physics of basic electronic components and their operation through both theory and practical labwork.

Prerequisites: PHYSICS 220 or PHYSICS 250.

PHYSICS 395L Computer Interfacing Laboratory Credits: 3

An introduction to data acquisition and automation by computer interfacing transduction and control equipment through the serial and parallel buses. The course is multidisciplinary, balancing the physics of transduction to the computer science of automation programming to the electrical engineering of bus protocols. Both high- and low-level programming are taught within the context of automating an experimental procedure. Digital-to-analog and analog-to-digital conversion is also covered.

Prerequisites: PHYSICS 385L.

PHYSICS 410 Thermal Physics Credits: 3

A study of the laws of thermodynamics and their applications, with an introduction to kinetic theory. Statistical methods are emphasized.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

PHYSICS 420 Optics Credits: 3

Geometrical optics, physical optics and introduction to selected topics in modern optics.

Prerequisites: PHYSICS 220 or PHYSICS 250 and MATH 210 or MATH 216 or MATH 266.

PHYSICS 450 Introduction To Solid State Physics Credits: 3

Crystal structure and binding, elementary lattice dynamics and energy band theory. Free electron models, theory of semiconductors and metals.

Prerequisites: PHYSICS 310 or PHYSICS 410.

PHYSICS 460 Electricity And Magnetism I Credits: 3

Static electric fields in free space and material media; Kirchoff's laws and direct current circuits; static magnetic fields.

Prerequisites: PHYSICS 220 or PHYSICS 250; and MATH 250 or MATH 268.

PHYSICS 461 Electricity And Magnetism II Credits: 3

Magnetostatics; alternating current circuits; Maxwell's equations and radiation; special relativity; topics in electromagnetism.

Prerequisites: PHYSICS 460.

PHYSICS 465 Cosmology Credits: 3

This course provides a foundation in both physical and observational cosmology. Students will acquire both a mathematical and conceptual understanding of the formation and dynamics of the Universe.

Prerequisites: PHYSICS 240 and PHYSICS 250, MATH 210 or MATH 220.

PHYSICS 472 Introduction To Quantum Mechanics Credits: 3

Introduction to the theory and applications of quantum mechanics with emphasis on the mathematical treatment of modern physics.

Prerequisites: PHYSICS 350.

PHYSICS 476LW Advanced Laboratory Credits: 3

This course offers a selection of important experiments in physics, performed with modern instrumentation. It is designed to give students a deeper understanding of physics and help them develop experimental abilities and improve their communication skills.

PHYSICS 490 Special Problems Credits: 1-3

The kind of problem and the amount of credit to be given by arrangement with the department.

PHYSICS 499 Undergraduate Research Credits: 1-3

Independent student research on a physics/astrophysics project under the supervision of a faculty member. Projects will engage students in aspects of the scientific process including data collection and analysis, research methods and strategies, scientific discussion and written/oral communication. Requires a minimum of 3-4 hours of research per week for each credit hour.

PHYSICS 5500 Methods Of Mathematical Physics I Credits: 3

Intended to provide the student with the advanced mathematical techniques needed for beginning graduate studies in the physical sciences. Content includes real variables, infinite series, complex analysis, linear algebra and partial differential equations.

PHYSICS 5501 Methods Of Mathematical Physics II Credits: 3

A continuation of Physics 500 which includes Sturm-Liouville operators, special functions, Fourier transforms, distributions and Green functions, Laplace transforms, linear groups and tensor analysis.

PHYSICS 5505 Survey Of Recent Development In Physics Credits: 3

Specifically designed to help high school and junior college science teachers keep pace with current developments in various subdivisions of physics and their impact on society and technology. (Not applicable for graduate degree in Physics).

Prerequisite: Baccalaureate degree and one year science teaching experience.

PHYSICS 5510 Theoretical Mechanics I Credits: 3

A review of undergraduate mechanics precedes the study of generalized classical mechanics in this course. Topics include variational principles, Lagrangian and Hamilton methods, conservation laws and Hamilton-Jacobi theory.

PHYSICS 5511 Theoretical Mechanics II Credits: 3

A continuation of PHYSICS 5510, this course covers topics such as normal coordinates, small oscillations, continuum mechanics and special/general relativity.

PHYSICS 5520 Electromagnetic Theory And Applications I Credits: 3

Electrostatics, magnetostatics and various approaches in solving boundary value problems of electromagnetism, Green's functions, conformal transformations and polynomial expansions, Maxwell's equations and waves.

PHYSICS 5521 Electromagnetic Theory And Applications II Credits: 3

Waveguides, fiber optics, radiation systems and antenna for wireless communications, scattering and diffraction of electromagnetic waves, multipole fields, special relativity and relativistic particle dynamics and radiation.

PHYSICS 5530 Quantum Mechanics I Credits: 3

Review of elementary methods, formal preliminaries, axioms, commuting operators, angular momentum, static perturbation theory, Wigner-Eckart theorem.

PHYSICS 5531 Quantum Mechanics II Credits: 3

Time dependent perturbation theory, scattering, applications to atoms, molecules and nuclei, reactions, relativistic methods.

PHYSICS 5535 Optical Properties Of Matter Credits: 3

Maxwell's equations and the dielectric function, absorption and dispersion, free-electron metals, interband transitions, dispersion relations and sum rules, self-consistent field approximation, current-current correlations and the fluctuation-dissipation theorem, plasmons and characteristic energy loss.

Prerequisites: PHYSICS 450, PHYSICS 460, PHYSICS 461, PHYSICS 472, PHYSICS 5500.

PHYSICS 5537 Particle Physics Credits: 3

Essential aspects of modern particle physics are examined in a historical context, and also in terms of the standard model describing concisely the fundamental interactions among particles. Conservation laws are discussed, and recent developments such as String Theory are considered.

Prerequisites: (for undergraduates) PHYSICS 240, PHYSICS 250, and PHYSICS 350 or PHYSICS 472.

PHYSICS 5540 Statistical Physics I Credits: 3

Statistical mechanics as a basis for thermodynamics; classical distribution functions; quantum statistical mechanics, kinetic theory, transport phenomena; application to systems of interacting particles.

Prerequisites: PHYSICS 410, PHYSICS 472.

PHYSICS 5541 Statistical Physics II Credits: 3

Special topics in advanced statistical physics including: second quantization, modern many body theory, interacting Fermi and Bose systems, superfluidity and superconductivity, renormalization group and computer simulation techniques.

Prerequisites: PHYSICS 5540.

PHYSICS 5550 Atomic And Molecular Structure Credits: 3

Experimental results and theoretical models by quantum mechanics. Special emphasis on the interaction between radiation and matter.

PHYSICS 5553 Practical Astronomy Credits: 3

A practical overview of the basic methods of observational astronomy research, including the principles of telescopes, detectors and measurement theory, as well as hands-on experience with data reduction and analysis. This course is open to graduate students from all majors.

PHYSICS 5555 Stellar Astrophysics Credits: 3

A mathematical and conceptual overview of the observed properties of stars and the fundamental astrophysics of radiative transfer, hydrostatic equilibrium, atomic processes and thermonuclear energy production that govern their structure, atmospheres and remnants.

PHYSICS 5556 Galaxies Credits: 3

A mathematical and conceptual overview of the observed properties and astrophysics of galaxies highlighting star formation and evolution, the interstellar medium, the Milky Way, galaxy populations and demographics, active galactic nuclei, and galaxy formation and evolution.

PHYSICS 5560 Nuclear Physics Credits: 3

Fundamental properties of the atomic nucleus discussed in terms of experimental results and theoretical models. Quantum and statistical mechanics are used where appropriate.

PHYSICS 5565 Cosmology Credits: 3

This course provides a foundation in both physical and observational cosmology. Students will acquire both a mathematical and conceptual understanding of the formation and dynamics of the Universe.

PHYSICS 5570 Quantum Theory Of Solids I Credits: 3

Lattice dynamics and thermal conductivity. Neutron scattering. Symmetry principles in crystals and consequences. Point group, space group and irreducible representations. Energy band theory and methods of band calculation. Elementary Theory of Magnetism. Spin wave theory.

PHYSICS 5571 Quantum Theory Of Solids II Credits: 3

Topics will include crystal imperfections, impurities and defects, optical properties of metals and semiconductors, electron-lattice interaction and transport theory, superconductivity and theory of disordered systems.

PHYSICS 5580 Physics Seminar Credit: 1

Contemporary publications and research.

PHYSICS 5585 Physics of Electronics Credits: 3

An introduction to the solid state physics of basic electronic components and their operation through both theory and practical lab work.

PHYSICS 5590 Topics In Physics Credits: 1-3

Contemporary publications and research.

PHYSICS 5590A Topics In Physics Credits: 1-3

Contemporary publications and research.

PHYSICS 5590B Special Topics Credits: 1-3**PHYSICS 5590R Topics in Physics Credits: 1-3**

Contemporary publications and research.

PHYSICS 5595L Computer Interfacing Laboratory Credits: 3

An introduction to computer interfacing through the use of serial and parallel ports and digital-to-analog and analog-to-digital converters. The course also introduces digital filtering techniques, data analysis techniques, and graphical presentation of data. The programming techniques are taught using high level programming languages currently used in research and development labs.

PHYSICS 5599 Research And Thesis Credits: 1-9

Research for thesis in partial fulfillment of the master's degree in physics.

PHYSICS 5680 Research Seminar Credits: 1-2

Seminars on current research topics of research programs in the department and those of external distinguished scientists. (Must be taken by Physics Ph.D. students).

PHYSICS 5690 Special Research Topics Credits: 1-3

A lecture course presenting advanced research-level topics.

Prerequisites: Ph.D. candidacy. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

PHYSICS 5696 Dissertation Research Credits: 1-3

This course is individually directed research leading to the fulfillment of the Comprehensive Exam requirements of the Department of Physics and Astronomy. These include (i) completion of an NSF-style research proposal and (ii) successful oral defense of it before the student's research advisory committee.

Prerequisites: Completion of at least 80% of coursework hours, as per the student's Plan of Study and Permission of the instructor.

PHYSICS 5699 Research And Dissertation Credits: 1-9

Research for dissertation in partial fulfillment of the Ph.D. degree requirements in physics.

PHYSICS 5899 Required Graduate Enrollment Credit: 1**PHYSICS H150 Honors: Introduction To Astronomy Credits: 3**

Honors: Introduction To Astronomy

PHYSICS H220 General Physics II Credits: 4

Fundamental principles of physics including sound, electricity, magnetism, optics, elementary modern physics, and applications of these principles to different interdisciplinary natural science.

Prerequisites: PHYSICS 210 (or equivalent).

PHYSICS H240 Physics For Science And Engineering I Credits: 5

Introduction to mechanics, wave motion and sound and heat and thermodynamics.

Co-requisites: MATH 210.

PHYSICS H250 Physics For Science And Engineering II Credits: 5

Introduction to electricity and magnetism, light and optics and modern physics.

Prerequisites: PHYSICS 240.

Co-requisites: MATH 220.

Astronomy Minor

Student Learning Outcomes

Students graduating from this program will:

- demonstrate competency in stellar astrophysics, galaxies, cosmology and practical astronomy in homework and exam questions.
- translate complicated mathematical expressions of astrophysics laws into concrete calculations and test these.
- clearly articulate scientific information both orally and in writing.

Description of the Program

The minor in Astronomy is designed for students desiring a general background in Astronomy.

Astronomy advising questions should be directed to Professor Daniel McIntosh (McIntoshDH@umkc.edu).

Program Requirements

Students majoring in any other discipline (including Physics) in the University may elect to minor in astronomy.

There are two tracks (Track One, Track Two) each requiring a minimum of 18 credit hours in Physics and Astronomy courses, with a minimum of 9 credit hours at the 300-400 level. It is highly recommended that students follow Track One because the upper level courses will be very challenging without the solid foundation obtained in the calculus-based physics courses (PHYSICS 240/PHYSICS 250). Students must receive grades of C or better in each course.

Track One (Recommended)

Code	Title	Credits
PHYSICS 240 & PHYSICS 250	Physics For Scientists and Engineers I and Physics For Scientists and Engineers II	10
Select three of the following:		9
PHYSICS 350	Modern Physics With Engineering Applications	
ASTR/PHYSICS 353	Practical Astronomy	
ASTR/PHYSICS 355	Stellar Astrophysics	
ASTR/PHYSICS 356	Galaxies	
ASTR/PHYSICS 465	Cosmology	
Total Credits		19

Track Two (Approval Required)

Code	Title	Credits
PHYSICS 210 & PHYSICS 220	General Physics I and General Physics II	8
Select one of the following:		2-3
ASTR/PHYSICS 150	Astronomy: Motions of the Cosmos	
ASTR/PHYSICS 153L	Introductory Astronomy Laboratory	
ASTR/PHYSICS 155	Astronomy: Starlight and Star Stuff	
Plus three of the following:		9
PHYSICS 342	Physics of Science Fiction	
PHYSICS 350	Modern Physics With Engineering Applications	
ASTR/PHYSICS 353	Practical Astronomy	
ASTR/PHYSICS 356	Galaxies	
Total Credits		19-20

In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for astronomy, Professor Dan McIntosh (McIntoshDH@umkc.edu).

Physics Minor

Student Learning Outcomes

Students graduating from this program will:

- Have a functional knowledge of the basic areas of physics.
- Be able to integrate their basic scientific knowledge with critical thinking skills to quantitatively solve physics problems.

The minor in Physics is designed for students desiring a general background in Physics.

Physics advising questions should be directed to Professor Elizabeth Stoddard (stoddarde@umkc.edu).

Program Requirements

Students majoring in any other discipline in the University may elect to minor in Physics.

The Physics minor requires a minimum of 18 credit hours in Physics courses, with a minimum of 9 credit hours at the 300-400 level. Students must receive grades of C or better in each course. Advising questions regarding the Physics minor should be directed to Professor Elizabeth Stoddard (stoddarde@umkc.edu).

Code	Title	Credits
Take the following coursework:		18
Any combination of other physics courses with at least 9 credit hours at the 300-400 level and a total of 18 credit hours.		
Select one of the following:		
PHYSICS 210 & PHYSICS 220	General Physics I and General Physics II	
PHYSICS 240 & PHYSICS 250	Physics For Scientists and Engineers I and Physics For Scientists and Engineers II	
Total Credits		18

In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for physics, Professor Elizabeth Stoddard, (stoddarde@umkc.edu (stoddarde@umkc.edu)).

Bachelor of Arts: Physics

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Have a functional knowledge of the basic areas of physics.
- Be able to integrate their knowledge with critical thinking skills in order to become quantitative problem solvers.
- Be able to clearly articulate scientific information, both orally and in writing.
- Be able to effectively use the scientific literature.

Description of the Bachelor of Arts Program

The Bachelor of Arts (BA) degree in Physics is recommended for students interested in seeking employment in science, technology, engineering and math (STEM) areas that require a strong scientific and quantitative background. The BA degree offers greater flexibility than either the Physics BS or the Physics/Engineering Double Degree program because it requires fewer credit hours of physics in contrast to the BS.

Physics advising questions should be directed to Professor Elizabeth Stoddard (stoddarde@umkc.edu).

Students graduating with a BA degree in Physics will be prepared for entry into the high-tech job market.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above)		3
Foreign Language (3rd Semester Level)		9

Laboratory Science Experience (Satisfied in program requirements below)

Total Credits	12
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Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Students must complete 31 hours of Physics coursework, of which 21 hours must be at the 300-level or above.

Code	Title	Credits
MATH 120	Precalculus (satisfies Math Pathway)	5
MATH 210	Calculus I	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
Choose One Introductory Series		8
PHYSICS 210 & PHYSICS 220	General Physics I and General Physics II	
PHYSICS 240 & PHYSICS 250	Physics For Scientists and Engineers I and Physics For Scientists and Engineers II	
Required Upper Division Theory Courses		9
PHYSICS 310	Mechanics I	
PHYSICS 330	Methods Of Theoretical Physics I	
PHYSICS 472	Introduction To Quantum Mechanics	
Required Upper Division Lab Course (Choose one)		3
PHYSICS 385L	Physics of Electronics	
PHYSICS 395L	Computer Interfacing Laboratory	
PHYSICS 476LW	Advanced Laboratory	
Additional ASTR/PHYSICS Electives to equal 31 credit hours of Physics coursework. Restrictions: no more than 3 credit hours of PHYSICS 490 / PHYSICS 499.		11
Regular elective offerings include the following. Please consult with advisor for additional course options.		
ASTR 353	Practical Astronomy	
ASTR 355	Stellar Astrophysics	
ASTR 356	Galaxies	
ASTR 465	Cosmology	
PHYSICS 311	Mechanics II	
PHYSICS 350	Modern Physics With Engineering Applications	
PHYSICS 410	Thermal Physics	
PHYSICS 420	Optics	
PHYSICS 450	Introduction To Solid State Physics	
PHYSICS 460	Electricity And Magnetism I	
PHYSICS 461	Electricity And Magnetism II	
PHYSICS 490	Special Problems	
PHYSICS 499	Undergraduate Research	
Total Credits		53

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		25

Major Minimum GPA: 2.0

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
MATH 210 ^{CC}		4 MATH 220 ^{CC}	4
GEFSE 101		3 PHYSICS 240 ^{CC}	5
ENGLISH 110		3 ENGLISH 225	3
GECRT-SC 101		3 Foreign Language Requirement (120 or higher)	3
Foreign Language Requirement (110 or higher)		3	
		16	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
MATH 250		4 PHYSICS 385L or 476LW	3
PHYSICS 250 ^{CC}		5 COMM-ST 110 or 277	3
CHEM 211 ^{CC}		4 GECRT-AH 101	3
CHEM 211L ^{CC}		1 GECRT-SS 101	3
Foreign Language course (211)		3 HISTORY 101, 102, or POL-SCI 210	3
		17	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
PHYSICS 310		3 PHYSICS 350	3
PHYSICS 330		3 PHYSICS 3XX/4XX Major Elective (420 recommended)	3
PHYSICS 3XX/4XX Major Elective (395L recommended)		3 GECDV 201	3
GECUE 201		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
PHYSICS 472		3 PHYSICS 3XX/4XX Major Elective	3
3XX/4XX General Elective		3 3XX/4XX General Elective (WI Writing Intensive course if not yet completed)	3
3XX/4XX General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3	
		15	12

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Science: Physics

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a

Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Have a functional knowledge of the basic areas of physics.
- Be able to integrate their knowledge with critical thinking skills in order to become quantitative problem solvers.
- Be able to clearly articulate scientific information, both orally and in writing.
- Be able to effectively use the scientific literature.

Description of the Bachelor of Science Program

The Bachelor of Science (BS) degree in Physics is recommended for students interested in seeking employment in industrial, governmental, or private organizations that require a strong scientific background and for those students that are seeking to continue their academic careers in either graduate school or professional/medical school.

Physics advising questions should be directed to Professor Elizabeth Stoddard (stoddarde@umkc.edu).

Students graduating with a BS degree in Physics will be prepared for entry into professional schools, graduate programs, or the job market for career employment.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Laboratory Science Experience (Satisfied in program requirements below)		
Total Credits		0

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
MATH 120	Precalculus (satisfies Math Pathway)	5
MATH 210	Calculus I	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II	5
PHYSICS 240 & PHYSICS 250	Physics For Scientists and Engineers I and Physics For Scientists and Engineers II	10
PHYSICS 310 & PHYSICS 311	Mechanics I and Mechanics II	6
PHYSICS 330	Methods Of Theoretical Physics I	3
PHYSICS 350	Modern Physics With Engineering Applications	3
PHYSICS 385L & PHYSICS 395L	Physics of Electronics and Computer Interfacing Laboratory	6
PHYSICS 410	Thermal Physics	3
PHYSICS 420	Optics	3

PHYSICS 460 & PHYSICS 461	Electricity And Magnetism I and Electricity And Magnetism II	6
PHYSICS 472	Introduction To Quantum Mechanics	3
PHYSICS 476LW	Advanced Laboratory	3
Total Credits		73

Math and Science Requirements

The Bachelor of Science degree requires a minimum of 60 hours in math and science coursework. The number of credit hours needed to meet this minimum requirement are listed below.

Code	Title	Credits
Additional Math/Science Coursework (Satisfied in program requirements above)		

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		17

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year			
Fall Semester	Credits	Spring Semester	Credits
MATH 210 ^{CC}		4 MATH 220 ^{CC}	4
GEFSE 101		3 PHYSICS 240 ^{CC}	5
ENGLISH 110		3 ENGLISH 225	3

COMM-ST 110, 140, or 277	3	GECRT-AH 101	3
GECRT-SC 101	3		
	16		15
Second Year			
Fall Semester	Credits	Spring Semester	Credits
MATH 250 ^{CC}		4 PHYSICS 350 ^{CC}	3
PHYSICS 250 ^{CC}		5 PHYSICS 385L ^{CC}	3
CHEM 211 & 211L ^{CC}		5 CHEM 212R & CHEM 212LR ^{CC}	5
General Elective		1 GECRT-SS 101	3
	15		14
Third Year			
Fall Semester	Credits	Spring Semester	Credits
PHYSICS 310		3 PHYSICS 311	3
PHYSICS 330		3 PHYSICS 410	3
PHYSICS 395L		3 GECDV 201	3
GECUE 201		3 General Elective	3
HISTORY 101, 102, or POL-SCI 210		3 General Elective	3
	15		15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
PHYSICS 460		3 PHYSICS 420	3
PHYSICS 472		3 PHYSICS 461	3
PHYSICS 476LW		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
	15		15

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Science: Physics - Astronomy Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Have a functional knowledge of the basic areas of astronomy, astrophysics, and physics.
- Be able to integrate their knowledge with critical thinking skills in order to become quantitative problem solvers.
- Be able to clearly articulate scientific information, both orally and in writing.
- Be able to effectively use the scientific literature.

Description of the Bachelor of Science Program with an Emphasis in Astronomy

The Bachelor of Science (BS) degree in Physics with an Emphasis in Astronomy is recommended for students that are seeking to continue their academic careers in graduate school or for those that are interested in seeking career employment in industrial, governmental, or private organizations that require a strong scientific background.

Astronomy advising questions should be directed to Professor Daniel McIntosh (McIntoshDH@umkc.edu).

Students graduating with a BS degree in Physics with an Emphasis in Astronomy will be prepared for entry into graduate programs or the job market for career employment.

Program Requirements

Code	Title	Credits
First Semester Experience Course		3
Critical Thinking in Arts & Humanities		3
Critical Thinking in Natural & Physical Sciences		3
Critical Thinking in Social & Behavioral Sciences		3
Culture & Diversity Course		3
Civic & Urban Engagement Course		3
Math Pathway (Satisfied in major requirements below)		
Composition:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Communication:		

COMM-ST 110	Fundamentals Of Effective Speaking And Listening	3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
ASTR/PHYSICS 353	Practical Astronomy	3
ASTR/PHYSICS 355	Stellar Astrophysics	3
ASTR/PHYSICS 356	Galaxies	3
ASTR/PHYSICS 465	Cosmology	3
COMP-SCI 101	Problem Solving and Programming I	3
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
MATH 120	Precalculus	5
MATH 210	Calculus I	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4
PHYSICS 240 & PHYSICS 250	Physics For Scientists and Engineers I and Physics For Scientists and Engineers II	10
PHYSICS 310 & PHYSICS 311	Mechanics I and Mechanics II	6
PHYSICS 330	Methods Of Theoretical Physics I	3
PHYSICS 350	Modern Physics With Engineering Applications	3
PHYSICS 410	Thermal Physics	3
PHYSICS 460 & PHYSICS 461	Electricity And Magnetism I and Electricity And Magnetism II	6
PHYSICS 472	Introduction To Quantum Mechanics	3
PHYSICS 476LW	Advanced Laboratory	3

or PHYSICS 395L

Computer Interfacing Laboratory

Total Credits

74

Math and Science Requirements

The Bachelor of Science degree requires a minimum of 60 hours in math and science coursework. The number of credit hours needed to meet this minimum requirement are listed below.

Code	Title	Credits
Additional Math/Science Coursework (Satisfied in program requirements above)		

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		16

Minimum GPA: 2.0

Total Credit Hours: 120

Formulating a Plan of Study

In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for astronomy (Professor Dan McIntosh, mcintoshdh@umkc.edu) before beginning the major.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
MATH 210 ^{CC}		4 MATH 220 ^{CC}	4
GEFSE 101		3 PHYSICS 240 ^{CC}	5

ENGLISH 110	3	ENGLISH 225	3
COMM-ST 110, 140, or 277	3	GECRT-AH 101	3
GECRT-SC 101	3		
	16		15
Second Year			
Fall Semester	Credits	Spring Semester	Credits
MATH 250 ^{CC}		4 PHYSICS 350 ^{CC}	3
PHYSICS 250 ^{CC}		5 COMP-SCI 101 ^{CC}	3
CHEM 211 & 211L ^{CC}		5 ASTR 353 or PHYSICS 410	3
		GECRT-SS 101	3
		General Elective (ASTR 150 or 155 recommended)	3
	14		15
Third Year			
Fall Semester	Credits	Spring Semester	Credits
PHYSICS 310		3 PHYSICS 311	3
PHYSICS 330		3 ASTR 353 or PHYSICS 410	3
ASTR 355 or 356		3 GECUE 201	3
GECDV 201		3 General Elective (ASTR 150 or 155 recommended)	3
HISTORY 101, 102, or POL-SCI 210		3 General Elective	3
	15		15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
ASTR 355 or 356		3 ASTR 465	3
PHYSICS 460		3 PHYSICS 461	3
PHYSICS 472		3 General Elective	3
PHYSICS 395L		3 General Elective	3
General Elective		3 General Elective	3
	15		15

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Master of Science: Physics

Student Learning Outcomes

Students graduating from this program will:

- Have an advanced knowledge of the basic areas of physics.
- Be able to integrate their knowledge with critical thinking skills in order to become quantitative problem solvers.
- Be able to clearly articulate scientific information, both orally and in writing.
- Be able to effectively use the scientific literature.

Admission to the Master of Science in Physics Program

Admissions Requirements

For admission to the program, an applicant must meet both the School of Graduate Studies (p. 454) and specific Department of Physics and Astronomy admission requirements described below. The graduate studies committee of the Department of Physics and Astronomy will review applications and make admission recommendations to the School of Graduate Studies. Admission to the graduate program is determined by a student's ability to do graduate-level work in physics. An undergraduate major in physics is not required, however a background in a related area of science or engineering is expected. A student's deficiencies in completed coursework and/or background may be overcome by taking certain additional undergraduate-level courses for graduate credit.

Admission decisions are based on the student's academic transcripts and English language abilities (for international students). International students must take the Test of English as a Foreign Language (TOEFL) or sit for an International English Language Testing System (IELTS) exam. Other optional information such as letters of reference (maximum of three), a statement of purpose, standardized test scores, and a personal interview can be provided to support a student's application. Although not required, applicants are encouraged to take both the Graduate Record Examination (GRE) aptitude test and the GRE physics subject test.

Description of the Master of Science in Physics Program

Degree Options

The Master of Science (MS) degree in Physics may be earned by fulfilling the requirements for the MS with thesis or the MS without thesis options.

Career Implications

The career implications for students with an MS degree in Physics and seeking employment are similar to those with a BS degree in Physics, except that they will have a more advanced standing and will be recognized as having more experience in science/technical activities. Similarly, for students that intend to pursue further academic or professional training, the MS degree in Physics will give greater weight to your applications.

Graduate Academic Advising

Graduate student academic advising questions should be directed to Professor Paul Rulis (rulis@umkc.edu), Flarsheim Hall 250D, (816) 235-5945 or Professor Mark Brodwin (brodwin@umkc.edu), Flarsheim Hall 250L, (816) 235-2508. Academic topics include, for example: the application and admission procedures, coursework plans of study, graduation credit hour requirements, administrative processes, participation in departmental social activities, and advice on how to find a research group, etc.

Graduate Research Advising

Graduate students are strongly encouraged to pursue research activities. Those that wish to do so will need to establish a research relationship with a faculty mentor who will then become the student's graduate research advisor. Because the time and resources of faculty are limited, a specific student-faculty research relationship cannot be guaranteed. Interested graduate students are encouraged to set up appointments to speak with individual faculty about their research activities so as to learn if/how research activities can be integrated into their plan of study.

Scholarships, Fellowships, and Assistantships

Financial support is available through fellowships, teaching assistantships, research assistantships or hourly student wages. Students wishing to be considered for an assistantship must so specify in their letters and application forms.

Program Requirements

General Regulations for all MS Degree Seeking Students

1. Students must satisfy the general (<https://catalog.umkc.edu/general-graduate-academic-regulations-information/general-graduate-academic-regulations/>) regulations and MS degree (<https://catalog.umkc.edu/general-graduate-academic-regulations-information/masters-degrees-academic-regulations/>) regulations set forth by the School of Graduate Studies (<https://catalog.umkc.edu/general-graduate-academic-regulations-information/masters-degrees-academic-regulations/>).
2. All graduate students must maintain a grade-point average of 3.0 on a 4.0 scale.
3. No more than twelve (12) credit hours of 400-level undergraduate courses may be taken for graduate credit.
4. No more than six (6) credit hours of 5599 Research and Thesis may be applied toward the degree whether pursuing a thesis-based MS degree or not.

Additional Requirements Specifically for the MS Degree in Physics Without Thesis

1. Completion of thirty-three (33) credit hours of Physics and Astronomy coursework taken for graduate credit.
 - a. Select a minimum of fifteen (15) credit hours of core MS courses.
 - b. Select no more than eighteen (18) credit hours of elective MS courses.

Additional Requirements Specifically for the MS Degree in Physics With Thesis

1. Completion of thirty (30) credit hours of Physics and Astronomy coursework taken for graduate credit.
 - a. Select a minimum of fifteen (15) credit hours of core MS courses.
 - b. Select no more than eighteen (18) credit hours of elective MS courses.
2. Maintenance of satisfactory progress toward completion of a research project and the associated written thesis as determined by your graduate research advisor.
3. A satisfactory¹ thesis defense with the following constraints:
 - a. The defense may be oral, written, or both and it may include the student's thesis proposal and associated background material.
 - b. The thesis defense is administered by the student's supervisory committee.
 - c. The thesis defense is publicly accessible.
4. **Note:** Graduate students should consult with either of the Department of Physics and Astronomy graduate academic advisors prior to enrollment.

Professor Mark Brodwin (brodwinm@umkc.edu), Flarsheim Hall 250L, 816-235-5945

Professor Paul Rulis (rulis@umkc.edu), Flarsheim Hall 250D 816-235-5945

Course List

Code	Title	Credits
MS Core Courses		15
PHYSICS 5510	Theoretical Mechanics I	
PHYSICS 5520	Electromagnetic Theory And Applications I	
PHYSICS 5530	Quantum Mechanics I	
PHYSICS 5540	Statistical Physics I	
PHYSICS 5521	Electromagnetic Theory And Applications II	
PHYSICS 5531	Quantum Mechanics II	
MS Elective Courses ²		15-18
PHYSICS 5500	Methods Of Mathematical Physics I	
PHYSICS 5501	Methods Of Mathematical Physics II	
PHYSICS 5511	Theoretical Mechanics II	
PHYSICS 5535	Optical Properties Of Matter	
PHYSICS 5541	Statistical Physics II	
PHYSICS 5550	Atomic And Molecular Structure	
PHYSICS 5553	Practical Astronomy	
PHYSICS 5555	Stellar Astrophysics	
PHYSICS 5556	Galaxies	
PHYSICS 5565	Cosmology	
PHYSICS 5560	Nuclear Physics	
PHYSICS 5570	Quantum Theory Of Solids I	
PHYSICS 5590	Topics In Physics	

PHYSICS 5595L	Computer Interfacing Laboratory
PHYSICS 5599	Research And Thesis ³
PHYSICS 410	Thermal Physics
PHYSICS 420	Optics
PHYSICS 476LW	Advanced Laboratory
PHYSICS 450	Introduction To Solid State Physics
PHYSICS 460	Electricity And Magnetism I
PHYSICS 461	Electricity And Magnetism II
PHYSICS 472	Introduction To Quantum Mechanics

¹ 'Satisfactory' is determined by the student's committee.

² No more than twelve (12) credit hours of 400-level courses.

³ No more than six (6) hours from PHYSICS 5599.

Interdisciplinary Ph.D. Program Regulations

Regulations

The Department of Physics and Astronomy is a full participant in the Interdisciplinary Ph.D. Program. The doctoral studies committee of the department has the primary responsibility for administering the program within the department. The committee consists of all physics doctoral faculty members with an elected committee chairperson.

See the School of Graduate Studies (p. 1538) section in this catalog and the departmental graduate brochure for general and discipline-specific regulations for Interdisciplinary Ph.D. study with physics as a coordinating unit discipline or co-discipline.

Physics/Engineering Double Degree

Description of the Physics and Electrical & Computer Engineering Double Degree Program

The combined Bachelor of Science (BS) degree in Physics and BS in Electrical & Computer Engineering five year double degree program is recommended for students interested in seeking employment in industrial, governmental, or private organizations that require a strong theoretical science and applied engineering background and for those students that are seeking to continue their academic careers in either graduate school or professional/medical school.

Physics advising questions should be directed to Professor Elizabeth Stoddard (stoddarde@umkc.edu).

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
	Writing Intensive Course (300-level or above)	3
	Foreign Language (3rd Semester Level)	9
	Laboratory Science Experience	1
Total Credits		13

Student Learning Outcomes

Students graduating with a BS degree in Physics and a BS degree in Electrical & Computer Engineering will:

- Have a functional knowledge of the basic areas of physics and electrical & computer engineering.
- Be able to integrate their knowledge with critical thinking skills in order to become quantitative problem solvers.
- Be able to clearly articulate scientific information, both orally and in writing.
- Be able to effectively use the scientific literature.

Students graduating with a BS degree in Physics and a BS in Electrical & Computer Engineering will be prepared for entry into professional schools, graduate programs, or the job market for career employment.

Course Requirements for the Physics BS and Electrical & Computer Engineering BS Double Degree Program

Because of the condensed format of the program, students are strongly advised to contact the Physics undergraduate advisor (Prof. Elizabeth Stoddard (stoddarde@umkc.edu)) and the Electrical & Computer Engineering undergraduate advisor (p. 1308) as early as possible before beginning this program.

Teacher Certification in Physics

Description of the Teacher Certification in Physics Program

Certification as a middle school (grades 5-9) or secondary (grades 9-12) Physics teacher in either Kansas or Missouri requires that a student complete specific requirements from the School of Education and take coursework in Biology, Chemistry, Environmental Science, Geology, and Physics.

Students will enter this program through the School of Education. For further information about the program, consult the School of Education section of this catalog (p. 1430), visit the School of Education web site (<http://education.umkc.edu/>), or contact the Education Student Services Office at (816) 235-2234.

Department of Political Science

Haag Hall, Room 213
5120 Rockhill Road
(816) 235-1326
polisci@umkc.edu
<http://cas.umkc.edu/politicalscience/>

Mailing Address

University of Missouri-Kansas City
Department of Political Science
Haag Hall 213
5120 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:

Greg Vonnahme

Administrative Assistant:

Nathan Milburn

Emeriti Faculty:

Robert Evanson, Robert E. Gamer, Dale A. Neuman, Max Skidmore

Curators' Professor:

Max J. Skidmore (Graduate Advisor)

Associate Professors:

Debra Leiter, Mona Lyne, Beth Vonnahme, Greg Vonnahme, Benjamin Woodson

Assistant Professors:

Rebecca Best

Adjunct Faculty:

David Sprick, Dan Stroud

Department Description

The Department of Political Science offers programs of study that lead to the Bachelor of Arts and Master of Arts degrees. The undergraduate major in Political Science equips students with the analytic, writing, and presentation skills to acquire, create and convey knowledge of the political and social environment. After completing two core introductory courses, students have complete flexibility in the substantive emphasis of their coursework. Some students focus on one of the main sub-disciplines of American politics, comparative politics, international relations and political theory, while others take a broad array of courses across these sub-disciplines. The political science minor is completely flexible with regard to substantive emphasis and requires only the completion of 18 credit hours of political science courses. With the international studies minor, students explore contemporary global issues, politics, and cultures from a multitude of perspectives.

Undergraduate Admissions

Students planning to major or minor in political science should declare their choice officially by filling out a Declaration of Major form (<http://www.umkc.edu/registrar/forms/declaration-of-major.pdf>), and consult the Department Chair for a signature and program advice as early as possible.

Career Implications of the Bachelor's Degree

Political science, in addition to serving as an excellent core discipline for a liberal arts education, may also serve as vocational and professional preparation for students with interests in the following areas:

- Law school and legal careers
- Electoral politics
- Government service
- Not-for-profit and public-interest organizations
- Business and finance
- Teaching and research
- Public and private political research and consulting services
- Electronic and print journalism
- International careers and non-governmental organizations

Department Activities

Advising

Undergraduates with questions about fulfilling Political Science requirements should meet with the Political Science advisor.

Honor Society

UMKC has an active chapter of Pi Sigma Alpha, the national political science honor society. Each year Pi Sigma Alpha seeks to recognize the best students in political science in order to – according to its national constitution – "stimulate productive scholarship and intelligent interest in the subject of government." The local Pi Sigma Alpha chapter regularly presents films and speakers, information sessions for law school and graduate school, and sponsors the department monthly informal discussion group known as the Lunch Bunch. Open to all students, the Lunch Bunch provides an informal environment for enjoying a pizza lunch and discussing current events among faculty and students.

Internships and Study Abroad

The department has an active internship program. Information on local, regional, national and international programs of interest to undergraduates in political science is posted on departmental bulletin boards and is available in the main office. Credit is given for successful completion of internship programs approved by the department. Further information regarding internship opportunities and requirements can be found at <http://cas.umkc.edu/politicalscience/internships.asp>.

UMKC has a large study abroad program, and the department strongly encourages students to participate in approved programs. Credit toward the degree can be earned for approved courses and competitive scholarships are available. For more information see <http://info.umkc.edu/international/>.

Research

Students are encouraged to participate in faculty research and/or to develop their own research project in conjunction with the undergraduate research program, UMKC SEARCH and SUROP (<http://www.umkc.edu/searchsite/>). Faculty invitation is required to assist with faculty research and course credit is available. Students who wish to develop their own research project should select a faculty mentor and develop a proposal in conjunction with the mentor. Successful proposals can receive up to \$1250 to support student independent research through SEARCH and SUROP.

Independent Study

Independent study in the form of tutorials is available in two courses: POL-SCI 497 and POL-SCI 498 (depending on student qualifications). In either case, without exception, the student must propose a topic for study, have the approval of the advisor and have the written consent of the instructor with whom the tutorial is to be taken before registration for the course. UMKC Honors Program participants may take any course in the department for honors credit by making special arrangements with the instructor at the beginning of the semester.

Political Science Scholarships

The department awards six scholarships each year to outstanding sophomores and juniors. The Ruth L. Gant Memorial Scholarship, the Sallie Millard and Cornelius Roach, Sr. Scholarship, the Dan Bishop Scholarship in Public Policy, Delia Wong Stephens Scholarship, the Pat Gray Memorial Scholarship, and the David N. Atkinson Scholarship in Political Science are awarded specifically to political science majors and can provide from \$500 to \$4000 to exceptional students. Political Science students are also eligible for College of Arts and Sciences general scholarships.

Faculty

Rebecca Best^{1,2}; assistant professor of political science; B.A. (East Carolina University); M.A., Ph.D. (University of North Carolina - Chapel Hill).

Robert K. Evanson; associate professor emeritus of political science; B.A. (University of Illinois-Urbana); M.A., Ph.D. (University of Wisconsin-Madison).

Robert E. Gamer; professor emeritus of political science; B.A. (Monmouth College); Ph.D. (Brown University).

Debra Leiter^{1,2}; associate professor of political science; B.A. (University of California - San Diego); M.A., Ph.D. (University of California - Davis).

Mona Lyne^{1,2}; associate professor of political science; B.S. (University of California - Berkeley); M.A. (Monterey Institute of International Studies); Ph.D. (University of California - San Diego).

Dale Allen Neuman; professor emeritus of political science; A.B. (Kenyon College); Ph.D. (Northwestern University).

Max J. Skidmore; curators' professor emeritus of political science; B.S., B.S. Ed. (Southwest Missouri State); M.Ed. (University of Missouri-Columbia); Ph.D. (University of Minnesota).

Elizabeth Vonnahme^{1,2}; chair and associate professor of political science; B.A. (Angelo State University); M.A., Ph.D. (Rice University).

Greg Vonnahme^{1,2}; associate professor of political science; B.S. (University of Iowa); M.A., Ph.D. (Rice University).

Benjamin Woodson^{1,2}; associate professor of political science; B.S. (Indiana University); M.A., Ph.D. (Stony Brook University).

¹ Members of UMKC Graduate Faculty

² Members of UMKC Doctoral Faculty

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts: Political Science (p. 944)
- Minor in International Studies (p. 948)
- Minor in Political Science (p. 950)
- Teacher Certification in Social Studies (p. 951)

Courses

POL-SCI 210 American Government Credits: 3

American government and politics, with special reference to the U.S. Constitution. This course meets the state requirement for study of the U.S. and Missouri Constitutions.

POL-SCI 210 - MOTR POSC 101: American Government



POL-SCI 220 Introduction To Comparative Politics Credits: 3

Introduces students to general concepts of political authority and systematically analyzes the causes and consequences of variation in political institutions, processes and policies across countries, illustrating concepts and themes with case studies of major European and Asian countries.

POL-SCI 220 - MOTR POSC 202: Introduction to Comparative Politic



POL-SCI 221 Introduction to Comparative Politics and Research Credits: 3

This course introduces students to general concepts of political authority, and systematically analyzes the causes and consequences of variation in political institutions, processes and policies across countries. This course also introduces students to research in comparative politics, with students developing an independent research project.

POL-SCI 230 International Relations Credits: 3

An analysis of relations among nations, with emphasis on structures of international power, causes of war, and approaches to peace.

POL-SCI 230 - MOTR POSC 201: International Relations



POL-SCI 301 Western Political Philosophy Credits: 3

An examination of the major theories of politics from Plato to today.

POL-SCI 303 Political Behavior Credits: 3

This course will survey research on conventional and unconventional forms of mass political behavior. Topics to be discussed include campaign participation, voting behavior, public opinion, the media, and participation in protests and revolutions. This course will also cover the methodological approaches to the study of political behavior.

POL-SCI 304 Politics of Developing Countries Credits: 3

The course examines the key arguments that have been advanced to account for differences across countries in rates and levels of economic and political development.

POL-SCI 308 Parties and Interest Groups Credits: 3

Introduction to parties and interest groups in the United States and their important role in the political process. Topics include the formation, organization, activities, and impact of political parties and interest groups in American politics.

POL-SCI 309 Public Opinion Credits: 3

Explores public opinion in the United States, surveying theories and empirical research on the measurement, formation, and distribution of public opinion.

POL-SCI 313 Politics In The American States Credits: 3

A study of the structures, functions, and politics of the institutions of American state governments and an assessment of their role in the federal system. This course is particularly interested in the extent to which political economy and political culture, broadly defined, influence public policy within the states.

POL-SCI 316 Terrorism And Political Violence Credits: 3

This course explores terrorism and armed struggle from theoretical and historical perspectives, and analyzes a number of violent movements with nationalist, ideological, and religious motivations.

POL-SCI 318 Political Psychology Credits: 3

The field of political psychology is an interdisciplinary field that draws on both psychology and political science to address topics in the political world. This course will focus on a variety of topics including inter-group conflict, stereotyping and prejudice, political socialization, attitude formation and change, political communication, decision heuristics and biases, public opinion, and the future of political psychology.

POL-SCI 319 Campaigns And Elections Credits: 3

This course will examine the role of campaigns in determining the outcome of both congressional and presidential elections and the way that electoral rules structure both campaign strategies and electoral outcomes. This course focuses on topics such as the role of the media, campaign advertising, campaign financing, public opinion, registration requirements, and the role of interest groups.

POL-SCI 336 American Foreign Policy Credits: 3

Understanding the contemporary debate over American foreign policy in terms of the premises and perspectives of several competing schools of thought.

POL-SCI 345 Women and Politics Credits: 3

This course investigates the role that women play in the political realm and how political institutions, laws, and norms shape women's experience in politics as citizens, activists, candidates and political leaders, plus the causes and consequences of women's participation and barriers to same.

POL-SCI 348 Constitutional Law: The Federal System Credits: 3

A study of the president, congress and state governments from the perspective of the Constitution, emphasizing powers and limitations on the exercise of authority.

POL-SCI 349 Constitutional Law: Civil Liberties Credits: 3

A study of civil liberties in American society, emphasizing factors and forces that restrict or enlarge their scope, as understood through constitutional interpretation.

POL-SCI 357 Western European Politics Credits: 3

This course explores democratic representation and political institutions in Western Europe.

POL-SCI 360 Labor, Politics and Society Credits: 3

This course explores many aspects of unions and the labor movement in society and the vital role organized labor plays as a pillar of democratic society. Unions impact the economy, growth, and the distribution of wealth, and the impact racial and gender equality, social security health and job safety, energy and the environment, and even foreign relations. As a social movement, labor has had a major impact on American history. This course covers these topics from a labor perspective. It examines current obstacles for union organizing, recent union campaigns, labor's political role, and the relationship between labor and the media. This course is part of the Certificate Program in Labor Studies and is offered on the University of Missouri Interactive Video Network at UMKC, UMSL, and UMC.

POL-SCI 362 Latin America and International Relations Credits: 3

This course we will survey the relations between Latin American states and between Latin America and the world. Taking the Latin American states as the key actors, we examine the history of US-Latin American relations, including current issues such as drug trafficking, immigration and terrorism. We will also study the region as a player on the international stage, examining Latin America's changing role in the world arena related to trade, development, and the environment. Finally we examine the emergence of new leadership in Latin America.

POL-SCI 365WI Congress and Parliaments Credits: 3

The objective of this course is to examine the election and behavior of legislators and legislatures in the United States compared to other countries' political systems, especially how these differences affect representation and policy making. Students will write and think critically about how structures of legislatures affect political outcomes.

POL-SCI 366 British Politics Credits: 3

This course focuses on the contemporary politics of the United Kingdom, particularly elections, institutions, and political parties.

POL-SCI 370 Labor Law Credits: 3

In this course, participants will examine the role of government in the regulation of labor-management relations in the United States. While the focus of the course will be on federal laws regulating private sector labor relations, parallel issues addressed in the Railway Labor Act and state public sector labor relations law will also be covered. Specific topics include the legal framework for the organization of workers, definition of prohibited or unfair labor practices of employers and unions, legal regulation of the collective bargaining process, regulation of the use of economic weapons in labor disputes, enforcement of collective bargaining agreements and the regulation of internal trade union activities.

POL-SCI 380 Political Science And Politics Credits: 1-6

Offered as a special course in the individual faculty member's area of research specialization. The course may be repeated for credit when the topic varies. The topic and instructor will be announced in advance.

POL-SCI 401 Legitimacy, Power, and the Survival of Political Systems Credits: 3

This course examines what allows political systems to survive, exert power, and maintain control over their population. It focuses on the concept of legitimacy – i.e. whether people believe a government has the right to make decisions that are binding on the mass public. The course covers how political systems and institutions develop legitimacy, how that legitimacy helps maintain control of the mass public, and why people sometimes choose to willingly follow commands issued by political authorities and other times choose to resist or rebel.

POL-SCI 404 Conflict Resolution Credits: 3

This course examines theories of peace and conflict resolution in the international system. Students will assess the challenges to conflict resolution, international cooperation, and peace as well as the means through which states and non-state actors overcome those challenges. Students will critically evaluate theories of conflict resolution and peace, while learning to apply those theories to current events.

POL-SCI 408 Judicial Politics Credits: 3

An examination of the judiciary in the American political process, emphasizing the role of judges, lawyers and the Supreme Court.

POL-SCI 425WI Seminar in Comparative Politics Credits: 3

A survey of the major research in comparative politics including state building, nationalism, democracy, nondemocratic regimes, economic development, and political violence. This course satisfies the College of Arts and Sciences Writing Intensive requirement.

Prerequisites: POL-SCI 220 or POL-SCI 221.

POL-SCI 452 Concepts in International Relations Credits: 3

This course exposes advanced undergraduate students to major conceptual and theoretical approaches to international relations. Recommended preparation: Prior course in international relations, politics, economics, or history.

POL-SCI 480 Government And Politics Credits: 1-6

This variable credit course will explore different contemporary issues and problems related to government and politics. Credit may apply to the major but will not satisfy any of the four subfields distribution requirements.

POL-SCI 491 Internship Credits: 1-6

With the written consent of the department chairman, students may participate in structured internship programs approved by the department for a maximum of six hours.

POL-SCI 493 Study Abroad Credits: 1-6

With prior approval from the department advisor, students may complete coursework at an approved foreign university and receive up to 6 hours of political science credit.

POL-SCI 497 Political Science Tutorial Credits: 2

Senior political science majors may apply to do independent study under a selected professor. Must have written consent of the professor prior to registration. Only one tutorial will count toward the major.

POL-SCI 498 Honors Tutorial Credits: 1-3

Senior political science majors with a grade point average of 3.4 or above in political science may apply to do independent study under a selected professor. Must have written consent of professor prior to registration. Only one tutorial will count toward the major.

POL-SCI 5501 Seminar in American Government Credits: 3

A seminar involving intense examination of the foundations, development, and structure of American national government through study of a broad range of classic materials and current research findings; course will prepare a political science graduate student to teach an introductory college course in American government.

Prerequisites: Graduate Standing.

POL-SCI 5506 Research Design and Analysis Credits: 3

This course focuses on methods of data gathering, management, and analysis used in political science research. Students gain an understanding of different types of data including surveys, experiments, and archival records. The curriculum will also include ways that these data are managed and analyzed, and how the results are presented in a useful manner.

POL-SCI 5513 Seminar in Comparative Politics Credits: 3

A survey of the major research in comparative politics including state building, democracy, economic development, and political violence.

POL-SCI 5522 Seminar In The Presidency Credits: 3

Critical examination of the American presidency, with in-depth research into selected themes and presidents.

Prerequisites: POL-SCI 406.

POL-SCI 5530 Seminar in International Relations Credits: 3

This course examines major schools of thought and contemporary research in international relations. Topics discussed include international systems, the causes of war and peace, collective security, and international political economy.

POL-SCI 5541 American Political Thought Credits: 3

This course will focus on intellectual reactions to the major periods in American history (the movement for independence, the writing of the constitution, the Jacksonian period, the civil war debate, the growth of big business, the rise of the positive state and contemporary America). Contemporary theorists will be included along with Jefferson, Madison, Hamilton and Marshall.

POL-SCI 5570 The Politics Of Social Security Credits: 3

This course will concentrate upon the principles of social insurance in general, and of the American Social Security system in particular. It will consider the system in relation to the history and traditions of American society. It will analyze popular misconceptions and will pay special attention to the political, economic, and demographic issues relevant to Social Security's current operation and to the program's future.

POL-SCI 5575 Political Ideologies Credits: 3

Consideration of political ideologies and their effects, with in-depth research into selected topics.

POL-SCI 5580 Government And Politics Seminar Credits: 3

Offered as a special seminar in the individual faculty member's area of research specialization. The seminar may be repeated for credit when the topic varies. The topic and instructor will be announced in advance.

POL-SCI 5590 Directed Studies And Research Credits: 1-6

Under the direction of the instructor, students in this course will produce a major research paper: a self-contained thesis chapter, an article for publication or the equivalent. May be repeated for credit.

POL-SCI 5599 Thesis Credits: 1-6

Directed specialized research.

POL-SCI 5688 Doctoral Research Seminar Credits: 3
Students will produce a major research paper under the direction of the instructor. The research project will consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

POL-SCI 5697 Doctoral-Level Independent Readings Credits: 3
Individual readings under the supervision of members of the Political Science Graduate or Doctoral Faculty in the specified topic or topics. May be repeated. May not be taken during an academic year in which a graduate course or seminar is offered on the topic.

POL-SCI 5699 Research And Dissertation Credits: 1-12
Directed specialized research.

POL-SCI 5899 Required Graduate Enrollment Credit: 1

Bachelor of Arts: Political Science

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

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Student Learning Outcomes

Students graduating from this program will:

- Describe the basic structures and processes of government systems
- Summarize fundamental concepts and theories in political science.
- Analyze political problems, arguments, information, and/or theories.
- Demonstrate effective written communication.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	

STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above)		3
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		13

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

The department requirement for a major is 30 hours of political science credit. Students must achieve a GPA of at least 2.0 in political science and no credit will be given for courses in which the grade is below C-.

At least 21 hours of political science coursework must be at the 300- to 400- level. Students transferring from other institutions should check as soon as possible to determine transferability.

Code	Title	Credits
Required Courses		6
POL-SCI 210	American Government (Satisfies Constitution Course Requirements)	
POL-SCI 220	Introduction To Comparative Politics	
or POL-SCI 221	Introduction to Comparative Politics and Research	
Electives		
Three Subfield Electives (see options below)		9
Additional Political Science Electives ¹		15
Total Credits		30

¹ These hours can include POL-SCI 491, POL-SCI 497, and POL-SCI 498.

Political science majors are required to take at least one course in three of the four subfields, which include American Politics, Comparative Politics, Political Theory, and International Relations. Courses may be offered on a rotation basis. Please consult with advisor for current availability.

Code	Title	Credits
American Politics		
POL-SCI 308	Parties and Interest Groups	
POL-SCI 309	Public Opinion	
POL-SCI 313	Politics In The American States	
POL-SCI 318	Political Psychology	
POL-SCI 319	Campaigns And Elections	
POL-SCI 348	Constitutional Law: The Federal System	
POL-SCI 349	Constitutional Law: Civil Liberties	
POL-SCI 360	Labor, Politics and Society	
POL-SCI 370	Labor Law	
POL-SCI 408	Judicial Politics	
Comparative Politics		
POL-SCI 304	Politics of Developing Countries	
POL-SCI 316	Terrorism And Political Violence	
POL-SCI 357	Western European Politics	
POL-SCI 365WI	Congress and Parliaments	
POL-SCI 366	British Politics	
POL-SCI 425WI	Seminar in Comparative Politics	
Political Theory		
POL-SCI 301	Western Political Philosophy	
POL-SCI 345	Women and Politics	
International Relations		
POL-SCI 230	International Relations	
POL-SCI 362	Latin America and International Relations	
POL-SCI 404	Conflict Resolution	
POL-SCI 452	Concepts in International Relations	

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		47

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
POL-SCI 210 ^{CC}		3 POL-SCI 220 or 221 ^{CC}	3
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110		3 STAT 115, MATH 116, or MATH 110	3
GECRT-SS 101		3 GECRT-SC 101	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
	15		15

Second Year

Fall Semester	Credits	Spring Semester	Credits
POL-SCI 2XX/3XX/4XX Major Subfield Course		3 POL-SCI 3XX/4XX Major Subfield Course	3
COMM-ST 110, 140, or 277		3 GECDV 201	3
GECRT-AH 101		3 Lab Science ^{LO}	1
GECUE 201		3 General Elective	3
Foreign Language course (211)		3 General Elective	3
		General Elective	3
	15		16

Third Year

Fall Semester	Credits	Spring Semester	Credits
POL-SCI 3XX/4XX Major Subfield Course		3 POL-SCI 3XX/4XX Major Elective	3
3XX/4XX General Elective		3 POL-SCI 3XX/4XX Major Elective	3

General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
15		15	

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
POL-SCI 3XX/4XX Major Elective		3 POL-SCI 3XX/4XX Major Elective	3
POL-SCI 3XX/4XX Major Elective		3 3XX/4XX WI Writing Intensive Course	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective (3XX/4XX if needed)		3 General Elective	3
General Elective		3 General Elective	2
15		14	

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Interdisciplinary Ph.D.

Program Opportunities

The Department of Political Science participates as a co-discipline in the Interdisciplinary Ph.D. program. Detailed information on the general and discipline-specific requirements (p. 1605) appears in the School of Graduate Studies (p. 1538) section of this catalog.

Minor: International Studies

Student Learning Outcomes

Students graduating from this program will:

- Discuss the political and economic features of regimes around the world
- Identify the structures and foundations of the international system

- Describe the history and culture of another region of the world
- Describe the political and economic structures that influence how countries interact with each other

Degree Requirements

- The requirement for the International Studies (IS) minor is 18 hours of International Studies coursework. Courses will only count toward the minor if a grade of C- or better is earned.
- At least 9 hours must be at the 300/400 level. At least 9 hours must be earned at UMKC unless the student participates in a study abroad program, in which case up to 12 hours may be transferred.
- Students may count up to 6 hours from their major, with approval, toward the minor.
- Additional courses may fulfill requirements with the approval of the International Studies minor advisor.
- Minors are encouraged to study abroad and students can count up to 9 hours of study abroad coursework toward the minor with approval of the IS minor advisor.
- Students are encouraged to complete an internship and can count up to 3 hours of an internship toward the minor with approval of the IS minor advisor.

Course Requirements

Code	Title	Credits
International Studies Core		
POL-SCI 220 or POL-SCI 221	Introduction To Comparative Politics Introduction to Comparative Politics and Research	3
POL-SCI 230	International Relations	3
Political and Economic Awareness		6
POL-SCI 304	Politics of Developing Countries	
POL-SCI 316	Terrorism And Political Violence	
POL-SCI 345	Women and Politics	
POL-SCI 357	Western European Politics	
POL-SCI 362	Latin America and International Relations	
POL-SCI 365WI	Congress and Parliaments	
POL-SCI 366	British Politics	
POL-SCI 404	Conflict Resolution	
POL-SCI 425WI	Seminar in Comparative Politics	
POL-SCI 452	Concepts in International Relations	
ECON 412	International Trade And Development	
ECON 442	International Finance	
Social and Cultural Awareness		6
ANTHRO 441	Globalization and Development	
ART-HIST 303	World Currents of Contemporary Art	
ART-HIST 315	Arts Of African and New World Cultures	
ART-HIST 319	Asian Art	
BLKS 315	Arts of African and New World Cultures	
CLASSICS 210	Foundations Of Ancient World Literature I	
ENGLISH 207	World Literature in English	
ENGLISH 317	British Literature I	
ENGLISH 323	Shakespeare	
ENGLISH 327	British Literature II	
FRENCH 221	Second Year French II	
FRN-LNG 230	Themes in World Cultures	
GEOG 200	World Geography I	
GEOG 202	World Geography II	
GERMAN 221	Second-Year German II	
HISTORY 406	Modern Latin America	
HISTORY 436R	Modern German History	

LLS 315	Arts Of African and New World Cultures
LLS 404	Women and Gender in Latin America
LLS 405	Colonial Latin America (From the Encounter to the Early 19th Century)
LLS 406	Modern Latin America
SOCIOL 441	Globalization and Development
SPANISH 221	Second Year Spanish II
Any 300- or 400-level FRN-LNG, FRENCH, GERMAN, SPANISH course	
Total Credits	
18	

Minor in Political Science

Student Learning Outcomes

Students graduating from this program will:

- critically evaluate their political and social environment.
- obtain an understanding of the workings of government and politics.
- develop skills in critical thinking, analysis and communication.

Requirements

A minor in political science requires the successful completion of 18 hours of coursework within the discipline. At least 9 hours must be at the 300- to 400-level. In addition, at least 9 hours must be earned at UMKC. Only courses in which a grade of C- or better is earned will count towards the minor. It is advisable for students to talk with the department advisor regarding course selection as some are offered on a rotation basis.

Code	Title	Credits
American Politics		
POL-SCI 303	Political Behavior	
POL-SCI 308	Parties and Interest Groups	
POL-SCI 309	Public Opinion	
POL-SCI 313	Politics In The American States	
POL-SCI 318	Political Psychology	
POL-SCI 319	Campaigns And Elections	
POL-SCI 343	The Politics Of Social Security	
POL-SCI 348	Constitutional Law: The Federal System	
POL-SCI 349	Constitutional Law: Civil Liberties	
POL-SCI 360	Labor, Politics and Society	
POL-SCI 370	Labor Law	
POL-SCI 406	Presidential Politics	
POL-SCI 408	Judicial Politics	
POL-SCI 427	Presidential Power: foundations, Growth, Issues	
Comparative Politics		
POL-SCI 304	Politics of Developing Countries	
POL-SCI 316	Terrorism And Political Violence	
POL-SCI 357	Western European Politics	
POL-SCI 366	British Politics	
International Relations		
POL-SCI 230	International Relations	
POL-SCI 362	Latin America and International Relations	
POL-SCI 404	Conflict Resolution and Cooperation	
POL-SCI 452	Concepts in International Relations	
Political Theory		
POL-SCI 403	Political Ideology	
POL-SCI 442	American Political Thought	

Teacher Certification in Social Studies

Teacher Certification in Social Studies

Certification as a middle school (grades 5-9) or secondary (grades 9-12) social studies teacher in either Kansas or Missouri requires that a student complete specific requirements in History, Political Science, Economics, Geography, Behavioral Sciences and the School of Education. A separate application for teacher education is required. For further information about the program, consult the School of Education (p. 1430) section of this catalog or contact the Education Student Services Office at (816) 235-2234.

Pre-Law Program

Pre-Law Advisor:

Nick Chappell
chappellnm@umkc.edu
(816) 235-5874
Scofield 9
711 E. 51st Street
<http://cas.umkc.edu/prelaw>

Mailing Address

University of Missouri-Kansas City
Pre-Law Program
Scofield 9
5100 Rockhill Road
Kansas City, MO 64110-2499

UMKC Pre-Law Program

The UMKC Pre-law Program is designed to help you make wise decisions about becoming a lawyer. It provides advice and information concerning the best possible path for each individual student, from the first semester of undergraduate courses to admission into law school.

The first thing to note about joining the Program is that it is not a major. There is no one major that prepares you for law school. In fact, there are over 30 majors at UMKC that a student may choose from and be on track for entrance into law school.

To garner the skills necessary for success, the pre-law student should select a curriculum that hones and develops superior writing skills, along with excellent oral communication, logical reasoning, and critical reading skills.

It is not enough, however, to be prepared for the academic rigors of law school. You'll want to ask yourself the following questions:

- Do you really want to become a lawyer?
- What law schools should you apply to?
- What does it mean to be a lawyer?
- What area of the law do you want to practice in?
- What are the alternative careers available to someone with a law degree?

When you have made the decision to pursue acceptance into law school, you'll need details on how to go about successfully presenting yourself to the admissions committee in your application. The Program provides answers to the following questions:

- What do you need to do to apply to law school?
- What do you need to do to succeed in law school?
- How can you afford law school?

90+ Program

UMKC's School of Law and The College of Arts and Sciences offer the motivated student a faster track to a legal education. While an undergraduate degree is usually a requirement for admission into law school, UMKC offers students the opportunity to start law school after completing as little as 90 undergraduate credit hours. Students then complete their undergraduate degree with law school credits. By overlapping credits, students can shorten the length of time necessary for completing their education by as much as one year.

90+ Participation

A student's first 30 hours at UMKC's School of Law may fulfill as many as 30 credit hours of non-Arts and Sciences electives towards an undergraduate degree. Therefore, if a student completes all of the general education, major, and upper-level requirements, leaving only elective credits to receive an undergraduate degree, the student may apply to the law school at UMKC.

If accepted, the student can start law school without having actually received an undergraduate bachelor's degree. The student will receive the undergraduate degree after earning the requisite amount of law school credits necessary to fulfill the remaining amount of undergraduate elective credits (up to 30 hours).

Any student who is pursuing a degree in The College of Arts and Sciences may participate. The 90+ program does not guarantee admission into UMKC's School of Law. Participants must apply and otherwise qualify for law school admission by having a competitive undergraduate GPA and LSAT score.

Road to Admission

Any interested student should meet early and often with the pre-law advisor. Given the number of requirements that must be satisfied in such a short period of time, potential 90+ students must monitor their progress with great care.

There are a number of necessary tasks to be completed by the student in order to qualify for the 90+ Program:

- The final 30 hours prior to enrolling in UMKC's School of Law must be from courses in UMKC's College of Arts and Sciences.
- Requirements to be completed prior to enrollment at UMKC's School of Law:
 - All general education requirements
 - All major requirements (and those for a minor if student chooses to complete a minor)
 - 36 hours of junior/senior (300/400-level) coursework
- Application for Graduation: After earning approximately 60-75 credit hours, the interested student should apply for graduation in the College of Arts and Sciences Student Services Office (Schofield Room 9). A student will review their degree audit(s) with the pre-law advisor as well as faculty advisors in major/minor programs to confirm status towards degree completion. This should be completed by the end of the fall semester prior to starting law school.
- Letter of Interest: After applying for graduation and completing the audit review, students must contact the pre-law advisor to arrange to have a letter sent to UMKC's School of Law stating that there is a plan in place that will allow the student to complete all requirements prior to enrolling in the law school the following fall. This process should be done during the student's last year of undergraduate study.

Six-Year Law Scholars

The Six-Year Law Scholars Program allows high-achieving high school students to prepare for their application to UMKC School of Law through a selective cohort as part of the 90+ Program described above while earning their undergraduate degrees.

- First-time college freshmen who have a minimum comprehensive ACT score of 26 or an equivalent SAT score, and a minimum high school core GPA of 3.5 may apply for admission to this program by completing the general application for admission to UMKC.
- Six-Year Law Scholars will meet regularly with an advisor to ensure that they can complete their undergraduate requirements prior to application to early entry into UMKC School of Law.

Admission Expectations for the UMKC School of Law under the Six-Year Law Scholars Program

- Students who have completed at least 90 degree-acceptable undergraduate hours of credit may be admitted to the UMKC School of Law as long as they have completed all non-elective course work towards their bachelor's degree.
- Competitive applicants to the Law School will have a cumulative grade point average of 3.3 or higher at the point at which the student applies to the Law School and an LSAT score that is equal to or greater than UMKC Law School's 50th percentile of the most recent entering class (in 2017, 152).
- All candidates for this program must, during the Law School application process, complete a satisfactory interview with the UMKC School of Law Admissions Committee. Candidates must also demonstrate potential to be a successful law student and an absence of disqualifying character or fitness issues.
- Applicants must otherwise complete all the normal requirements of the law school application process, including but not limited to application through LSAC, personal statement, transcript, letters of recommendation, etc.
- Students admitted under this program must be able to document completion of an undergraduate degree prior to starting their second year of study at the UMKC School of Law.

Department of Psychology

Department Address

Cherry Hall, Room 324
 5030 Cherry Street
 (816) 235-1318 (Phone)
 (816) 235-1062 (Fax - please use cover sheet)
 Psychology EMail (psychology@umkc.edu)

Mailing Address

University of Missouri - Kansas City
 Department of Psychology
 5030 Cherry Street, # 324
 Kansas City, MO 64110-9976

Undergraduate Psychology Advising Office (<http://cas.umkc.edu/psychology/degree-programs/undergraduate-programs/advising-2/>)
 Cherry Hall, Room 330
 (816) 235-1092 (Phone)
 (816) 235-1062 (Fax - please use cover sheet)
 Undergraduate Psychology Advising Email (umkcpsuga@umkc.edu)

For an up-to-date listing of faculty, please visit the Department of Psychology website (<http://cas.umkc.edu/Psychology/>).

Department Chair:

Joan McDowd

Professors:

Diane L. Fillion, Jennifer D. Lundgren, Joan McDowd (Chair), Johanna Nilsson

Associate Professors:

Kymberly K. Bennett, Seung-Lark Lim, Jacob Marszalek, Ricardo Marte, Melisa Rempfer

Assistant Professors:

Oh-Ryeong Ha, Erin P. Hambrick, Joah L. Williams

Department Description

The Department of Psychology is focused on behavioral science contributions to health and well-being. Our faculty members are national and international leaders in research on areas such as cognitive aging, development in children, obesity and eating disorders, neuropsychological functioning, child trauma, affective neuroscience, psychophysiological approaches to cognition and emotion, transnational methodology & motivational theories, international issues and populations, serious mental illness, consequences of trauma exposure and violence, and community factors in health. We have strong and active collaborations with important community partners such as Saint Luke's Hospital, Mid America Heart Institute, KC Care, University of Kansas Medical Center, Truman Medical Center and the Calvary Community Outreach Network. At the undergraduate level, the department offers a general program of study leading to the bachelor of arts degree in psychology. A minor in psychology is available to students majoring in other disciplines. Graduate programs are also offered by the Department of Psychology (<http://cas.umkc.edu/Psychology/>).

Career Implications of the Degree

Psychology is a broad discipline incorporating material from the natural sciences, other social sciences and the humanities. The study of psychology entails an examination of the human condition that is relevant to a wide range of occupations. A psychology major serves as the basis for an excellent liberal arts education and also serves as an excellent introduction to the world of scientific inquiry. Psychology students learn about the important concepts that underlie current scientific thought and they receive training in the application of psychological research methods.

The educational background obtained by a student majoring in psychology will prove useful in a variety of professional settings and will provide adequate preparation for entry-level positions in a variety of fields. Graduates with bachelor's degrees in psychology have established careers in such diverse areas as:

- Business and industry
- Child care
- General healthcare
- Gerontology
- Mental health services
- Probation and parole
- Public relations and marketing
- Research or laboratory assisting
- Services for people with developmental disabilities
- Social services

For students interested in pursuing a career in the field of psychology, a psychology major is clearly a logical beginning. There are positions available to job candidates with bachelor's degrees in psychology; however, most professional opportunities in psychology require advanced degrees (i.e., master's, doctorate). Students who want to pursue a career in psychology are advised to prepare for graduate study. The psychology major at UMKC offers a solid educational foundation for students who plan to work toward advanced degrees in the field.

Department of Activities

Honor Society

The department has a chapter of Psi Chi, the national honor society in psychology. Each year Psi Chi presents a variety of educational and social programs. Membership is open to students at both undergraduate and graduate levels. Regular meetings are held throughout the academic year. Information about membership and current events is available on RooGroups (<https://roogroups.umkc.edu/>).

Psychology Club

The department also has a Psychology Club. The members of the Psychology Club join with the members of the Honor Society for educational social programs. Membership is open to students at both undergraduate and graduate level who have an interest in psychology. Regular meetings are held throughout the academic year jointly with PsiChi. Information about membership and current events is available on RooGroups (<https://roogroups.umkc.edu/>).

Bernard Lubin Memorial Speaker Series

This speaker series is sponsored by UMKC's Department of Psychology and is named in memory of Dr. Bernard Lubin, Curators' Professor Emeritus, to honor his contributions and dedication to the field of psychology.

Graduate Psychology Activities Committee

The focus of the Graduate Psychology Activities Committee (GPAC) is to coordinate graduate student and student-faculty social events, enhance communication between the members of various graduate programs in the department, and coordinate educational events to support the professional development of students in the graduate programs. The committee and the events planned are open to graduate students within the Department of Psychology.

Advising System

For Undergraduate Psychology Program information, please contact the Psychology Advising Office (<http://cas.umkc.edu/psychology/degree-programs/undergraduate-programs/advising-2/>) at umkcnpuga@umkc.edu or (816) 235-1092.

For UMKC College of Arts & Sciences general education requirements, please contact the College of Arts & Sciences Student Services Office (<https://cas.umkc.edu/student-services/>) directly at (816) 235-1148.

See the Undergraduate Psychology Program Advising website (<http://cas.umkc.edu/psychology/degree-programs/undergraduate-programs/advising-2/>) for more information.

Financial Aid

Financial aid information can be found on the UMKC Financial Aid website (<http://finaid.umkc.edu/>).

Part-time graduate teaching and research assistantship positions may be available to Psychology doctoral students. These opportunities will be discussed with students at the time of their acceptance into the program.

Faculty

For the most current listing, see the Department of Psychology (<http://cas.umkc.edu/psychology/>) website.

Kymerly K. Bennett^{1,2}; director, undergraduate psychology program and associate professor of psychology; B.A. (University of Redlands); Ph.D. (University of Nevada, Reno)

Carl Calkins; director, UMKC institute for human development and professor of psychology; B.A. (State University of New York); M.A. (Southern Connecticut State College); Ph.D. (Vanderbilt University).

Diane L. Filion^{1,2}; professor of psychology; B.A. (Eastern Washington University); M.A., Ph.D. (University of Southern California).

Oh-Ryeong Ha^{1,2}; assistant professor of psychology; B.A. (Seoul Women's University); M.A. (Korea University); Ph.D. (University of Louisville).

Erin P. Hambrick^{1,2}; assistant professor of psychology; B.A. (Furman University); M.A. (Western Carolina University); Ph.D. (University of Kansas).

Seung-Lark Lim^{1,2}; associate professor of psychology; B.A., M.A. (Korea University); Ph.D. (Indiana University).

Jennifer Lundgren^{1,2}; dean, school of graduate studies and professor of psychology; B.S. (Oklahoma State University); M.A., Ph.D. (University of Illinois).

Jacob Marszalek^{1,2}; associate professor of psychology; B.A. (Illinois State University); M.A. (Emporia State University) Ph.D. (University of Illinois at Urbana-Champaign).

Ricardo Marte¹; associate teaching professor of psychology; B.A. (State University of New York at Binghamton); M.A., Ph.D. (University of Nevada, Reno).

Joan M. McDowd^{1,2}; chair, department of psychology and professor of psychology; B.A. (Washington University); M.A., Ph.D. (University of Toronto).

Johanna Nilsson^{1,2}; professor of psychology; B.A. (Roger Williams University); M.A., Ph.D. (State University of West Georgia).

Alexis Petri; associate research professor of psychology and director of PROPEL program; B.A. (University of Missouri, Kansas City; University of Massachusetts, Boston); M.A., Ph.D. (University of Missouri, Kansas City).

Melisa Rempfer^{1,2}; director of clinical training, Ph.D. program; clinical psychology (health emphasis) option and associate professor of psychology; B.S. (University of Iowa); M.A., Ph.D. (University of Kansas).

Joah Williams^{1,2}; assistant professor of psychology; B.A. (The University of the South); M.S. (The University of Memphis); Ph.D. (Medical University of South Carolina, Department of Psychiatry / Ralph Johnson VAMC Consortium).

Retired Faculty

Jim Collins, associate professor emeritus of psychology.

Jay Hewitt, associate professor emeritus of psychology.

Joseph B. Hughey; professor emeritus of psychology; B.A., M.A. (Wichita State University); Ph.D. (University of Tennessee).

Tamera B. Murdock, professor of psychology

Charles L. Sheridan, professor emeritus of psychology.

¹ Members of UMKC Graduate Faculty

² Members of UMKC Doctoral Faculty

Undergraduate Undergraduate Degrees:

- Bachelor of Arts: Psychology (p. 961)
- Psychology Double Major
- Minor in Psychology (p. 974)

Graduate Graduate Degrees:

- Master of Arts: Psychology (p. 972)
- Doctor of Philosophy: Clinical Program (Health Emphasis) Option (p. 968)
- Doctor of Philosophy: Applied Cognitive & Brain Sciences Option (p. 966)

Courses

PSYCH 151 College Study Skills and Resources Credits: 3

Course helps Propel students develop critical thinking, time management and academic skills, necessary for success in college and future employment. Students will learn about their individual learning styles and skills as well as the academic resources available to help them develop new skills. They will also explore and use various software and apps to help them stay organized and build self-sufficiency.

Prerequisites: Propel Student.

PSYCH 152 Developing a Person-Centered Life Plan Credits: 3

In this course students in the Propel Program will develop a person-centered plan that will serve as a foundation for their college experience and their future. The course approaches the topic with the belief that people with disabilities are people first and therefore the person-centered life engages the whole person and ensures person-centered supports.

Prerequisites: Propel Student.

PSYCH 153 Communication Skills for Networking, Employment, and Friendship Credits: 3

Through this course, students in the Propel program will gain communication skills, networking skills; learn how to build friendships; and gain important insight on personal safety.

Prerequisites: Propel Student.

PSYCH 154 Personal Finance and Disability Services Credits: 3

This course will introduce Propel students to disability services and systems that they will need in their adult lives. A second focus on personal finance will help students understand how disability benefits affect their personal finances.

Prerequisites: Propel Student.

PSYCH 155 Developing a Career Credits: 3

Career development is a journey of self-assessment and decision-making. Using an interactive discovery process, students identify possible careers that would match personality type, strengths, interests, skills, and/or values. With Career Center resources, Propel students identify strategies for leveraging the college experience to jumpstart a career.

Prerequisites: Propel Student.

PSYCH 156 Transition Skills Credits: 3

Propel students will learn how to identify, report and avoid abuse, neglect, and exploitation. They will also learn about their personal rights, including the right to confidentiality.

Prerequisites: Propel Student.

PSYCH 207 Orientation to the Psychology Major Credit: 1

This course provides an introduction to the field of Psychology, and to the Department of Psychology at UMKC. Students will explore major requirements, behaviors associated with academic success, campus resources, and faculty research and teaching interests.

Co-requisites: PSYCH 217.

PSYCH 210 General Psychology Credits: 3

A survey of the fundamental principles, theories, and methods of psychological science.

PSYCH 210 - MOTR PSYC 100: General Psychology

**PSYCH 212 Social Psychology Credits: 3**

Survey of behavior in the actual, imagined, and implied presence of others, including attitudes, the self, conformity, altruism, aggression, prejudice, and group processes.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 217 Academic and Career Opportunities in Psychology Credits: 2

This course explores post-BA career options for students majoring in Psychology. Students will examine psychology-related career opportunities with a bachelor's degree, and options for psychology-related careers after earning a graduate degree. Emphasis will be placed on students developing academic plans that will prepare them for professional success.

Prerequisites: PSYCH 207 (or coreq) and PSYCH 210 with C- or better. Must be Psychology BA major and have completed a minimum of 15 credit hours.

PSYCH 222 Child Psychology Credits: 3

Survey of child development from conception to adolescence, including major theories, developmental milestones and research related to the physical, cognitive, social and emotional growth of children.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 252 Psychology of Communicating Your Lived Experience Credits: 3

This course provides frameworks for people interested in communicating their lived experiences with disabilities. This course will not satisfy the College of Arts and Sciences' Social and Behavioral Science distribution or Humanities distribution degree requirements.

PSYCH 253 Disability Civil Rights Movements Credits: 3

A survey of disability civil rights movements. The course includes such topics as institutionalization and deinstitutionalization, education, protests, civil rights advocacy, and the Americans with Disabilities Act. Students will develop a timeline of disability history milestones and conduct oral history interviews with Kansas City area individuals with disabilities.

Prerequisites: Propel Student.

PSYCH 255 Accessible, Inclusive Internships Credits: 3

Through this experiential learning opportunity, students complete an internship with a company, non-profit, governmental or community-based organization. Through a combination of direct observation, reflection, and evaluation, students relate the experience to their academic study and to their career exploration.

Prerequisites: Propel Student.

PSYCH 257 Disability History and Culture Credits: 3

An examination of selected political, cultural, economic and social forces shaping disability from historical and present day perspectives. The course is taught with discussions and reflections with local disability leaders.

Prerequisites: Propel Student.

PSYCH 258 Leadership and Disabilities Credits: 3

Students learn about leadership theories and develop leadership skills as they apply theory to practical situations.

Prerequisites: Propel Student.

PSYCH 302 Research Design in Psychological Science Credits: 3

An overview of research designs and data collection methods used in psychological science. Emphasis is placed on comparing strengths and limitations of various research designs and data collection methods as well as identifying appropriate uses of those research designs and data collection methods.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 305 Psychology of Gender Credits: 3

An examination of theory and research on the biological, psychological, and social aspects of gender. Differences and similarities in men's and women's affect, cognition, and behavior will be explored. Perceptions of how gender affects cognitions and behaviors will also be discussed.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 316 Quantitative Methods In Psychology Credits: 3

Introduction to the use, calculation, reporting, and interpretation of descriptive and elementary inferential statistical techniques in psychological science.

Prerequisites: PSYCH 210 with a C- or better; and MATH 110 or MATH 116 or STAT 115 or MOTRMATH 110 or higher level math (with a grade of C- or higher); or ALEKS Score of 61 or higher.

PSYCH 320 Ethnic and Minority Perspectives in Psychology Credits: 3

The theory, methods and content of psychology relevant to the interests and needs of ethnic minorities, and the contributions of ethnic groups and other minorities to psychology.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 323 Theory and Methods of Personality Credits: 3

The development, organization, dynamics and determinants of personality. May not be taken for graduate credit.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 405 Motivation and Emotion Credits: 3

A review of the principles of both human and animal motivation from classical drive, behavioral, and cognitive perspectives. May not be taken for graduate credit.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 407 Cognitive Psychology Credits: 3

Historical foundations and current state of knowledge regarding human information processing and the mental processes that underlie human behavior.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 418 Brain and Behavior I Credits: 3

Introduction to the neural bases of human behavior, including movement, learning and memory, sensation and perception, emotion, cognition, psychological, and neurological disorders.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 433 Abnormal Psychology Credits: 3

Introduction to major psychological problems and disorders as well as consideration of some of the many interacting biopsychosocial influences viewed from an empirically-informed perspective. May not be taken for graduate credit.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 440 The Psychology Of Aging Credits: 3

Survey of concepts, theory, and methods in the psychology of aging, including biological and social influences on behavior.

Prerequisites: PSYCH 210 with a grade of C- or better.

PSYCH 450 Special Topics Credits: 1-3

Offered as the result of student demand, specialized faculty interests, or the availability of a visiting expert in a field related to psychology.

Prerequisites: PSYCH 210 with a grade of C- or better.

PSYCH 461 Field Practicum Credits: 1-6

Provides supervised human services experience in an external community agency or organization that addresses human or social problems.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 490 Directed Individual Research Credits: 1-6

Students work on an individual research project under the supervision of a departmental faculty member.

Prerequisites: PSYCH 210 with a grade of C- or better.

PSYCH 491 Psychology Research Externship Credits: 1-6

Provides supervised research experience in an external community agency or organization that examines basic or applied research questions.

Prerequisites: PSYCH 210 with a C- or better.

PSYCH 495WI Contemporary Issues in Psychology Credits: 3

In-depth analysis of a contemporary issue in psychology. Emphasis will be placed on reading and writing about empirical approaches to contemporary challenges in psychological science.

Prerequisites: PSYCH 210 and PSYCH 302 both with a C- or better.

PSYCH 5504 Contemporary Issues In Learning Credits: 3

A discussion and analysis of recent research and theoretical papers in learning. The student will have to demonstrate undergraduate competence in learning in the first few weeks of this course in order to remain enrolled.

PSYCH 5505 Motivation Credits: 3

The definition of the concept of motivation is explored. Emphasis is placed upon integration of the concept of motivation into comprehensive theoretical explanations of phenomena. Students should have in their background a foundation in Learning Theory (or at least Theory Construction) and Experimental (Scientific Method). Previous laboratory experiences are desired.

PSYCH 5507 Cognitive Psychology Credits: 3

An advanced study in the intersection of cognition and emotion, focusing on the topics of attention, memory, and executive function, and how these abilities influence and are influenced by emotional processes and by individual difference variables such as health, mental health, age, gender, and ethnicity.

PSYCH 5509 Assessment 1: Intellectual And Cognitive Assessment Credits: 3

This course is designed to provide students with a foundation in the use of intellectual and cognitive assessment instruments in clinical evaluation. The course covers theoretical issues pertinent to intellectual and cognitive assessment, as well as basic assessment skills including administration, scoring, interpretation, and communication of results for commonly used measures.

PSYCH 5510 Assessment Methods In Professional Counseling Credits: 3

This course provides an understanding of assessment process and assessment techniques. Skills and practice in selection, administration, and interpretation of representative assessment instruments. Two semester hours lecture, two semester hours lab experience per week.

Prerequisites: Course on assessment of intellectual functioning.

PSYCH 5511 Principles Of Assessment In Psychology Credits: 3

This will be a field practicum course in which test batteries will be used to assess and evaluate the intelligence, personality, and aptitude of the individual.

Prerequisites: PSYCH 5510.

PSYCH 5512 Contemporary Issues In Social Psychology Credits: 3

A critical survey of the recent literature in social psychology with emphasis on experimental investigations.

PSYCH 5515 Advanced Systems And History Of Psychology Credits: 3

In depth review of the major theoretical systems of psychology in terms of historical assumptions, methodologies and developments with the goal of enabling the student to better evaluate current theories and assumptions in psychology.

PSYCH 5516 Quant Analysis 1: Regression And Analysis Of Variance Credits: 3

This graduate level statistics course for students in education and the behavioral sciences provides a strong conceptual understanding of two major statistical procedures with the context of the general linear model: multiple regression and numerous analysis of variance (ANOVA) models. Students will learn to select appropriate statistical techniques, tests the assumptions of the techniques, analyze data using statistical software, and report the results of their analyses in the format of the American Psychological Association (APA, 2002).

Prerequisites: EDUC-R&P 5505, PSYCH 316.

PSYCH 5517 Quantitative Analysis II: Advanced Topics In Regression And Mda Credits: 3

This graduate level statistics course for students in the behavioral sciences and education provides a strong conceptual understanding of advanced topics in regression (interaction effects, logistic regression, path analysis) and various multivariate techniques (MANOVA, canonical correlation, factor analysis). Students will complete a series of data based projects that allow them to demonstrate their skills in analysis, reporting and interpretation of findings.

Prerequisites: EDUC-R&P 5605 / PSYCH 5516 and EDUC-R&P 5505.

PSYCH 5518 Advanced Biopsychology Credits: 3

This course assumes that the student has mastered the basics of biopsychology, and deals with this topic in greater depth and scope than PSYCH 418. It will begin with a brief review and update of basic materials of neuroanatomy, neuronal conduction, and synaptic transmission but will quickly turn to an emphasis on biological influences on human psychology, in particular those biological factors that are of practical significance in the lives of patient and non-patient populations.

Prerequisites: PSYCH 418 (or equivalent).

PSYCH 5521 Advanced Social Psychology Credits: 3

The study of the individual in a social context. How social structure and interaction influence the behavior of an individual. Several contemporary systematic positions will be compared.

PSYCH 5522 Contemporary Issues In Developmental Psychology Credits: 3

A discussion of recent research literature in developmental psychology leading to an individual research project in this area.

PSYCH 5523 Seminar Personality Theory And Methodology Credits: 3

A study of the social-cultural, trait, learning, perceptual, motivational, and field theories of personality with special emphasis on research studies and the methodology of personality research.

Prerequisites: PSYCH 323.

PSYCH 5530 Addressing Health Disparities through Community-based Participatory Research Credits: 3

The purpose of this course is to familiarize students with the principles of community-based participatory research as a strategy to reduce health disparities. Students will learn how CBPR principles are applied across the research continuum for developing new community partnerships, conducting needs assessments, developing culturally-appropriate health promotion interventions in collaboration with community-based organizations, and packaging health interventions for dissemination in minority communities. This class is organized with a service learning component which will require students to work with a local community-based organization on a health issue for which there is joint interest.

PSYCH 5533 Psychopathology Credits: 3

A review of the experimental-clinical literature concerning the behavior disorders with special reference to their classification and etiology. Course generally will be restricted to students enrolled in license-eligible specialties who have had an undergraduate course in abnormal psychology.

PSYCH 5538 Development And Evaluation Of Assessment Tools Credits: 3

This survey course examines test theories, construction, and measurement theories. Within the context of a variety of conceptual frameworks and examples, students become knowledgeable about the various purposes, approaches, and computer software tools for measurement.

Prerequisites: PSYCH 5516 and PSYCH 5517.

PSYCH 5540 The Psychology Of Aging Credits: 3

This course will identify major issues concerning psychology related to aging. The major influences on the behavior, cognitive functioning and emotions of older adults will be examined. Consideration will be given to individual, group and environmental influences. Possible interventions will be identified. Cross-sectional and longitudinal research will be reviewed in order to examine the changes in individuals due to aging and the differences between cohort groups. Three major areas of information will be the focus: concepts, theory and methods in psychology of aging; biological and social influences on behavior; and behavioral processes. There will be a review of current literature.

PSYCH 5543 Adult Development And Aging Credits: 3

This course will identify major themes and issues of mid-life and older adults. It will examine major developmental theories of adult development and aging. A contextual approach is stressed, including research and theory on the impact of cohort, gender, race/ethnicity, socioeconomic status, and culture on development. Application to real life is integrated throughout the course. There will be a review of current literature.

PSYCH 5550 Field Practicum Credits: 4

Provides supervised experience working in community agencies/ organizations which address various human and social problems. Students receive training in community service oriented skills and approaches, e.g., advocacy, community organizing, program assessment, development and evaluation, outreach, and applied research. Ten hours per week at practicum site and class attendance are required.

PSYCH 5575 Professional Issues And Ethics In Psychology Credits: 3

Ethical and legal problems of research and practice will be discussed. Professional organizations in psychology and their publications will be reviewed.

PSYCH 5575A Professional Issues & Ethics Credits: 3**PSYCH 5580 Special Topics Credits: 1-3****PSYCH 5580AD Special Topics Credits: 1-3****PSYCH 5580SM Special Topics Credits: 1-3****PSYCH 5582 Community Mental Health Credits: 3**

A review of current theory and research. The emphasis is on prevention rather than treatment of mental health problems. The assets and liabilities of neighborhood communities for mental health problems will be discussed. Recent methods in crisis intervention are reviewed. Each student will be required to become familiar with a neighborhood with a high incidence of application for mental health care.

PSYCH 5586 Theory, Research And Practice Of Consultation Credits: 3

Theory and research on community, mental health, organizational and agency consultation. Entry, process, outcome and ethical issues surrounding each model of intervention will be explored. Each student will be expected to conduct and report on a consultation project.

PSYCH 5590 Directed Research Credits: 1-6**PSYCH 5597 Directed Readings In Psychology Credits: 3**

Intensive readings in areas of joint interest to the enrolled student and the cooperating faculty.

PSYCH 5599 Research And Thesis Credits: 1-9**PSYCH 5601 Experimental Methods In Design And Analysis I Credits: 3**

An examination of multifactor and multilevel designs and interactions. Topics covered will include randomized block designs, Latin square designs, complex trend analysis designs, covariance designs and multiple comparison of treatment means.

PSYCH 5604 Field Practicum In Community Psychology Credits: 3

Supervised experience in health care, social welfare, correctional, political, ethnic, and neighborhood agencies. May be repeated six times for up to 18 credit hours.

PSYCH 5610 Structural Equation Modeling Credits: 3

Students will learn core techniques in structural equation modeling, including path analysis, confirmatory factor analysis, structural regression models; and be introduced to advanced topics such as multi-group SEM and latent growth models. There will be multiple lab sessions using appropriate computer applications.

Prerequisites: PSYCH 5517 (or EDUC-R&P 5606) and PSYCH 5538 (or EDUC-R&P 5609).

PSYCH 5611 Theories & Methods Of Assessment & Intervention/Community Psych Credits: 3

Review of the assessment and intervention literature in social situations will be conducted. Students will design and carry out an assessment and an intervention project.

PSYCH 5612 Program Evaluation And Research Dissemination Credits: 3

A study of the area of applied research in which process and outcome characteristics of programs are related explicitly to a set of values, such as program goals, objectives and costs.

PSYCH 5614 Prevention Science I: Theories, Principles And Methods Credits: 3

Course provides a comprehensive overview of the field of prevention emphasizing basic concepts, conceptual models, and approaches associated with prevention in the field of psychology. The goal is to provide knowledge that will allow students to critically evaluate prevention programs in their communities. Students apply their learning by conducting a critical analysis of an existing community prevention and/or health promotion initiative.

PSYCH 5615 Prevention Science II: Applications Credits: 3

This advanced seminar is the follow-up course to Prevention Science I. Emphasis is placed on the application of prevention science to specific content areas (e. g., substance abuse, violence in schools physical or sexual abuse, AIDS/HIV infection, infant mortality, cardiovascular disease, promoting social competence.) A semester project involves an in-depth review of prevention efforts in the chosen area of interest, resulting in a comprehensive research proposal and/or public policy analysis.

Prerequisites: PSYCH 5614.

PSYCH 5620 Hierarchical Linear Models Credits: 3

Students will be introduced to hierarchical linear modeling techniques. Foundational topics include the rationale for using hierarchical linear models, issues related to assumptions and data screening, and a dissection of the components of a two-level organizational effects hierarchical linear model. Special topics to be discussed include growth modeling, three-level models, dyadic models, and models with categorical outcome variables (i.e., hierarchical generalized linear models). Multiple class sessions will be devoted toward use of software to build and analyze these models.

Prerequisites: PSYCH 5517 (or EDUC-R&P 5606) and PSYCH 5538 (or EDUC-R&P 5609).

PSYCH 5622 Theoretical And Ethical Issues In Professional Psychology Credits: 3

This course is designed to introduce first year doctoral students to the fundamental concepts and methods of psychology conceived as the application of scientific and ethical reasoning to human problems. It will provide an in-depth examination of the American Psychological Association code of ethics and its application to the conduct of psychologists. Critical and analytical thinking will be emphasized in all aspects of the course. The course will cover broad models of clinical and counseling psychology and their historical and scientific foundations, issues in diagnosis, cross-cultural applications and professional problems in light of ethical principles, professional standards, scientific data multicultural contexts.

PSYCH 5623 Methods Of Counseling In Professional Psychology Credits: 3

This course is designed to introduce students to the fundamental concepts and methods of counseling in professional psychology. Students will apply ethical and multicultural principles to the helping relationship while learning the basic methods of humanistic, psychodynamic, and cognitive behavioral approaches as they related to the helping process. A main focus of this course is the acquisition of basic helping skills. Students will also become familiar with counseling outcome research and will increase their level of counselor self-awareness.

Prerequisites: PSYCH 5622.

PSYCH 5625 Health Research Methods: Intro To Epidemiology & Clinical Trials Credits: 3

This course will introduce graduate students in health-related disciplines to research methods utilized in understanding disease and health risk in humans and conducting intervention trials. Students will learn about how epidemiology contributes to: 1) identifying factors that cause diseases; 2) assessing the public health importance of diseases; 3) describing the natural history of diseases; and 4) evaluating procedures for preventing or treating diseases. After completing this course, students should be able to read and summarize epidemiological research papers and answer questions about a study's purpose, design, methods of procedure, results, and major strengths and weaknesses.

Prerequisites: graduate standing; PSYCH 5601.

PSYCH 5631 Theoretical Foundations Of Health Psychology Credits: 3

This course will introduce students to the theoretical foundations of health psychology, including the Biopsychosocial model, individual and systems level theories of behavior change, stress and coping, disease prevention and health promotion, as well as adherence and relapse models. Upon completion of this course students will possess a broad understanding of how cognitive, behavioral, and social factors interact with biological parameters in influencing morbidity and mortality. In addition, students will become familiar with several substantive areas (e.g., chronic pain, HIV/AIDS, cancer, sleep disorders, cardiovascular risk reduction), research methods, and multicultural and ethical issues in health psychology.

PSYCH 5632 Health Psychology Interventions Credits: 3

This course will introduce students to a wide range of psychological assessment and intervention strategies that can be used in health care settings. Individual, group, community and policy interventions will be discussed. This course may be used for credit in the Health Psychology Discipline of the Interdisciplinary Ph.D. Program.

Prerequisites: PSYCH 5631.

PSYCH 5638 Seminar In Health Care Leadership Credits: 3

This course is designed to offer an educational experience that fosters both the knowledge and skills needed for leaders of healthcare in the future. The instructors will guide students through the process of generating new thinking, creating new knowledge, and enhancing interpersonal and professional effectiveness. Course topics will include what creates health and quality of life, social capital and health, healthcare policy, collaborative problem-solving, and transformational leadership and systems thinking.

PSYCH 5650 Clinical Practicum Credits: 1-6

Advanced supervised assessment and psychotherapy with individuals and groups in applied settings. Preregistration by application to instructor at least 60 days prior to the beginning of the semester. Approval by Psychology Director of Clinical training required.

Prerequisites: PSYCH 5623.

PSYCH 5660 Clinical Health Psychology Internship Credits: 1-6

Planned sequence of training experiences in an organized program designed to prepare students for the practice of professional psychology.

PSYCH 5696 Pre-Dissertation Credits: 1-12

Individualized research experiences to prepare students for the conduct of the dissertation.

PSYCH 5699 Research And Dissertation Credits: 1-16**PSYCH 5899 Required Graduate Enrollment Credit: 1****PSYCH H210 General Psychology Credits: 3**

A survey of the fundamental principles, theories, and methods of psychological science.

Prerequisites: Departmental consent.

Bachelor of Arts: Psychology

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Describe major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
- Engage in integrative, science-based reasoning to interpret behavior and solve problems.
- Apply ethical standards outlined by the American Psychological Association to science and practice.
- Effectively write, speak, and interact with others.
- Apply psychological content and skills to career goals, and develop professional direction for life after graduation.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.

- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above)		3
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		13

Major Requirements

Majors are required to complete a minimum of 36 hours of coursework in psychology. The major is comprised of general, core area, and elective courses.

Code	Title	Credits
Required Courses		
PSYCH 207	Orientation to the Psychology Major	1
PSYCH 210	General Psychology	3
PSYCH 217	Academic and Career Opportunities in Psychology	2
PSYCH 302	Research Design in Psychological Science	3
PSYCH 316	Quantitative Methods In Psychology	3
Foundational Courses		
Biological		
PSYCH 418	Brain and Behavior I	3
Clinical		
PSYCH 323 or PSYCH 433	Theory and Methods of Personality Abnormal Psychology	3
Cognitive		
PSYCH 407	Cognitive Psychology	3
Developmental		
PSYCH 222 or PSYCH 440	Child Psychology The Psychology Of Aging	3
Diversity		
PSYCH 305 or PSYCH 320	Psychology of Gender Ethnic and Minority Perspectives in Psychology	3
Social		
PSYCH 212	Social Psychology	3
Major Electives		
Select a minimum of six hours of elective coursework ¹		6
PSYCH 461	Field Practicum	
PSYCH 490	Directed Individual Research	
PSYCH 491	Psychology Research Externship	
PSYCH 495WI	Contemporary Issues in Psychology	
Total Credits		36

¹ See Undergraduate Advising (<http://cas.umkc.edu/psychology/undergrad/advising.asp>) for a complete list of undergraduate psychology courses that may serve as these electives. A maximum combination of 3 credit hours of PSYCH 490 and PSYCH 491 and a maximum of 3 credit hours of PSYCH 461 may be used toward fulfilling elective requirement.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		38

Other Requirements

Double majors with Sociology or Criminal Justice & Criminology may use the statistics courses taught in those departments (SOCIOL 363 or CJC 303) to fulfill PSYCH 316.

Double majors with the Conservatory may apply up to 6 credits from CONSVTY 342, CONSVTY 395, or CONSVTY 435 toward their psychology electives.

A grade of "C-" or higher must be achieved for any course to apply toward the major in psychology. The Undergraduate Psychology Advising Office encourages students to visit each semester to check on degree requirements and registration for courses, and to discuss professional development issues that will prepare students for their careers post-graduation.

Minimum GPA: 2.0

Total Credit Hours: 120

General Advice for Developing a Plan of Study

The department usually offers some courses during the summer term, but we cannot guarantee that all required courses will be offered. In addition, any courses offered during the summer must meet a threshold of minimum enrollment. If a course has not met this threshold and needs to be cancelled, students will be notified in a timely manner so that they can make alternative arrangements. Our academic advisors can assist you with summer course planning once the summer schedule is released (typically at the half-way point of the spring semester).

Please make sure prerequisites for courses are met prior to enrollment in Pathway. Students who do not meet course prerequisites will not be allowed to enroll through Pathway. Exceptions to prerequisites are made by instructors on a case-by-case basis.

For questions regarding the Undergraduate Psychology Program, or to schedule an appointment with a Psychology Advisor, please contact the Psychology Advising Office at umkcputa@umkc.edu or (816) 235-1092. See Undergraduate Advising (<http://cas.umkc.edu/psychology/undergrad/advising.asp>) for more information.

The Undergraduate Psychology Program is designed to provide majors with a base of scientific knowledge in psychology that can be used to pursue a professional career with a BA or a graduate/professional degree.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
PSYCH 210 ^{CC}		3 PSYCH 212 ^{CC}	3
GEFSE 101		3 PSYCH 207 ^{CC}	1
ENGLISH 110		3 PSYCH 217 ^{CC}	2
GECRT-SS 101		3 ENGLISH 225	3
Foreign Language Requirement (110 or higher)		3 STAT 115	3
		Foreign Language Requirement (120 or higher)	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
PSYCH 316 ^{CC}		3 PSYCH 302 ^{CC}	3
PSYCH 222 or 440		3 PSYCH 305 or 320	3
GECRT-AH 101		3 GECRT-SC 101	3
HISTORY 101, 102, or POL-SCI 210		3 GECDV 201	3
Foreign Language course (211)		3 COMM-ST 110 or 277	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
PSYCH 323 or 433		3 PSYCH 407	3
GECUE 201		3 3XX/4XX General Elective	3
3XX/4XX General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
Lab Science ^{LO}		1	
		16	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
PSYCH 418		3 PSYCH 3XX/4XX Major Elective (495WI recommended)	3
PSYCH 3XX/4XX Major Elective		3 3XX/4XX General Elective (WI course if not yet completed)	3
General Elective (3XX/4XX if needed)		3 General Elective	3
General Elective		3 General Elective	3

General Elective	3 General Elective	2
	15	14
Total Credits: 120		

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Doctor of Philosophy in Psychology: Applied Cognitive and Brain Sciences

The mission of the Applied Cognitive and Brain Sciences Option at UMKC is to enhance health outcomes, broadly defined, for individuals and communities. In service of this mission, we offer advanced training in the fundamental areas of experimental psychology, health psychology, and quantitative and methodological approaches for applied psychology. The doctorate training emphasizes the development of research skills and empirical investigation of real-world problems in the life and health sciences. Graduates are prepared for careers in academia, allied health, industry, and government agencies.

The Applied Cognitive and Brain Sciences Option at UMKC provides full time Ph.D. study. Didactic instruction is integrated with research from the beginning of students' training. Students are paired with a faculty mentor and become part of a lab where they learn how basic research is applied to practical problems and develop the knowledge and skills to carry out original research. These experiences are graded in complexity and designed to foster the development of cumulative knowledge and skill as the student progresses through their training.

Admission Criteria

Our doctoral training is designed for applicants with a prior bachelor's or master's level degree. The following are minimum criteria recommended for admission:

1. A bachelor's degree in Psychology or related discipline. Satisfactory completion of prior coursework in Introductory/General Psychology, Experimental Methods/Research Design and Statistics/Quantitative Methods is required. Satisfactory completion of prior coursework in at least two of the following areas is also strongly recommended: Biopsychology, Cognitive Psychology, Learning, Motivation, Neuroscience, Sensation and Perception, and Social Psychology.
2. Undergraduate GPA of 3.0 or graduate GPA of 3.5. Alternative criteria may be accepted at the discretion of the admissions committee if there is good reason to believe the regular criteria do not adequately portray the student's potential to do quality work while in the doctorate degree. However, admission is highly competitive, and we seek to admit students with a general history of excellence.
3. Competitive Graduate Record Examination scores from the general test (GRE Math + Verbal greater than 300; Analytical Writing score of at least 4.5). Students whose scores fall below this recommended minimum may present additional evidence of their capacity to do quality doctoral-level work. Such additional evidence will be considered and accepted at the discretion of the Admissions Committee.

4. Demonstrated evidence of interest in health research. The training follows a mentorship model. Therefore, applicants whose research interests are similar to those of the faculty will be given higher consideration. A listing of faculty interests and research can be accessed through the Department of Psychology (<http://cas.umkc.edu/psychology/>) web page.
5. History of personal conduct consistent with the ability to adhere to high standards of student conduct, as outlined in the UMKC Standard for Student Conduct.

A detailed description of the doctorate policies and procedures, including the requirements for retention, is available in the student handbook that can be accessed through the Applied Cognitive and Brain Sciences Option (<http://cas.umkc.edu/psychology/degree-programs/graduate-programs/applied-cognitive-and-brain-sciences-ph-d-option/>) web page.

Admission Procedure

New students are admitted in fall semester only. Because we receive applications from many more qualified individuals than can be admitted, admission is competitive. All application materials must be received by December 5 to be considered for admission the following fall. Visit the Applied Cognitive and Brain Sciences Option (<http://cas.umkc.edu/psychology/degree-programs/graduate-programs/applied-cognitive-and-brain-sciences-ph-d-option/>) web page for current application procedures and links to other helpful application resources.

Student Learning Outcomes

Students completing the Applied Cognitive and Brain Sciences Option will demonstrate:

1. Competence in the evaluation, conduct, and dissemination of research to support independent activity at the next level (e.g., post-doctoral research, academic research, applied research),
2. Ethical conduct and high professional standards in research, including sensitivity to issues of diversity,
3. Knowledge of the theoretical and scientific foundations of health psychology, and
4. Understanding of the breadth of scientific psychology and its application to health psychology.

Program Requirements

The following represents the program's core curriculum.

Year I					
Fall	Credits	Spring	Credits		
PSYCH 0000 Psychology Core Course	3	PSYCH 5517	3		
PSYCH 5516	3	PSYCH 5590	3		
PSYCH 5590	3	PSYCH 5601	3		
	9		9		
Year II					
Fall	Credits	Spring	Credits		
PSYCH 5538 (PSYCH 0000 Psychology Core Course)	3	PSYCH 5599	3		
PSYCH 5599	3	EDUC-R&P 5611 (And/Or HLM)	3		
		EDUC-R&P 5613 (And/Or SEM)	3		
		Completion of Master's Degree ¹			
	6		9		
Year III					
Fall	Credits	Spring	Credits	Summer	Credits
PSYCH 0000 Elective	3	PSYCH 0000 Elective	3	Comprehensive Exam to advance to candidacy	
PSYCH 0000 Psychology Core Course	3	PSYCH 0000 Psychology Core Course	3		
PSYCH 5696	3	PSYCH 5696	3		
	9		9		0

Year IV

Fall	Credits	Spring	Credits
PSYCH 5699 ²	3	PSYCH 5699 ²	3
Post-master's Degree ³		Post-Master's Degree ³	
	3		3

Total Credits: 57

Code	Title	Credits
Psychology Core Courses		
Select four of the following:		12
PSYCH 5521	Advanced Social Psychology	
PSYCH 5507	Cognitive Psychology	
PSYCH 5518	Advanced Biopsychology	
PSYCH 5515	Advanced Systems And History Of Psychology	
PSYCH 5543	Adult Development And Aging	
Possible Electives		
PSYCH 5533	Psychopathology	
PSYCH 5632	Health Psychology Interventions	
PSYCH 5580	Special Topics (Health Psychology: Community Based Participatory Research)	

Requirements for Retention

A detailed description of policies and procedures, including the requirements for retention, is available in the student handbook.

Doctor of Philosophy in Psychology: Clinical Psychology Option

The Clinical Psychology Ph.D. Option is a full-time program of graduate study designed to train health service psychologists who are competent scientist-practitioners with expertise in clinical psychology. The program seeks to enhance the health of our communities, broadly defined, through: providing rigorous training of students (education mission); serving our communities through the integration of behavioral sciences, health research and health service (service mission); developing knowledge and enhancing health outcomes through empirical research (research and evaluation mission); and incorporating integrity and respect for human diversity in all our activities (human mission). Based on a scientist-practitioner model, the program's clinical training and services are grounded in a commitment to the integration of science and practice. Consistent with the mission of our University to lead in the life and health sciences, our program faculty and students are actively involved in research, communities, and health service systems to promote a high quality of life for all.

Note: UMKC also offers a Ph.D. in Counseling Psychology through the School of Education. For information on that program, please see <https://education.umkc.edu/>.

Admission Criteria

Our doctorate is designed for applicants with a prior bachelor's or master's level degree. New students are admitted in fall semester only. Because we receive applications from many more qualified individuals than can be admitted, admission is highly competitive (see links to detailed information below). All application materials must be received by *December 5* to be considered for admission the following fall. Visit the Clinical Psychology Option web page for current application procedures and links to other helpful application resources.

The following are minimum criteria recommended for admission:

1. A bachelor's degree in Psychology, Counseling, Special Education or other health-related discipline such as Pre-Med or Nursing. Satisfactory completion of prior coursework in Introductory/General Psychology, Experimental Methods/Research Design and Statistics/Quantitative Methods is required. Satisfactory completion of prior coursework in at least two of the following areas is also strongly recommended: Abnormal Psychology, Personality, Biopsychology, Sensation and Perception, Cognitive Psychology, Motivation, Social Psychology.
2. Undergraduate GPA of 3.0 or graduate GPA of 3.5. Alternative criteria may be accepted at the discretion of the admissions committee if there is good reason to believe the regular criteria do not adequately portray the student's potential to do quality work in the doctoral degree. However, admission to the doctorate is highly competitive, and we seek to admit students with a general history of excellence. A disclosure of the average GPA of students recently admitted to the program can be accessed through the doctorate's web page.
3. Competitive Graduate Record Examination scores from the general test (GRE Math + Verbal greater than 300; Analytical Writing score of at least 4.5). Students whose scores fall below this recommended minimum may present additional evidence of their capacity to do quality doctoral-level work. Such additional evidence will be considered and accepted at the discretion of the Clinical Admissions Committee. A disclosure of the

GRE scores of students recently admitted (<http://cas.umkc.edu/psychology/degree-programs/graduate-programs/clinical-ph-d-option/>) can be accessed through our web page.

4. Demonstrated evidence of interest in clinical psychology research. Our training follows a mentorship model. Therefore, applicants whose research interests are similar to those of the faculty will be given higher consideration. A listing of faculty interests and research can be accessed through the Department of Psychology Faculty Research (<http://cas.umkc.edu/psychology/research/faculty-research/>) web page.
5. History of personal conduct consistent with the ability to adhere to high standards of student conduct, as outlined in the UMKC Standard for Student Conduct (p. 517), and professional conduct as outlined by the American Psychological Association (<http://www.apa.org/>) and state licensure boards.

Because clinical psychology is an empirically-based discipline, our training emphasizes continuous involvement in research and practice. For this reason, students primarily interested in psychotherapy and clinical or counseling practice without a strong interest in the scientific aspect of the scientist/practitioner model would be better served by other programs.

Typically four students are accepted each year. Applicants are evaluated based on the following dimensions:

1. Academic potential
2. Research potential
3. Interpersonal skills and other indications of potential for clinical work
4. Professional identity and involvement
5. Evidence of high ethical standards

Our training follows the American Psychological Association (<http://www.apa.org/>) Guidelines for Graduate School Offers and Acceptances.

Admission Procedure

New students are admitted in fall semester only. Because we receive applications from many more qualified individuals than can be admitted, admission is highly competitive. A disclosure of relevant data for students recently admitted (<http://cas.umkc.edu/psychology/degree-programs/graduate-programs/clinical-ph-d-option/>) can be accessed through the Clinical Psychology Option web page (<http://cas.umkc.edu/psychology/degree-programs/graduate-programs/clinical-ph-d-option/>). All application materials must be received by December 5 to be considered for admission in the following fall. Please see the Clinical Psychology Option (<http://cas.umkc.edu/psychology/degree-programs/graduate-programs/graduate-admissions/>) web page for current application procedures (<http://cas.umkc.edu/psychology/degree-programs/graduate-programs/graduate-admissions/>).

Our training follows the American Psychological Association (<http://www.apa.org/>) Guidelines for Graduate School Offers and Acceptances.

Student Learning Outcomes

The Clinical Psychology Option is organized around the following training goals and student learning outcomes:

Training Goal 1: To provide students with knowledge and skills in the evaluation, conduct, and dissemination of general psychological and clinical health related research

Student Learning outcomes:

1. Students will demonstrate the ability to critically evaluate literature relevant to the science and practice of psychology
2. Student will demonstrate the ability to conduct empirically sound research, including research design and implementation and statistical analysis

Training Goal 2: To provide students with entry-level skill in the delivery of evidence-based psychological and clinical health services

Student Learning outcomes

1. Students will demonstrate the ability to select, administer, and interpret assessment and diagnostic tools in the context of clinical service delivery
2. Students will demonstrate the ability to select, administer, and evaluate evidence-based psychological and clinical health interventions

Training Goal 3: To provide students with knowledge of ethical and professional principles and to promote ethical conduct and high professional standards in research and clinical situations

Student Learning outcomes

1. Student will demonstrate the ability to identify and appropriately respond to ethical issues raised in research contexts
2. Student will demonstrate the ability to identify and appropriately respond to ethical issues raised in clinical contexts

Training Goal 4: To provide students with knowledge and skills in working with diverse groups of individuals in professional contexts

Student Learning outcomes

1. Student will demonstrate the ability to identify the nature and impact of diversity on the administration and interpretation of assessments and the delivery of health services
2. Student will demonstrate the ability to identify the nature and impact of diversity in the conduct of research and its dissemination

Program Requirements

The following represents the program's core curriculum.

First Year

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
CPCE 5503	3	PSYCH 5510	3	PSYCH 5650 (optional) ²	1
PSYCH 5509	3	PSYCH 5517	3		
PSYCH 5516	3	PSYCH 5590 or 5599 ¹	1		
PSYCH 5580 ³	1-3	PSYCH 5601	3		
PSYCH 5590 or 5599 ¹	1-9				
11-21			10		1

Second Year

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
Psych 0000 Core Psychology ⁵	3	PSYCH 0000 Core Psychology ⁵	3	PSYCH 5650 (optional) ²	1
PSYCH 5538 ³	3	PSYCH 0000 Core Psychology ⁵	3		
PSYCH 5650 ²	3	EDUC-R&P 5611 or 5613	3		
PSYCH 5580 or 5632 ^{3,4}	3	PSYCH 5590 or 5599 ¹	2		
PSYCH 5590 or 5599 ¹	2	PSYCH 5650 ²	3		
14			14		1

Third Year

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
PSYCH 0000 Core Psychology ⁵	3	PSYCH 0000 Core Psychology or Diversity Requirement ⁵	3	PSYCH 5650 (optional) ²	1
PSYCH 5586 or 5580	3	PSYCH 5650 ²	1		
PSYCH 5650 ²	1	PSYCH 5696 ⁶	2		
PSYCH 5696 ⁶	2				
9			6		1

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
PSYCH 0000 Core Psychology or PSYCH 5586 ⁵	3	PSYCH 0000 Core Psychology ⁵	3
PSYCH 5650 ²	1	PSYCH 5650 ²	1
PSYCH 5699 ⁶	2	PSYCH 5699 ⁶	2
6		6	

Fifth Year

Fall Semester	Credits	Spring Semester	Credits
PSYCH 5660 ⁷	1	PSYCH 5660 ⁷	1
PSYCH 5699 ⁸	1	PSYCH 5699 ⁸	1
2		2	

Total Credits: 83-93

¹ Students are required to officially enroll and accumulate 6 hours of research credit over their first 2 years in the program (6 credit hours of graduate level research credit are required to receive the M.A.). If the master's thesis project has been waived or completed, **formal enrollment in directed research is still required**. It is expected that all students will be actively involved in research and evaluated on their research performance every fall and

winter semesters. Students who have had the M.A. requirement waived need only take 1 credit hour of research in each semester of the second year. However, students will still need to accumulate the additional 8 research credit hours required over and above the master's thesis requirement to reach the graduate school minimum of 12 research credit hours for the Ph.D.

² The program requires that students enroll in practicum each regular Fall and Spring semester of the second, third, and fourth years. Students may complete additional clinical hours in summer practicum to improve their competitiveness for internships. Official enrollment is optional, although documentation of supervised hours is required for those to be included.

³ This may be taken during the third year (same semester) instead of the second year.

⁴ Some courses will offered in alternate years

⁵ There are 5 core course requirements (see list at the bottom of the table). In some areas (e.g., Developmental) alternative courses may be used to fulfill the requirement.

⁶ The graduate school requires at least 12 hours of graduate research credit to graduate with a Ph.D. Our program requires a total of 8 research credit hours (pre-dissertation and dissertation) beyond the 6 required for the master's thesis for graduation. You may accumulate these hours in any way you wish as long as you complete the additional 8 hours prior to graduation. However you must first pass comps before enrolling in dissertation units.

⁷ Due to variable internship start and end dates you may only officially complete you internship after the end of the Spring semester. In these cases an incomplete grade will be given until official completion of the internship. Note that the university generally requires students to be enrolled in the semester that they graduate. However, providing all other program requirements have been completed by the end of the spring semester (such as the dissertation) the DCT will request that summer enrollment be waived for students graduating in the summer. If all other requirements are not completed you will be required to enroll in at least one credit (for example, if you dissertation is not yet defended you will enroll in 1 credit of research for the summer semester).

⁸ Students who defend their dissertations prior to the 5th year do not register for continuing dissertation hours. Students, fifth year or beyond, who have not successfully defended the dissertation are required to enroll in 1CH of Dissertation each semester until it is completed.

Code	Title	Credits
PSYCH 5521	Advanced Social Psychology	3
PSYCH 5507 or PSYCH 5505	Cognitive Psychology Motivation	3
PSYCH 5518	Advanced Biopsychology	3
PSYCH 5515	Advanced Systems And History Of Psychology	3
Developmental Requirement, for example:		
PSYCH 5522	Contemporary Issues In Developmental Psychology	
PSYCH 5543	Adult Development And Aging	

Leadership, Employment, and Community Engagement Certificate (PROPEL)

Student Learning Outcomes

Students graduating from this program will:

- Be able to advocate for their disability needs effectively.
- Be able to apply academic knowledge and social proficiencies in a work-based setting.
- Be able to create networks with peers and others.
- Be able to identify possible careers that would match personality type, strengths, interest, skills, and/or values.

The Propel Program is a comprehensive college experience for young adults with intellectual developmental disabilities. Students enrolled in Propel attend UMKC for two years, full-time (12 credit hours/semester; fall and spring semesters) and participate in college courses with students without intellectual disabilities 60% to 70% of the time. The curriculum focuses on the following domains: academic learning; work-based learning and career exploration; social learning; independent living skills; and self-determination. In addition to full-time coursework, students will also have the option of participating in other student activities such as student organizations and service-learning/community engagement. Propel Undergraduate Certificate is housed in the UMKC College of Arts and Sciences, Department of Psychology. Propel is supported through a grant from the Office of Postsecondary Education, US Department of Education to build a model comprehensive transition program for college students with intellectual developmental disabilities.

Program Requirements

Code	Title	Credits
Required Courses		24
PSYCH 151	College Study Skills and Resources	
PSYCH 152	Developing a Person-Centered Life Plan	
PSYCH 153	Communication Skills for Networking, Employment, and Friendship	
PSYCH 154	Personal Finance and Disability Services	
PSYCH 155	Developing a Career	
PSYCH 156	Transition Skills	
PSYCH 255	Accessible, Inclusive Internships	
PSYCH 258	Leadership and Disabilities	
Electives		24
Psychology Electives		
PSYCH 252	Psychology of Communicating Your Lived Experience	
PSYCH 253	Disability Civil Rights Movements	
PSYCH 257	Disability History and Culture	
Propel students take a variety of elective courses on campus offered by the College of Arts & Sciences and other Schools and Departments. Fifteen courses Propel students frequently enroll in are:		
ART 105	Introduction To Photography	
ART 112	Foundation Drawing	
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
ENGLISH 126	Popular Literature	
ENV-SCI 110R	Understanding the Earth: Introduction to Environmental Science and Laboratory	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
MATH 116	Mathematics For Liberal Arts	
PHYSICS 130	Physics of Sports	
PHYSICS 140	How Things Work	
PHYSICS 140L	How Things Work Laboratory	
SOCIOL 101	Sociology: An Introduction	
Total Credits		48

To complete the program, the Propel student needs to finish required Propel certificate courses with a 2.0 GPA or better. Elective courses may be taken pass/fail.

Students who successfully completed the Propel undergraduate certificate may apply to be a UMKC bachelor's degree-seeking student by following the steps below.

1. Inform the Propel Program and identify a transition plan for the spring semester of year two.
2. Successfully complete all of the requirements for earning the Leadership, Employment, and Community Engagement Certificate.
3. Meet with a UMKC advisor in the area of study to have Propel coursework evaluated that will be applicable to an undergraduate degree program.
4. Apply to UMKC as a degree-seeking student, noting successful completion of Propel.
5. The application decision will be made by UMKC's Office of Admissions.

Students admitted to Propel who feel they do not need the Propel student support structures may apply to become a bachelor's degree-seeking student by completing an appeal to the Director of Admissions.

Master of Arts: Psychology

Student Learning Outcomes

Students graduating from this program will:

- To provide students with knowledge and skills in the evaluation, conduct, and dissemination of psychological research.
- To provide students with knowledge of ethical principles and to promote ethical conduct and high professional standards in research and applied situations.
- To provide students with knowledge and skills working with diverse individuals in professional contexts.

Note. Beginning academic year 2012-2013, The Department of Psychology is no longer accepting new students into the Master of Arts in Psychology program. The information that follows is applicable to students accepted to the program prior to Fall 2012. Students enrolled in the Doctor of Philosophy (PhD) in Psychology degree program are eligible for a Master of Arts in Psychology degree as part of the PhD in Psychology degree program. A detailed list of requirements for obtaining a Master of Arts in Psychology degree as part of the PhD in Psychology degree program can be found in the PhD program handbook.

Program Description

The Master of Arts in Psychology Program prepares students for research careers in academic or community psychology settings. The program involves training in theory, research design and statistics, and the application of principles to real world situations. The program provides advanced training both for recent graduates and for individuals who have been in the work force for a number of years. Although some students subsequently enter doctoral programs and complete Ph.D.s, many immediately accept challenging jobs in the public, private or non-profit sector. Students may complete the program on a full- or part-time basis. However, to ensure the timeliness of training, all program requirements must be completed within five years from admission.

The program is research oriented and provides many opportunities to gain valuable experience in conducting research and includes experimental studies working with human participants in a variety of areas. See faculty interests and on-going projects on the Department of Psychology website. (<http://cas.umkc.edu/psychology/>)

Potential applicants should be aware that the Master of Arts in Psychology program is not designed to prepare students for professional practice as a psychologist. Further, completion of the Master of Arts in Psychology program is not adequate preparation for either the practice of psychology or use of the term "psychologist," both of which are regulated by state statute. Students interested in the practice of psychology should consider the Clinical Psychology Ph.D. program described under the Department of Psychology listing.

Suggested Plan of Study

The program is designed for students who seek rigorous training in research design and statistical analysis. Acquiring skills in these areas will prepare students for additional graduate training as well as for immediate application in a work setting. Quantitatively skilled professionals are employed in a variety of settings including: university departments such as psychology, marketing, management, education, medical and biological research programs, personnel management programs, government, industry, market research firms, large-scale mental testing corporations, software development companies and consulting firms.

One key component of training is six credit hours of a capstone research project, either research and thesis or directed research program evaluation, in which students will, under the direct supervision of faculty, apply the skills they have learned in the classroom to real-world problems and research questions.

Code	Title	Credits
PSYCH 5516	Quant Analysis I: Regression And Analysis Of Variance	3
PSYCH 5517	Quantitative Analysis II: Advanced Topics In Regression And Mda	3
PSYCH 5530	Addressing Health Disparities through Community-based Participatory Research	3
PSYCH 5538	Development And Evaluation Of Assessment Tools	3
PSYCH 5601	Experimental Methods In Design And Analysis I	3
Take (6) hours of the following:		6
PSYCH 5590 or PSYCH 5599	Directed Research Research And Thesis	
Psychology Elective ¹		3
Electives ²		12
Total Credits		36

¹ Psychology electives must be 5500 level or above, unless prior written approval is obtained from your psychology advisor and the course instructor. Documentation of completion of additional work in undergraduate courses must be filed with the department in order to obtain graduate credit. Refer to the MA in Psychology handbook for elective options.

² Courses at the 5500 level or above from other UMKC departments may be used to fulfill these requirements; however, prior written approval from your psychology advisor is required.

Psychology Minor

Student Learning Outcomes

Students graduating from this program will:

- Describe psychology's content domains.
- Engage in integrative, science-based reasoning to interpret behavior and solve problems.
- Apply ethical standards to science and practice, and promote community at local, national, and global levels.
- Effectively write, speak, and interact with others.
- Apply psychological content and skills to career goals, and develop professional direction for life after graduation.

Program Requirements

Eighteen hours of coursework in psychology are required for a psychology minor with at least 9 of those hours at the upper-division level. Of the 18 hours a minimum of 9 hours must be completed at UMKC. A grade of "C-" or higher must be achieved for any course to apply toward the minor in psychology.

The following is required of all psychology minors:

Code	Title	Credits
PSYCH 210	General Psychology	3
Psychology Electives (choose from the following): ¹		15
PSYCH 207	Orientation to the Psychology Major	
PSYCH 212	Social Psychology	
PSYCH 217	Academic and Career Opportunities in Psychology	
PSYCH 222	Child Psychology	
PSYCH 302	Research Design in Psychological Science	
PSYCH 305	Psychology of Gender	
PSYCH 316	Quantitative Methods In Psychology	
PSYCH 320	Ethnic and Minority Perspectives in Psychology	
PSYCH 323	Theory and Methods of Personality	
PSYCH 407	Cognitive Psychology	
PSYCH 418	Brain and Behavior I	
PSYCH 433	Abnormal Psychology	
PSYCH 440	The Psychology Of Aging	
PSYCH 461	Field Practicum	
PSYCH 490	Directed Individual Research	
PSYCH 491	Psychology Research Externship	
PSYCH 495WI	Contemporary Issues in Psychology	
Total Credits		18

¹ A maximum combination of 3 credit hours of PSYCH 490 and PSYCH 491 and a maximum of 3 credit hours of PSYCH 461 may be used toward fulfilling elective requirement.

Minimum GPA: 2.0

Total Credit Hours: 18

Psychology/Music Therapy Double Major

Student Learning Outcomes

Students graduating with a double major will:

- Describe psychology's content domains.
- Engage in integrative, science-based reasoning to interpret behavior and solve problems.
- Apply ethical standards to science and practice, and promote community at local, national, and global levels.

- Effectively write, speak, and interact with others.
- Apply psychological content and skills to career goals, and develop professional direction for life after graduation.

Program Requirements

Double majors with the Conservatory may apply up to 6 credits from CONSVTY 342, CONSVTY 395, or CONSVTY 435 toward their psychology electives.

Race, Ethnic, and Gender Studies

The Race, Ethnic, and Gender Studies (REGS) mission is to foster teaching, research, and service on the social, cultural, and historical processes that shape human and group identities and experiences, and to foster intersectional understandings about the formations of inequalities of race, class, gender, sexuality, and other axes of privilege and/or oppression, as well as knowledge and commitment to redress them.

Undergraduate

Black Studies Minor (p. 612)

Latinx and Latin American Studies Minor (p. 864)

Women's, Gender, and Sexuality Studies Minor (p. 1008)

Religious Studies

C (<http://www.umkc.edu/virtualtour/haag-hall.asp>) Cockefair Hall, Room 203
5121 Rockhill Road
(816) 235-5704 or 5854
Fax: (816) 235-5723
rel-st@umkc.edu
http://cas.umkc.edu/Religious_Studies (http://cas.umkc.edu/Religious_Studies/)

Mailing Address

University of Missouri-Kansas City
Center for Religious Studies
Cockefair Hall 203
5121 Rockhill Road
Kansas City, MO 64110-2499

Program Director:

Dr. Gary L. Ebersole, Cockefair Hall 223B

Professor:

Dr. Gary L. Ebersole (History/Religious Studies), Cockefair Hall 223B

Associate Professor:

Dr. Jeffrey S. Bennett (Sociology/Anthropology), Manheim Hall 206D

Dr. David Freeman (History), Cockefair Hall 211

Description of Program

The Center for Religious Studies (http://cas.umkc.edu/Religious_Studies/) offers an interdisciplinary, cross-cultural and socio-historical approach to the study of religion. The Center is a consortium of several area institutions of higher education that have pooled their resources to participate in the UMKC Interdisciplinary Ph.D. program. Students in religious studies are introduced to the many dimensions of religious belief, practice and expression found in human cultures across time and space.

In addition to graduate courses, the Center offers a number of undergraduate courses on topics such as gender and religion, women and religion, the anthropology of religion, and religion in America. Related courses relevant to the study of religion will be found under the listings of other departments and programs.

Courses

RELIG-ST 400 Special Topics In Religious Studies Credits: 1-3

Special topics in religious studies which are not offered regularly. The focus of the course varies by semester and instructor.

RELIG-ST 497RS Special Topics And Readings Credits: 1-6

Intensive reading and/or research in an area selected by the student in consultation with the instructor. May be repeated for credit when the topic varies.

RELIG-ST 5500 Special Topics In Religious Studies Credits: 1-3

Special topics in religious studies. The focus of the course will vary by semester and instructor.

RELIG-ST 5500A Special Topics In Religious Studies Credits: 1-3**RELIG-ST 5500B Special Topics In Religious Studies Credits: 1-3****RELIG-ST 5500C Special Topics In Religious Studies Credits: 1-3****RELIG-ST 5500D Special Topics in Religious Studies Credits: 1-3****RELIG-ST 5500E Special Topics In Religious Studies Credits: 1-3****RELIG-ST 5500F Special Topics In Religious Studies Credits: 1-3****RELIG-ST 5501A Religion In America Credits: 3**

An in-depth examination of selected aspects of the history of religions in America from the colonial period to the present. Special emphasis will be given to methodological issues in the study of American religious history.

RELIG-ST 5502 Religion & Colonialism in Latin America Credits: 3

The study of selected aspects of the history of religions in the Americas. Primary focus is on the complex ways that European, Native American Africans religions helped to structure and negotiate the experiences and the significance of cultural contact and colonialism through lived worlds of meaning.

RELIG-ST 5503 Visions, Dreams, and Prophecies as Religious Phenomena Credits: 3

This course explores the way visions, dreams, and prophecies have acquired religious significance in Western and non-western contexts from the ancient to the present.

RELIG-ST 5504 Gender and Religion Credits: 3

Cross-cultural and comparative study of how religious groups create and transmit gender roles and expectations.

RELIG-ST 5506 The History of Christianity to the Middle Ages Credits: 3

This course examines the historical and theological development of Christianity from its origins to the the High Middle Ages The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major social, institutional and intellectual force with a focus on patterns of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.

RELIG-ST 5507 The History of Christianity from the Middle Ages to the Present Credits: 3

This course examines the historical and theological development of Christianity from the High Middle Ages to the present. The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major social, institutional and intellectual force with a focus on patterns of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.

Cross Listings: HISTORY 5507A.

RELIG-ST 5508 Anthropology of Religion Credits: 3

This course explores the ways anthropologists have gone about studying religion from the opening decades of the 20th century to present. The course introduces students to the diversity of human religious expression and experience through anthropological literature and to the diversity of anthropological expression especially as it has been revealed in social scientific studies of religious life. The course is designed to generate a critical dialogue about the special role that religion has played in the ongoing anthropological engagement with "other" societies and cultures over time.

RELIG-ST 5510 Religions Of The World Credits: 3

This course is designed to introduce graduate students to the major religions of the world, as well as to selected small-group religions. Our goal will be to learn to appreciate the similarities and differences in the structure and history of these religions. A primary focus will be on using the categories of the history of religions to examine and analyze the various dimensions of religion (e.g., historical, sociological, ritual, mythological, aesthetic). In addition, methodological issues of comparison will be addressed.

RELIG-ST 5567 Myth and Ritual Credits: 3

Myth and "ritual" have long been fundamental categories in the study of religion. This course will briefly survey some of the major theories and approaches to the study of myth and ritual from the Enlightenment to the present. Will not only trace the shifting meanings of "myth" and "ritual," but will critically evaluate the utility of diverse approaches to the study of religious phenomena designated by these terms. Reading will include theoretical works, as well as selected case studies.

RELIG-ST 5584RS Sacred Narratives And Texts Credits: 3

This course will study the "social lives" of sacred narratives and texts as they circulate within religious communities. Among the topics to be studied are methods of exegesis in different religious traditions, orality and literacy (including the reoralization of written texts), the canonization process, the emergence of interpretive specialists, text as amulets, reading and meditative practices and techniques, and narratives and the arts. The course is comparative, cross-cultural, and interdisciplinary in nature.

RELIG-ST 5586RS Methodological Approaches To The Study Of Religion Credits: 3

This course examines the various disciplines that undertook the critical, objective study of religion beginning in the second half of the nineteenth century and continuing into the present. The course examines how the disciplines of the social sciences and humanities emerged in the last century and how the study of religion emerged from its roots in Jewish scholarship and Christian theology to be included under the umbrella of the humanities and social sciences. The historical development of religious studies as a historical and intellectual contexts.

RELIG-ST 5587 Contemporary Approaches to the Study of Religion Credits: 3

A survey of major scholars and theorists of religion from 1950 to the present, with an emphasis on significant shifts in the field.

RELIG-ST 5587RS Research Seminar Credits: 3

Students in this course will produce a major research paper under the direction of the instructor: a self-contained thesis chapter, an article for publication or the equivalent.

RELIG-ST 5592 Cults Sects, And New Religious Movements Credits: 3

In this course, students will experience: (a) a variety of methods for analyzing and understanding new religious movements in society: sociological, historical, and textual; (b) an introduction to the broad spectrum of religious beliefs which exist (and flourish) outside the cultural mainstream; and (c) an introduction to some of the means by which dominant religious and secular culture has confronted the presence of NRMs-e.g., deprogramming exit counseling, and theologically oriented countermovement.

RELIG-ST 5593 Sex And Religion Credits: 3

The course is designed to highlight issues related to the various ways in which religions of the world have integrated, embraced, or repressed one of the basic human experiences sexual expression. This is an elective course designed for graduate students with Religious Studies either as their coordinating or co-discipline. This is an advanced seminar, and as such does assume a certain measure of theoretical familiarity and background of study.

RELIG-ST 5594RS Death In The History Of Religions Credits: 3

As a biological "fact," death would appear to be a human universal. Yet, human beings have imagined—and, thus experienced—the meaning of death in many diverse ways in different cultures and over time. This course explores the conceptualization and representation of death and dying, as well as the ritual activities surrounding death, found in selected religious communities. The goals are to gain insight into how people have sought to (re) create a world of meaning in the face of death and to gain a critical perspective on our own contemporary situation.

RELIG-ST 5595RS Time And Space In The History Of Religions Credits: 3

Time and space are essential components of the lived worlds of human beings, yet the cultural and historical constructions of these are remarkably diverse and, moreover, are subject to change. This course is a cross-cultural, interdisciplinary, and comparative exploration of the constructions and experiences of time and space found in selected religious communities and historical periods. In addition, it investigates the pivotal role the categories of "sacred and profane time and space" have played in theorizing religion and in the study of religious myths and rituals in the modern period. Time and space are essential components of the lived worlds of human beings, yet the cultural and historical constructions of these are remarkably diverse and, moreover, are subject to change. This course is a cross-cultural, interdisciplinary, and comparative exploration of the constructions and experiences of time and space found in selected religious communities and historical periods. In addition, it investigates the pivotal role the categories of "sacred and profane time and space" have played in theorizing religion and in the study of religious myths and rituals in the modern period.

RELIG-ST 5596RS Body In The History Of Religions Credits: 3

The human body is the site of extensive imaginal and ritual activities in all religious traditions. This course explores some of the diverse ways religious communities have imagined and experienced the human body, as well as how the body had been manipulated and worked on in an effort to transform the human situation in the world.

RELIG-ST 5597RS Non-Thesis Research/Reading Credits: 1-6

Individual direction of student reading or research by selected, consenting faculty. This course can be taken only when faculty supervision is unavailable in colloquia or seminars.

RELIG-ST 5598RS Seminar In The History Of Religions Credits: 3

Advanced graduate seminar on a selected topic or problem in the History of Religion. Topic varies, but the seminar will have a methodical or theoretical focus. May be repeated for credit when topic is different.

RELIG-ST 5680RS Doctoral Colloquium Credits: 3

This course will examine the writings and theories of major scholars in a particular area of Religious Studies. The authors, works and intellectual currents which form the basis of the colloquium will vary from semester to semester depending upon the professor's expertise and design for the course.

RELIG-ST 5687RS Doctoral Research Seminar Credits: 3

Students in this course will produce a major research paper under the direction of the instructor. This shall consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

RELIG-ST 5697RS Doctoral-Level Independent Readings Credits: 1-6

Individual reading under the supervision of members of the Religious Studies Doctoral faculty and adjuncts in preparation for the Comprehensive Examination for the Ph.D.

RELIG-ST 5699RS Dissertation Credits: 1-15

Course credits in dissertation.

RELIG-ST 5899 Required Graduate Enrollment Credit: 1

Department of Sociology

Haag Hall, Room 208
5120 Rockhill Road
(816) 235-1116
Fax: (816) 235-1117

<http://cas.umkc.edu/sociology> (<http://cas.umkc.edu/sociology/>)

Mailing Address

University of Missouri-Kansas City
Department of Sociology
Haag Hall, Room 208
5120 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:

Shannon Jackson

Professors:

Deborah B. Smith

Associate Professors:

Jeffrey S. Bennett, Marc Garcelon (Coordinator, Sociology Program), Jennifer Huberman, Shannon Jackson (Coordinator, Anthropology Program), Sookhee Oh, Theresa Torres

Assistant Professor:

Michelle Smirnova (Principal Graduate Advisor), Joseph Workman

Associate Teaching Professor:

Ann Marie Wood

Administrative Assistant:

Nathan Milburn

Professors Emeriti:

Linda Breyspraak, Miguel Carranza, Thomas Carroll, Burton Halpert, Philip G. Olson, Peter Singelmann

Department Description

The Department of Sociology offers programs of study leading to:

- Bachelor of Arts in Sociology - two emphasis options:
 - General Sociology
 - Cultural Anthropology Emphasis
- Master of Arts in Sociology

Program minors are available in:

- Sociology
- Anthropology

Sociology is a wide-ranging discipline that strives to understand how the organization of society affects people's lives and experiences. Our mission is to help students develop a sociological perspective and use this perspective to question and understand the world around them. Students in our program have opportunities to develop critical thinking and research skills and to apply classroom learning through experiences in community organizations and agencies. Department faculty members are committed to excellence in teaching and work to assist students in developing a foundation for moving into a career.

Department Activities

Academic Advising

Student academic advising is a continuous process in the department. Undergraduate advisors are available for consultation throughout the academic year. The department recommends that students check the program requirements in the department office before filing the Declaration of Major form.

Undergraduate majors are encouraged to consult with the department to establish a tentative plan of study and to meet with a department advisor each semester. Students should leave their mail and email addresses with the department office so they can receive notifications concerning the class time table, new classes, and other departmental information of interest to majors.

Financial Assistance

Students can receive financial assistance through various campus scholarships, loan programs, grants and the work-study program. Students who are interested should contact the Financial Aid and Scholarships Office.

Sociology/Anthropology Club and Sociology Honor Society

The Sociology Club is open to all students majoring in Sociology as well as students who are interested in this field but have not yet declared a major. Club activities include service projects in the community, sponsorship of community speakers on campus, participation in local and regional professional meetings, and learning about internships and research opportunities. The department has a chapter of Alpha Kappa Delta, a national honorary society for Sociology students.

Undergraduate Student Award

A special award was established as a memorial to Edward Tomich, Ph.D., professor of Sociology from 1964 to 1976. Students must submit an application to the department to be considered for the award. On the recommendation of the department faculty, the Edward Tomich Award is given annually to a senior student majoring in Sociology who exemplifies an indomitable spirit; a commitment to the struggle for human welfare; an unquenchable thirst for knowledge and personal growth; an unwillingness to be cowed by authority or the superficialities of status; a readiness to ask the more difficult questions while being ready to accept the uncertainty of answers; and an appreciation of the value of theoretical knowledge about human interaction in everyday life.

Cooperative Programs

The department cooperates with other programs frequently by jointly listing courses at the undergraduate level. Students may benefit from combining one of these areas of study with their major in sociology:

- Black Studies
- Family Studies
- Gerontology
- Honors
- Latina/Latino Studies
- Women's, Gender, and Sexuality Studies

Desirable Preparation for Undergraduate Admission Requirements

High school students are encouraged to take a general college preparatory curriculum. Additional courses in mathematics, English, foreign languages and the social sciences, such as economics, anthropology, psychology and sociology are recommended. Students planning to transfer from a community college are encouraged to take at least 6 credit hours of sociology (including introductory sociology), and college algebra. A maximum of 12 hours of transfer credits, including introductory sociology, can be counted toward satisfaction of the major field requirements.

Faculty

Jeffrey S. Bennett^{1,2}; associate professor of anthropology and religious studies; B.A. (University of Washington); M.A., Ph.D. (University of Chicago).

Linda M. Breytspraak; professor emeritus of sociology and medicine;

Miguel A. Carranza professor emeritus of sociology and latina/latino studies program.

Thomas E. Carroll associate professor emeritus of sociology.

Marc Garcelon¹; associate professor of sociology; B.A. (University of Washington); M.A., Ph.D. (University of California at Berkeley).

Burton Halpert associate professor emeritus of sociology and medicine.

Jennifer Huberman; associate professor of anthropology; B.A. (Boston University); M.A., Ph.D. (University of Chicago).

Shannon Jackson^{1,2}; associate professor of anthropology; B.A., M.A. (University of Connecticut); Ph.D. (University of Chicago).

Sookhee Oh^{1,2} associate professor of sociology; B.A. (Ewha Woman's University, Korea); M.C.P. (Seoul National University, Korea); Ph.D. (Milano Graduate School of Management and Urban Policy, The New School).

Philip G. Olson; professor emeritus of sociology.

Clovis Semmes; retired professor of sociology and black studies; B.A., Ph.D. (Northwestern University); M.A. (University of Illinois, Chicago).

Peter M. Singlemann professor emeritus of sociology.

Michelle Smirnova^{1,2}; associate professor of sociology; B.A. (Washington University); M.A. (University of Maryland); Ph.D. (University of Maryland).

Deborah B. Smith^{1,2}; chair; department of sociology; professor of sociology and director of family studies; B.S., Ph.D. (Cornell University); M.A. (University of Minnesota).

Theresa L. Torres^{1,2}; associate professor of sociology and latina/latino studies; B.A. (Benedictine College); M.A. (Boston College); O.S.B. (Order of St. Benedict); Ph.D. (Catholic University of America).

Ann Wood¹; associate teaching professor of sociology; B.A. (Grinnell College); M.A., Ph.D. (University of Kansas).

Joseph Workman^{1,2}; assistant professor of sociology; B.A. (Ohio State University); M.A. (University of Notre Dame); Ph.D. (University of Notre Dame)

¹ Members of UMKC Graduate Faculty

² Members of UMKC Doctoral Faculty

Undergraduate Undergraduate Degrees:

- Bachelor of Arts: Sociology (p. 986)
- Bachelor of Arts: Sociology with (p. 991)Cultural Anthropology Emphasis
- Minor in Sociology (p. 996)
- Minor in Anthropology (p. 995)

Anthropology Courses

ANTHRO 103 Introduction To Cultural Anthropology Credits: 3

An introduction to culture and the basic concepts of anthropology. Topics include kinship, language, and cultural change.

ANTHRO 103 - MOTR ANTH 201: Cultural Anthropology



ANTHRO 300 Special Topics in Anthropology Credits: 1-3

Each time this course is offered, a different area of anthropology, to be announced, will be examined.

ANTHRO 302 Social Stratification Credits: 3

The distribution of power, privileges and prestige are examined in a historical and comparative perspective. The process whereby distribution systems develop, become institutionalized, and become transformed are analyzed.

ANTHRO 305 Language and Culture Credits: 3

This course is designed to familiarize students with the basic objects, aims, and methods of linguistic anthropology. Students will acquire this familiarity by studying both theoretical and ethnographic articles that focus on some of the major areas of concern within the field including: the evolution of human language, linguistic particularity and universality, the relationship of language to thought, structuralism and semiotics, trope theory, language and emotion, sociolinguistics, the development of writing systems, and language conservation and change.

ANTHRO 306 Culture, Emotion, and Identity Credits: 3

This course introduces students to some of the key theoretical perspectives and debates within the field of psychological anthropology. By drawing upon cross-cultural studies of emotion, personhood, sexuality, illness, and consciousness it seeks to understand some of the ways that culture and society influence human psychology and experience.

ANTHRO 308 The Social Life of Things Credits: 3

This course examines the connections between people and things. It explores how social relationships are created and changed through the use and exchange of objects, and how objects themselves take on particular meanings and values in these processes.

ANTHRO 322 Race And Ethnic Relations Credits: 3

The nature, origin and dynamics of ethnic and race relations in the U. S. and other societies. Specific attention will be given to the historical and contemporary contexts of prejudice, discrimination and confrontation.

ANTHRO 326 Consumer Society Credits: 3

This course explores the emergence of Consumer Society as both a sociohistorical development and as an object of social scientific inquiry. Students will explore how the study of Consumer Society has been animated by different scholarly questions, debates, and analytic approaches.

ANTHRO 328 Body and Society Credits: 3

Body and Society is an interdisciplinary and comparative approach to the study of the body as the subject and object of social processes. Interdisciplinary approaches to topics such as meaning, ritual, performance, and practice will provide a framework for classical as well as contemporary explorations of bodily representation and experiences across a variety of cultural contexts.

Prerequisites: ANTHRO 103.

ANTHRO 331 Urban Anthropology Credits: 3

A course designed to apply anthropological methods to the study of various urban environments. The approach to the subject is comparative, seeking to spell out those features of the urban setting which vary from culture to culture as well as those which are common to all.

ANTHRO 348 Latinx Immigrants, Migrants, and Refugees in the U.S. Credits: 3

This course addresses the culture of societies of U.S. citizens, immigrants, and refugees of Latin American heritage living in the U.S. The course emphasizes recent anthropological, historical, cultural, and sociological studies.

ANTHRO 358 Culture and Society Credits: 3

This course examines the "culture concept" at the heart of the contending theories of society, which is used to describe a society or way of life, a whole social order, or particular aesthetic styles and objects. The course links these various topics together in a concluding section on culture in the age of the Internet and globalization.

ANTHRO 359 Media and Society Credits: 3

This course examines the rise, development, and change of mass media in American society from broadsheets and news flyers through contemporary media formats.

ANTHRO 373 Anthropology of Religion Credits: 3

This course explores the ways anthropologist have gone about studying religion from the opening decades of the 20th century to present. The course introduces students to the diversity of human religious expression and experience through anthropological literature and to the diversity of anthropological expression especially as it has been revealed in social scientific studies of religious life. The course is designed to generate a critical dialogue about the special role that religion has played in the ongoing anthropological engagement with "other" societies and cultures over time.

ANTHRO 380 Technology and Society Credits: 3

This course will help students explore the ways technology shapes and is shaped by human interaction. Students will read interdisciplinary literature that builds theoretical and interpretive frameworks around classical and contemporary case studies. A fundamental question to be addressed throughout the course: how does the comparative study of technology help us understand what it means to be human?

ANTHRO 397 Independent Readings in Anthropology Credits: 1-3

Intensive readings in an area selected by the student with prior consultation with instructor.

Prerequisites: Twelve hours of anthropology.

ANTHRO 407 Writing Culture: The Craft of Ethnography Credits: 3

This course will explore the ways anthropologists document and write about cultural practices, processes, and beliefs. Students will become familiar with debates about representation while they consider differences in the ways ethnographic writing rhetorically conveys culture. Students will also compare ethnographic methods, theories, and styles of writing as these have changed over time.

ANTHRO 441 Globalization and Development Credits: 3

Focuses on issues of economic development, social stratification, political institutions, and political mobilization in societies where colonialism provided the context for their long-term disadvantages in the international economic order. Specific attention is paid to the intersection of the international components that define the options and limits for societal development (e.g., market shifts, international institutions and contracts, foreign policies, and migration) and the distinct social, political and cultural implications of these factors for developing societies.

Sociology Courses

SOCIOL 101 Sociology: An Introduction Credits: 3

An introduction to the study of society and the basic concepts of sociology.

SOCIOL 101 - MOTR SOCI 101: General Sociology

**SOCIOL 201 Introduction To Social Psychology Credits: 3**

Exploration of the relationships between human behavior and social context. The course focuses on how realities are socially constructed and sustained, the role of symbol systems, definitions of the situation, the self as a product of interaction, and the relationship between language, thought and culture.

SOCIOL 203 Social Problems Credits: 3

An examination of major social problems of modern Western society, including issues of racial conflict, war, civil rights, youth movements, the mass media, urban poverty, and crime. The topics will vary from year to year depending upon the instructor.

SOCIOL 211 Social And Psychological Development Through The Life Cycle Credits: 3

A survey of significant psychosocial issues, events and crises throughout the human life span. The life cycle of the family is examined as the primary context within which individual development occurs. Although the primary emphasis will be on normal adjustment and development, attention will also be given to the occurrence of special problems and deviations at each life stage.

SOCIOL 300 Special Topics in Sociology Credits: 1-3

Each time this course is offered, a different area of sociology, to be announced, will be given. On demand.

SOCIOL 300A Special Topics In Sociology Credits: 1-3

Each time this course is offered, a different area of sociology, to be announced, will be given.

SOCIOL 302 Social Stratification Credits: 3

The distribution of power, privileges and prestige are examined in a historical and comparative perspective. The process whereby distribution systems develop, become institutionalized, and become transformed are analyzed.

SOCIOL 306 Culture, Emotion, and Identity Credits: 3

This course introduces students to some of the key theoretical perspectives and debates within the field of psychological anthropology. By drawing upon cross-cultural studies of emotion, personhood, sexuality, illness, and consciousness it seeks to understand some of the ways that culture and society influence human psychology and experience.

SOCIOL 310R Families And The Life Course Credits: 3

This course is an upper level introduction examining the sociological, historical, and social psychological research on the family, focusing primarily on the United States. The course examines families of varied ethnicity, as well as family compositions at different stages of the life course. Emphasis is placed on the interdependence of family members, as well as how society and policy influence the family.

SOCIOL 313R Sociology Of Gender Credits: 3

This course is an introduction to the sociological study of gender in contemporary U.S. society. Special attention is directed to how gender is experienced inter-sectionally with other social categories, including social class, race, sexuality, and age.

SOCIOL 316 Sociology Of Death And Dying Credits: 3

Examination of attitudes, behaviors and institutions related to death and dying in contemporary American society. Topics include the status of death in American society, effects of the setting on dying, interaction with the dying, funeral practices, bereavement customs, surviving spouse, and suicide.

SOCIOL 317 Policies Of Drug Use And Control Credits: 3

Utilizing both historical and contemporary information, this course provided an assessment of the "drug problem" in the U.S. and policies of control developed in response to the problem. Drug use criminalization, legalization, medical treatment and prevention strategies and related issues are considered in regard to scientific knowledge related to the patterns, causes and impact of substance abuse.

SOCIOL 320 Social Deviance Credits: 3

The dominant sociological perspectives on deviance will be discussed with special attention given to the processes that define behavior and persons as deviant and the impact of such definitions on social relationships and identity.

SOCIOL 322 Race And Ethnic Relations Credits: 3

The nature, origin and dynamics of ethnic and race relations in the U. S. and other societies. Specific attention will be given to the historical and contemporary contexts of prejudice discrimination and confrontation.

SOCIOL 326 Consumer Society Credits: 3

This course explores the emergence of Consumer Society as both a sociohistorical development and as an object of social scientific inquiry. Students will explore how the study of Consumer Society has been animated by different scholarly questions, debates, and analytic approaches.

SOCIOL 328 Body and Society Credits: 3

Body and Society is an interdisciplinary and comparative approach to the study of the body as the subject and object of social processes. Interdisciplinary approaches to topics such as meaning, ritual, performance, and practice will provide a framework for classical as well as contemporary explorations of bodily representation and experiences across a variety of cultural contexts.

Prerequisites: ANTHRO 103.

SOCIOL 332 Sociology Of Political Life Credits: 3

The concept of power, community power structure and decision making. The social basis of liberal democracy; consensus and legitimacy; political stability and instability. Power and politics in a mass society; elites and masses; democracy and oligarchy; alienation; bureaucracy; pluralism and totalitarianism. Ideology and social movements.

SOCIOL 337 Community Development In Urban America Credits: 3

The focus in this course is on experiential learning in which the student participates in several urban community development projects that allow for learning about collaboratives, networking, problem-solving, and requisite skills to successfully manage a project. Principles of community development are presented to give the student background for understanding the projects visited.

SOCIOL 348 Latinx Immigrants, Migrants, and Refugees in the U.S Credits: 3

This course addresses the culture of societies of U.S. citizens, immigrants, and refugees of Latin American heritage living in the U.S. The course emphasizes recent anthropological, historical, cultural, and sociological studies.

SOCIOL 357 Social Movements Credits: 3

This course focuses on the link between social movements and political change in the modern world. Social movements arise outside official channels and against established political orders. Students will develop an understanding of the relation between social mobilization and institutional change in various countries, especially in the United States.

SOCIOL 358 Culture and Society Credits: 3

This course examines the "culture concept" at the heart of the contending theories of society, which is used to describe a society or way of life, a whole social order, or particular aesthetic styles and objects. The course links these various topics together in a concluding section on culture in the age of the Internet and globalization.

SOCIOL 359 Media and Society Credits: 3

This course examines the rise, development and change of mass media in American society from broadsheets and news flyers through contemporary media formats.

SOCIOL 361 Social Theory Credits: 3

A survey of the major orientations in social theory, their historical development, and contemporary issues and controversies in social theory.

Recommended preparation: A course in social science.

SOCIOL 362 Methods Of Sociological Research Credits: 3

Experimental and observational schemes; survey analysis; interview and questionnaire designs; scaling techniques; sampling. Recommended preparation: A course in Social Science.

SOCIOL 363 Introduction to Statistics in Sociology/Criminal Justice Credits: 3

A first course in the statistical analysis of quantitative data. Course emphasizes descriptive statistics, probability theory, parameter estimation, bivariate hypothesis testing, and computer applications.

Prerequisites: MATH 110 or higher, or STAT 115 or MOTRMATH 110.

SOCIOL 380 Technology and Society Credits: 3

This course will help students explore the ways technology shapes and is shaped by human interaction. Students will read interdisciplinary literature that builds theoretical and interpretive frameworks around classical and contemporary case studies. A fundamental question to be addressed throughout the course: how does the comparative study of technology help us understand what it means to be human?

SOCIOL 390R Directed Field Experience I Credits: 1-6

The student will work within one or more social agencies or organizations in the city under the joint supervision of a professional within the organization and a member of the Sociology Department. In-class discussion will cover the major problems of social organization.

SOCIOL 391 Directed Field Experience II Credits: 1-6

A continuation of SOCIOL 390R.

SOCIOL 397 Independent Readings In Sociology Credits: 1-3

Intensive readings in an area selected by the student with prior consultation with instructor. Recommended preparation: Twelve hours of sociology coursework.

SOCIOL 398 Independent Research In Sociology Credits: 1-6

Intensive research in an area selected by the student with prior consultation with instructor.

Prerequisites: Twelve hours of sociology.

SOCIOL 404WI The Sociology Capstone: Senior Seminar Credits: 3

This seminar explores the interrelationships between sociology theory, research methods, and statistics. It may focus on major contemporary issues building on and integrating knowledge obtained in previous courses. Recommended preparation: SOCIOL 362.

Prerequisites: SOCIOL 363.

SOCIOL 410R Aging In Contemporary Society Credits: 3

Attitudes and stereotypes, the status of the aged in American society; the social psychology of the aging process; the response of societal institutions such as the family and political system to the aging of the population as a whole. Applications and potentials of research are considered.

SOCIOL 411 Sociology Of Human Sexuality Credits: 3

A cross cultural examination of the most fundamental dichotomy in human society: male and female. Considering sex both as a biological and social category, this course compares diversity and similarity in the interrelationships of male and female in patterns of behavior and social organization found in human societies across time and space.

SOCIOL 418 Feminist Theories Credits: 3

This class introduces the major feminist theories and their primary authors over the last 200 years. The class takes both a historical view (beginning with two millennia of male-centered theories about women) and a conceptual approach (theories are grouped by common ground) and familiarizes the student with both the historical processes that necessitate feminist theories as well as with the breadth and depth of the historically and currently available scholarship.

Prerequisites: WGS 201.

SOCIOL 431 Social Organization Of The City Credits: 3

An examination of the social structure of the American city with special reference to the historical development of American cities. Attention will be focused on the role of social institutions as they have changed in relation to urban problems.

SOCIOL 433 Immigration and the City Credits: 3

This course examines key issues and controversies in immigration research. Special attention will be paid to the social, economic, and historical developments of urban immigrant communities.

SOCIOL 434 Spatial Thinking in Social Science Credits: 3

This course will review ways in which social scientists have incorporated the concepts of space, place, and distance into their theories and research. Readings will be drawn from interdisciplinary work in the areas of urban sociology, criminology, health and demography that deal with spatial organization of communities and cities, spatial disparity of health and crimes, and mobility.

Prerequisites: junior, senior, or graduate standing.

SOCIOL 440R Sociology Of Medicine Credits: 3

Relationship of basic concepts in sociology to health and medical care. Cultural and class variations in health status. Social and cultural aspects of health. Recommended preparation: A course in social science.

SOCIOL 441 Globalization and Development Credits: 3

Focuses on issues of economic development, social stratification, political institutions, and political mobilization in societies where colonialism provided the context for their long-term disadvantages in the international economic order. Specific attention is paid to the intersection of the international components that define the options and limits for societal development (e.g., market shifts, international institutions and contracts, foreign policies, and migration) and the distinct social, political and cultural implications of these factors for developing societies.

SOCIOL 5501 Social Theory I Credits: 3

Examines the development of social theory in Europe up to the beginning of the twentieth century, with a focus on its intellectual precursors of social theory, debates over the nature of society, and controversies over the distinct features of sociology as an emerging academic discipline. The major perspectives covered include the intellectual origins of sociological thought in Great Britain, France, and Germany, and the debates as reflected in the writings of Karl Marx, Emile Durkheim, Max Weber, and Georg Simmel.

Prerequisites: undergraduate course in Sociological Theory.

SOCIOL 5502 Social Theory II Credits: 3

Examines the major sociological theories developed during the twentieth century and contemporary debates over the nature of society and the nature of our knowledge about society. Theories to be examined include behaviorism, symbolic interactionism, structural functionalism, phenomenology, conflict theory, postmodernism, those that attempt to integrate social agency and structure, and feminist theory.

Prerequisites: SOCIOL 5501.

SOCIOL 5503 Controversies In Contemporary Social Theory And Practice Credits: 3

This course critically examines central issues in contemporary debates among social theorists over the nature of society and how it should be studied.

SOCIOL 5510 Sociological Methods I Credits: 3

A survey of methods used by sociologists: selection and formulation of problem, research design, survey research, participant observation, sampling, reliability and validity, use of scales, and data analysis.

Prerequisites: SOCIOL 362.

SOCIOL 5511 Sociological Methods II Credits: 3

Quantitative research is the primary focus of the course; emphasis is placed on problem formulation; research design; sampling procedures; questionnaire construction and interviewing techniques; data collection; problems of scaling, validity and reliability; uses of secondary data sets; data analyses and report writing.

Prerequisites: SOCIOL 362.

SOCIOL 5516 Intermediate Statistics Credits: 3

A systematic development of the logic and practice of selected statistical methods used in sociological research. Included are analysis of variance and covariance, regression analysis, multiple contingency, and non-parametric tests.

Prerequisites: SOCIOL 363 or CJC 303.

SOCIOL 5530 Anthropology Of Gender Credits: 3

This class explores theories of the social construction of gender in cross-cultural contexts. It will also explore global issues of diversity, local and international politics, the economy and work, education, etc.

SOCIOL 5531 Feminist Theories Credits: 3

This class introduces the major feminist theories and their primary authors over the last 200 years. The class takes both an historical (we begin with two millennia of male-centered theories about women) and a conceptual approach (theories are grouped by common ground) and familiarizes the student with both the historical processes that necessitate feminist theories as well as with the breadth of the historically and currently available scholarship. Graduate students are expected to fulfill all undergraduate requirements at graduate-level quality, including independent research components; in addition, graduate students are required to be prepared to lead class discussions.

Prerequisites: WGS 201.

SOCIOL 5534 Spatial Thinking in Social Science Credits: 3

This course will review ways in which social scientists have incorporated the concepts of space, place, and distance into their theories and research. Readings will be drawn from interdisciplinary work in the areas of urban sociology, criminology, health and demography that deal with spatial organization of communities and cities, spatial disparity of health and crimes, and mobility. Generic computer file management skills are required and knowledge of research methods is desirable.

SOCIOL 5537 Anthropology of Religion Credits: 3

This course explores the ways anthropologists have gone about studying religion from the opening decades of the 20th century to present. The course introduces students to the diversity of human religious expression and experience through anthropological literature and to the diversity of anthropological expression especially as it has been revealed in social scientific studies of religious life. The course is designed to generate a critical dialogue about the special role that religion has played in the ongoing anthropological engagement with "other" societies and cultures over time.

SOCIOL 5538 Gender, Work And Social Change Credits: 3

This course examines the role of gendered work and consumption in global social change. Drawing from sociological perspectives on gender and work, this course foregrounds a global comparative analysis of societal development and working contexts, including tourism employment, sex work, domestic work, and agricultural, garment, and informatics production. Graduate students are required to carry out independent research or complete work in the area of public sociology and academic-service learning. Students will write a conference paper or journal quality article from this research.

SOCIOL 5540 Urban Social Structure Credits: 3

An examination of the social structure of the American city with special reference to the historical development of American cities. Attention will be focused on the role of social institutions as they have changed in relation to urban problems.

SOCIOL 5550 Sociology Of Aging Credits: 3

A seminar in which theoretical orientations, methodologies, and findings from crosscultural and community research in gerontology are systematically reviewed, within a social change framework.

SOCIOL 5554 Sociology Of The Aging Woman Credits: 3

An exploration of the intersection of gender and aging issues with special attention to cultural images of women, the development of self-concept and identity in mid-life and beyond, caring roles in the family, work and retirement, and health and mental health issues. These issues are examined within the context of social class, race, and ethnicity. Implications for community programs and social policy are considered. Graduate students will be expected to carry out a research project and to lead a class session.

SOCIOL 5556 Aging And Developmental Disabilities Credits: 2

This course explores the experience of aging with a developmental disability or mental retardation within the context or normative aging. Among the comparisons made between older persons with and without developmental disabilities are their demographic characteristics, physical and cognitive functioning, role transitions and losses, identities and self-concepts, and family and caregiving issues. Policies, programs, and emerging concepts of best practices are considered within the context of quality of life, ethical, and community inclusion bases.

SOCIOL 5557 Practicum In Aging And Developmental Disabilities Credit: 1

Students gain experience in working with and defining issues of older persons with developmental disabilities through placements in sheltered workshops, senior centers, residential group homes, and other community-based programs.

Co-requisites: SOCIOL 5556.

SOCIOL 5560 Sociology Of Death And Dying Credits: 3

This course examines attitudes, behaviors, and institutions related to death and dying in contemporary American society. Topics include the meanings of death in American society, social settings for dying, interaction with the dying, customs and practices surrounding death, role transitions of survivors, and suicide. Special attention is given to issues of aging and dying.

SOCIOL 5573 Latin American Immigrants and Refugees in the U.S. Credits: 3

This course is the study of history, culture and societies of immigrants and US citizens of Latin American heritage living in the U.S.

SOCIOL 5580 Special Studies In Sociology Credits: 1-3

An opportunity to explore in depth topics not included in usual course offerings. One or more topics will be announced in advance of registration.

SOCIOL 5595 Directed Research Experience Credits: 3

Research project supervised by faculty.

SOCIOL 5597 Independent Readings Credits: 1-3

Intensive readings in an area selected by the student with prior consultation with the instructor.

SOCIOL 5599 Thesis And Research Credits: 1-6

Directed specialized research. Before writing a thesis, the student must clear the topic and research design with the Supervisory Committee. The course also involves the writing of the thesis.

SOCIOL 5699 Dissertation Research Credits: 1-12

Individual directed research leading to preparation and completion of doctoral dissertation.

SOCIOL 5899 Required Graduate Enrollment Credit: 1

Bachelor of Arts: Sociology

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Examine the role and relevance of the sociological perspective for contemporary social life. Thus students will gain knowledge of the fundamentals in Sociology, such as the foundations of human practice, belief, and organization.
- Reflect on contemporary issues and controversies in the academic discipline of Sociology. Thus students will be able to examine issues of inequality, cultural difference, and social stratification from a comparative perspective, applying sociological principles and concepts to their own lives.
- Explore the basic theoretical and methodological perspectives, both in the social sciences and in a chosen specialty area. Thus students will have the capacity to critically evaluate and engage contemporary issues, trends in theory, and instruments of social analysis.
- Advance the critical research, thinking, and writing skills that are integral to professional development and civic engagement. Thus students will apply the fundamentals of sociology to both experience and enhanced interest in community engagement.

Career Implications

The B.A. curriculum in sociology is designed to prepare students for a variety of career paths, including:

- Graduate level work in sociology degrees in order to become a professor, researcher, or applied social scientist.
- Entry-level positions throughout the business, human services, and government sectors. Employers look for people with the skills that an undergraduate degree in sociology provides.
- Careers in journalism, politics, public relations, business, or public administration—fields that involve the kind of investigative skills and ability to work with diverse groups that students encounter in the curriculum our faculty's expertise.
- Professions such as law, education, medicine, social work, and counseling—fields that all draw on the rich fund of knowledge from sociology.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
	Foreign Language (3rd Semester Level)	9
	Laboratory Science Experience	1
Total Credits		10

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
Required Coursework		
ANTHRO 103	Introduction To Cultural Anthropology	3
SOCIOL 101	Sociology: An Introduction	3
SOCIOL 361	Social Theory	3
SOCIOL 362	Methods Of Sociological Research	3
SOCIOL 363	Introduction to Statistics in Sociology/Criminal Justice	3
SOCIOL 404WI	The Sociology Capstone: Senior Seminar ¹	3
Major Electives		15
ANTHRO 308	The Social Life of Things	
ANTHRO 326	Consumer Society	
SOCIOL 203	Social Problems	
SOCIOL 211	Social And Psychological Development Through The Life Cycle	
SOCIOL 302	Social Stratification	
SOCIOL 306	Culture, Emotion, and Identity	
SOCIOL 310R	Families And The Life Course	
SOCIOL 313R	Sociology Of Gender	
SOCIOL 316	Sociology Of Death And Dying	
SOCIOL 320	Social Deviance	
SOCIOL 322	Race And Ethnic Relations	
SOCIOL 328	Body and Society	
SOCIOL 332	Sociology Of Political Life	
SOCIOL 337	Community Development In Urban America	
SOCIOL 348	Latinx Immigrants, Migrants, and Refugees in the U.S	
SOCIOL 357	Social Movements	
SOCIOL 358	Culture and Society	
SOCIOL/ANTHRO 380	Technology and Society	
SOCIOL 410R	Aging In Contemporary Society	
SOCIOL 411	Sociology Of Human Sexuality	
SOCIOL 418	Feminist Theories	
SOCIOL 431	Social Organization Of The City	
SOCIOL 433	Immigration and the City	
SOCIOL 434	Spatial Thinking in Social Science	
SOCIOL 440R	Sociology Of Medicine	
SOCIOL 441	Globalization and Development	
Total Credits		33

¹ All majors are required to take a writing intensive course within the Department of Sociology (SOCIOL 404WI fulfills this requirement).

Other degree requirements include:

1. A minimum grade of C- in all required core courses.
2. A 2.0 grade-point average in the 33 major credit hours.
3. Completion of the general degree requirements of the College of Arts and Sciences with a minimum GPA of 2.0.

4. No more than three one-credit courses of Special Topics in Sociology (SOCIOL 300__) may be used to fulfill sociology elective requirements.
5. A maximum of 6 hours from any combination of field experience, directed individual study and research will count toward the requirements.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		44

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
SOCIOL 101 ^{CC}		3 ENGLISH 225	3
GEFSE 101		3 STAT 115, MATH 110, or MATH 116	3
ENGLISH 110		3 COMM-ST 110 or 277	3
GECRT-SS 101		3 GECRT-SC 101	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ANTHRO 103 ^{CC}		3 SOCIOL 2XX/3XX Major Elective ^{CC}	3
GECRT-AH 101		3 GECUE 201	3

GECDV 201	3	HISTORY 101, 102, or POL-SCI 210	3
Foreign Language course (211)	3	Lab Science ^{LO}	1
General Elective	3	General Elective	3
		General Elective	3
	15		16
Third Year			
Fall Semester	Credits	Spring Semester	Credits
SOCIOL 361		3 SOCIOL 362	3
SOCIOL 363		3 SOCIOL 3XX/4XX Major Elective	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
	15		15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
SOCIOL 3XX/4XX Major Elective		3 SOCIOL 404WI	3
SOCIOL 3XX/4XX Major Elective		3 SOCIOL 3XX/4XX Major Elective	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective (3XX/4XX if needed)		3 General Elective	3
General Elective		3 General Elective	2
	15		14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Bachelor of Arts: Sociology - Cultural Anthropology Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Examine the role and relevance of the sociological perspective for contemporary social life. Thus students will gain knowledge of the fundamentals in Sociology, such as the foundations of human practice, belief, and organization.
- Reflect on contemporary issues and controversies in the academic discipline of Sociology. Thus students will be able to examine issues of inequality, cultural difference, and social stratification from a comparative perspective, applying sociological principles and concepts to their own lives.
- Explore the basic theoretical and methodological perspectives, both in the social sciences and in a chosen specialty area. Thus students will have the capacity to critically evaluate and engage contemporary issues, trends in theory, and instruments of social analysis.
- Advance the critical research, thinking, and writing skills that are integral to professional development and civic engagement. Thus students will apply the fundamentals of sociology to both experience and enhanced interest in community engagement.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3

Critical Thinking in Social & Behavioral Sciences (GECRT-SS)	3
Culture & Diversity Course (GECDV)	3
Civic & Urban Engagement Course (GECUE)	3
Total Credits	30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

College of Arts & Sciences Degree Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. Additional details are available in the Student Services (p. 1011) section of the catalog.

Code	Title	Credits
Writing Intensive Course (300-level or above; Satisfied in program requirements below)		
Foreign Language (3rd Semester Level)		9
Laboratory Science Experience		1
Total Credits		10

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Sociology majors at UMKC can earn a cultural anthropology emphasis within the undergraduate degree. As the comparative study of human societies, a cultural anthropology emphasis is uniquely poised to develop diversity awareness which is increasingly critical as the world becomes more global. To earn the cultural anthropology emphasis, in addition to the core major requirements, students must take 15 elective credit hours from the course list below. Nine of these 15 credit hours must be at the 300-level or higher. Completion of the emphasis is recorded on the student's transcript.

Code	Title	Credits
Required Coursework		
ANTHRO 103	Introduction To Cultural Anthropology	3
SOCIOL 101	Sociology: An Introduction	3
SOCIOL 361	Social Theory	3
SOCIOL 362	Methods Of Sociological Research	3
SOCIOL 363	Introduction To Statistics In Sociology/Criminal Justice	3
SOCIOL 404WI	The Sociology Capstone: Senior Seminar	3

Cultural Anthropology Emphasis Electives		15
ANTHRO 302	Social Stratification	
ANTHRO 305	Language and Culture	
ANTHRO 306	Culture, Emotion, and Identity	
ANTHRO 308	The Social Life of Things	
ANTHRO 322	Race And Ethnic Relations	
ANTHRO 326	Consumer Society	
ANTHRO 328	Body and Society	
ANTHRO 331	Urban Anthropology	
ANTHRO 348	Latinx Immigrants, Migrants, and Refugees in the U.S.	
ANTHRO 358	Culture and Society	
ANTHRO 373	Anthropology of Religion	
ANTHRO/SOCIOL 380	Technology and Society	
ANTHRO 407	Writing Culture: The Craft of Ethnography	
ANTHRO 441	Globalization and Development	
Total Credits		33

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		44

Other degree requirements include:

1. A minimum grade of C- in all required core courses.
2. A 2.0 grade-point average in the 33 major credit hours.
3. Completion of the general degree requirements of the College of Arts and Sciences with a minimum GPA of 2.0.
4. No more than three one-credit courses of Special Topics in Sociology (SOCIOL 300__) may be used to fulfill sociology elective requirements.
5. A maximum of 6 hours from any combination of field experience, directed individual study and research will count toward the requirements.

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
SOCIOL 101 ^{CC}		3 ENGLISH 225	3
GEFSE 101		3 STAT 115, MATH 110, or MATH 116	3
ENGLISH 110		3 COMM-ST 110 or 277	3
GECRT-SS 101		3 GECRT-SC 101	3
Foreign Language Requirement (110 or higher)		3 Foreign Language Requirement (120 or higher)	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ANTHRO 103 ^{CC}		3 ANTHRO 3XX/4XX Major Elective ^{CC}	3
GECRT-AH 101		3 GECUE 201	3
GECDV 201		3 HISTORY 101, 102, or POL-SCI 210	3
Foreign Language course (211)		3 Lab Science ^{LO}	1
General Elective		3 General Elective	3
		General Elective	3
		15	16

Third Year

Fall Semester	Credits	Spring Semester	Credits
SOCIOL 361		3 SOCIOL 362	3
SOCIOL 363		3 ANTHRO 3XX/4XX Major Elective	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
ANTHRO 3XX/4XX Major Elective		3 SOCIOL 404WI	3
ANTHRO 3XX/4XX Major Elective		3 ANTHRO 3XX/4XX Major Elective	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	2
		15	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

LO Lab Science course may be paired with associated Lecture course fulfilling General Elective hours

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

College of Arts & Sciences Student Services

09 Scofield Hall (basement)

<https://cas.umkc.edu/student-services/>

816-235-1148

Minor: Anthropology

Student Learning Outcomes

Students graduating from this program will:

- Examine the role and relevance of the anthropological perspective for contemporary social life. Thus students will gain knowledge of the fundamentals in Anthropology, such as the foundations of human practice, belief, and organization.
- Reflect on contemporary issues and controversies in the academic discipline of Anthropology. Thus students will be able to examine issues of inequality, cultural difference, and social stratification from a comparative perspective, applying anthropological principles and concepts to their own lives.
- Explore the basic theoretical and methodological perspectives, both in the social sciences and in a chosen specialty area. Thus students will have the capacity to critically evaluate and engage contemporary issues, trends in theory, and instruments of social analysis.
- Advance the critical research, thinking, and writing skills that are integral to professional development and civic engagement. Thus, students will apply the fundamentals of anthropology to both experience and enhanced interest in community engagement.

Anthropology is a holistic and cross-culturally comparative science that is uniquely qualified to prepare students for multicultural work and social environments in the U.S. and abroad. Careers for anthropologists, however, lie in all areas of human interaction. Anthropologists are especially attractive to companies and government agencies that work with and for national minorities and in foreign countries.

Students will be introduced to the subject and methods of cultural anthropology, examining its foundations and current trends in theory and applications. Students earning a minor in anthropology take 3 credit hours of required coursework (ANTHRO 103) and 15 credit hours of elective courses, which result in a total of 18 credit hours. At least 9 of the 18 credit hours must be in courses at the 300- or 400-level. Where courses are cross-listed in a major and a minor, only 6 credit hours can be applied to both. Only 3 credit hours can be shared between two minors. Students should consult with the program coordinator to select the appropriate courses. A minimum grade of C in ANTHRO 103 and a minimum overall GPA of 2.0 in the minor must be attained. No more than 6 of the 18 credits may be transferred from another institution.

Students are urged to confer with a department advisor to plan a minor. To declare a minor in anthropology, students must file a completed declaration form with a current copy of their transcript with the Anthropology Program Coordinator. Completion of the minor is recorded on the student's transcript

Code	Title	Credits
ANTHRO 103	Introduction To Cultural Anthropology	3
Elective Coursework (in consultation with advisor)		15
ANTHRO 302	Social Stratification	
ANTHRO 305	Language and Culture	

ANTHRO 306	Culture, Emotion, and Identity
ANTHRO 308	The Social Life of Things
ANTHRO 322	Race And Ethnic Relations
ANTHRO 326	Consumer Society
ANTHRO 328	Body and Society
ANTHRO 331	Urban Anthropology
ANTHRO 348	Latinx Immigrants, Migrants, and Refugees in the U.S.
ANTHRO 358	Culture and Society
ANTHRO 373	Anthropology of Religion
ANTHRO/SOCIOL 380	Technology and Society
ANTHRO 407	Writing Culture: The Craft of Ethnography
ANTHRO 441	Globalization and Development

Total Credits

18

Minor: Sociology

Student Learning Outcomes

Students graduating from this program will:

- demonstrate the ability to apply theoretical concepts to one's own life experiences. Specifically, students should be able to discuss how a theoretical framework can explain or elucidate a personal experience or a new or previously held belief about one's life or the social world in general.
- be able to communicate ideas in written form.

Students are urged to confer with a department advisor to plan a minor. To declare a minor, students must file a completed declaration form with the College of Arts and Sciences Advising Office. Completion of the minor is recorded on the student's transcript

Program Requirements

Undergraduate students can complete an 18-credit minor in Sociology. Course work must include the introductory course, SOCIOL 101, and at least 9 credits at the upper-division (300 or 400) level. Where courses are cross-listed in a major and minor, only 6 credit hours can be applied to both. A minimum grade of C- in SOCIOL 101 and a minimum overall GPA of 2.0 in the minor must be attained. Only 3 credit hours can be shared between minors. No more than 6 of the 18 credits may be transferred from another institution.

Code	Title	Credits
SOCIOL 101	Sociology: An Introduction	3
Program Electives:		15
ANTHRO 308	The Social Life of Things	
ANTHRO 326	Consumer Society	
SOCIOL 203	Social Problems	
SOCIOL 211	Social And Psychological Development Through The Life Cycle	
SOCIOL 302	Social Stratification	
SOCIOL 306	Culture, Emotion, and Identity	
SOCIOL 310R	Families And The Life Course	
SOCIOL 313R	Sociology Of Gender	
SOCIOL 316	Sociology Of Death And Dying	
SOCIOL 320	Social Deviance	
SOCIOL 322	Race And Ethnic Relations	
SOCIOL 328	Body and Society	
SOCIOL 332	Sociology Of Political Life	
SOCIOL 337	Community Development In Urban America	
SOCIOL 348	Latinx Immigrants, Migrants, and Refugees in the U.S	
SOCIOL 357	Social Movements	
SOCIOL 358	Culture and Society	
SOCIOL 361	Social Theory	
SOCIOL 362	Methods Of Sociological Research	

SOCIOL 363/CJC 303	Introduction To Statistics In Sociology/Criminal Justice
SOCIOL/ANTHRO 380	Technology and Society
SOCIOL 404WI	The Sociology Capstone: Senior Seminar
SOCIOL 410R	Aging In Contemporary Society
SOCIOL 411	Sociology Of Human Sexuality
SOCIOL 418	Feminist Theories
SOCIOL 431	Social Organization Of The City
SOCIOL 433	Immigration and the City
SOCIOL 440R	Sociology Of Medicine
SOCIOL 441	Globalization and Development

Total Credits

18

School of Social Work

Master of Social Work Program

5030 Cherry Street

(816) 235-1025

Fax: (816) 235-6573

soc-wk@umkc.edu

<http://cas.umkc.edu/socialwork> (<http://cas.umkc.edu/socialwork/>)

Mailing Address:

University of Missouri-Kansas City

School of Social Work

5100 Rockhill Road

Kansas City, MO 64110-2499

Director of Field Education: Professor Ile Haggins**MSW Program Director:** Professor Amy Simmons

Rosalyn Bertram, Ph.D., Associate Professor (children, child welfare, youth and families, wraparound and multi-systemic collaborative strengths-based practice, evidence-based practice, program implementation and evaluation, systems of care, research)

Ile Haggins, MSW, LCSW, Associate Teaching Professor, Director of Field Education (practice, children and family, cultural diversity, and mental health)

Adriana Paez, MSW, Assistant Teaching Professor, Coordinator of Field Education (human behavior, youth, young adults and mental health)

Sarah Pilgrim, Ph.D., Assistant Professor, (social welfare policy, research methods; scholarship: sexual health and decision making of adolescents in foster care through promotion of body image positivity and additional protective and promotive factors)

Robert Prue, Ph.D., Associate Professor (social work research methods, open source and freely available software for social workers, interface of indigenous health and healing supports with mainstream, spirituality and social work, veterans' issues, post-traumatic stress)

Amy Simmons, MSW, LCSW, Assistant Teaching Professor, MSW Program Director (community development, prevention, behavioral health, group practice, school social work, psychopathology)

Department Description

The School of Social Work offers a program of study leading to the master's in social work degree and a professional career in social work. Started in 1999, the MSW program is the result of collaborative efforts by the University of Missouri System, UMKC and many social service agencies in the Kansas City metropolitan area. The MSW program received initial accreditation in May 2003 with reaffirmation of accreditation granted in 2015.

Mission of the School of Social Work

The mission of the School of Social Work is to "Prepare competent, advanced generalist social work practitioners to meet the needs of multicultural diverse populations in a dynamic mid-western metropolitan context; to be culturally proficient, ethical leaders and service providers engaged in knowledge-driven, inter-professional, multi-systemic, community-based practice; who advocate for social and economical justice, enhance human well being, and support individuals' capacity to address their own needs."

Mission-derived goals of the School of Social Work are to:

- Demonstrate professional behavior and uphold the values and ethics of the profession that guide professional practice.
- Advance human rights and social, economic, and environment justice while actively engaging diversity and difference in all levels of practice.
- Engage in interdisciplinary scientific inquiry, through practice-informed research and research-informed practice.
- Implement practices to engage, assess, intervene, and evaluate families, groups, organizations, and communities, while utilizing critical thinking, knowledge of theoretical frameworks, and evidence-based practices.

Vision of the School of Social Work

UMKC School of Social Work will become a model urban, professional school recognized for its partnership within diverse communities to effectively collaborate and sustain a safe, more economically secure, and socially just quality of life.

Career Implications

Why consider an advanced degree in social work? Above all, the degree is flexible and versatile. For example, social workers are employed in public social service agencies, nonprofit organizations, medical settings, schools, community-based clinics and residential settings. The social work perspective looks not only at individual thoughts, feelings and actions, but also at the social environment as a primary arena for opportunities for change. On behalf of the people they serve, social workers have strong interests in social policy and advocacy, as well as social science research and policy and program evaluation.

- Social workers have the right education, experience, and dedication to help people help themselves whenever and wherever they need it.
- Social workers help people in all stages of life, from children to the elderly, and from all situations from adoption to hospice care.
- Professional social workers are the nation's largest providers of mental health services.
- According to the Bureau of Labor Statistics, the need for social workers is expected to grow twice as fast as any other occupation, especially in gerontology, home healthcare, substance abuse, private social service agencies, and school social work (BLS, 2010).

Program Description

The program educates Advanced Generalist Social Work practitioners for professional responsibilities at various levels with complex and dynamic human service organizations. To accommodate working students' schedules, many classes are scheduled for late afternoons, evenings and weekends.

Faculty members and students co-create empowering learning environments through group discussions, role play, experiential occurrences and readings that enable transformational learning.

The practice-oriented curriculum is focused on advanced generalist social work practice in an urban environment. The curriculum provides: theoretically based understanding to assess diverse human behaviors in varied social environments; skills for operating in a multidisciplinary agency and community environment; research methods with practical application to agency practice; and approaches to working with culturally diverse populations.

The full-time, regular MSW program offers a two-year, 60-credit curriculum combining classroom and field experience. For students who already have a B.S.W. degree, the full-time Advanced Standing program includes 36 credits during a spring or summer semester and one full-time year of coursework with a supervised field practicum. Students may attend the part-time program schedule, but must complete the MSW in four years.

The foundation year curriculum includes coursework in generalist social work practice, theory and skills, social policy, human behavior in the social environment, social work research and a generalist field practicum experience in a human service agency approximately 16 hours a week.

The concentration year curriculum focuses on advanced generalist methods within an urban context. The required curriculum includes courses in program evaluation, advance practice methods, and a capstone course (Integration Seminar). Under the guidance of their academic advisor and in light of their career plans, students select four electives with a requirement of at least one elective in Integrative content area and at least one elective in Advanced Methodological approaches to Social Work practice. Finally, a second field practicum for approximately 16 hours a week provides advanced generalist experience and supervision.

Field Practicum

The practicum program uses agencies throughout the metropolitan area to offer experiences at both foundation and advanced levels. Students typically spend approximately two days in the field and are mentored by an MSW practitioner employed by the agency. Students spend a required number of hours in face-to-face contact with clients, in agency meetings, in individual or group supervision, and in the community. In some cases, students who already are social service employees can arrange to complete one year of their field placements at their own agencies. Practicum can also be completed in a student's human service oriented work site, provided the Director of Field Education approves the same.

Admissions

The majority of applicants to MSW programs have a variety of undergraduate degrees. Some people have life or work experience in other fields and are ready for a career change. Others have worked in the human service field and are ready to pursue an MSW degree to advance in their careers.

- Applicants who hold a baccalaureate degree that, preferably, reflects a broad liberal arts base in the social, behavioral, or psychological sciences, or related disciplines, are encouraged to apply. The baccalaureate degree should be from an institution accredited in a manner accepted by UMKC.
- B.S.W. degrees from accredited programs may be considered for the advanced standing program if students have received a B.S.W. degree within the last five years.
- A minimum cumulative GPA of 3.0 is preferred. However, lower GPAs will be considered for provisional admission when combined with volunteer and work experience, or when there are extenuating circumstances.
- GRE is not required.

• **The UMKC application and School of Social Work application are both required. Applicants must provide narratives addressing the following:**

a. **Statement of Values and Ethics**

Attach a brief essay (2-5 typewritten, double-spaced pages) in which you address the following: The **NASW Code of Ethics** may be found at <https://www.socialworkers.org/about/ethics/code-of-ethics> (<http://www.socialworkers.org/pubs/code/default.asp>)

- i. Discuss your purpose for pursuing a Master's in Social Work.
- ii. Compare and contrast your personal value framework with the **NASW Code of Ethics'** values and principles.
- iii. In light of the Code of Ethics, what human needs do you hope to address as a professional social worker?
- iv. In light of the Code of Ethics, how will you infuse all of the six ethical principles into your future social work practice?
- v. Describe a personal life experience that challenged your values and ethics. How did you respond to this challenge?

b. **Preparation for Professional Training**

Read the prompts below and provide complete answers including specific examples (2-5 typewritten, double-spaced pages).

- i. Please explain any particular difficulties or successes in your undergraduate academic career.
- ii. How would you evaluate your academic experience up to this point in time?
- iii. Identify how you manage personal and professional challenges in your life.
- iv. What social supports do you have in place (or can you put in place) to assist with managing work, family and academic commitments?
- v. Identify the areas in which you need further learning and growth.

• **Advanced Standing Only**

Please provide a 3-5 page typewritten, double-spaced response to the following:

- a. Provide an overview of your field practicum experiences.
- b. Describe lessons learned from your field experiences. Provide specific examples.
- c. How do you think these lessons-learned will affect your future social work field experiences?
- d. In relation to the social work profession, in what areas do you need to further your personal and professional growth?

• **Additional Information**

- a. Use the forms provided to supply three references. Include a person able to judge your potential for social work (a social worker who has supervised you, an employer, or field instructor) and a person able to judge your writing, critical thinking, and academic potential.
- b. While personal interviews are not required, the MSW Admissions Committee may request a meeting with an applicant. Applicants with questions about the program may attend public information sessions, which are scheduled once a month in the Social Work office. See website for details (cas.umkc.edu/socialwork (<http://cas.umkc.edu/socialwork/>)).
- c. The program is inclusive and draws from a diverse applicant pool. Toward this end, program faculty members make regular community presentations to diverse groups. The program works with student organizations representing women, people of color, gay, lesbian, bisexual, and transgender people, international students, and students with disabilities. Individuals from diverse groups are encouraged to apply.
- d. For additional details, please refer to the Student Handbook pdf file at the School of Social Work website.
- e. UMKC University Application for Admission and its application fee are required. In addition you are required to submit all of the School of Social Work application material.

• **Application Checklist**

Please refer to the following checklist before sending materials:

- Application for Admission: Go to <https://www.umkc.edu/apply> (<https://www.umkc.edu/apply/>) to begin the online application process.
- All undergraduate and graduate transcripts.¹
- Application fee
- Statement of Values and Ethics Narrative
- Preparation for Professional Training Narrative
- Advanced Standing Narrative (if applicable)
- Letters of Reference (3)

¹ **You must personally request transcripts from previous schools you have attended.** Requests for official transcripts should be made as soon as possible to ensure timely receipt of these documents. In addition, applicants who either currently attend or have attended UMKC must make a new request for transcripts to be reported to the School of Social Work. For transcript assistance, please call (816) 235-1125. Individuals with speech or hearing impairments may call Relay Missouri at (800) 735-2966 (TT) or (866) 735-2460 (voice).

Application Deadlines

Advanced Standing

- October 1 to begin courses in Spring Semester
- February 1 to begin courses in Summer Semester

Regular Program

- March 1 to begin courses in Fall Semester

Note: All completed applications will be reviewed on a first-come, first-served basis

Midwest Student Exchange Program (MSEP)

MSEP is an interstate initiative established by the Midwestern Higher Education Commission to increase educational opportunities for students in its member states. MSEP enables residents of Kansas, Michigan, Minnesota, Missouri, Nebraska and North Dakota to enroll in designated institutions and selected programs outside their home state at reduced tuition levels.

Student Advising

Upon admission into the program, students must:

1. Read student handbook available on our website: cas.umkc.edu/socialwork (<http://cas.umkc.edu/socialwork/>)
2. Schedule a meeting with their academic advisor during the academic year to develop a plan of study.
3. Report any changes they make to the plan of study to their advisor.
4. Full-time students must meet the Director of Field Education and complete a field application form to select and finalize field placement.
5. Part-time students must meet the Director of Field Education at the end of their first year in the program, fill out the field application form and finalize field placement before the beginning of their second year in the program.

Professional Status

After graduation, students are well prepared to accept professional social work positions with populations at-risk in a variety of human service, mental health, medical, or community settings.

Both Missouri and Kansas offer an exam to license specialist clinical social workers after two years of supervised practice in direct services. For social workers who plan to practice at this level, Kansas statutes require completion of graduate or continuing education courses in psychopathology and diagnostic skills. Students who are considering clinical licensure in Kansas are encouraged to take SOC-WK 5560 as an elective prior to graduation from the MSW program.

Both Missouri and Kansas offer the following licenses for professional social workers:

- LBSW-Licensed Bachelor's Social Worker
- LMSW-Licensed Master Social Worker

Missouri also offers:

- LAMSW - Licensed Advanced Macro Social Worker

Faculty

Rosalyn M. Bertram² Professor of Social Work; BA (San Francisco State University); MSW (San Francisco University); Ph.D. (University of South Florida).

Ile Haggins² Associate Teaching Professor and Director of Field Education; BA (Oterbein University); MSW (University of Kansas).

Adriana Paez² Assistant Teaching Professor, MSW (University of Missouri-Kansas City)

Sarah Pilgrim² Assistant Professor of Social Work, BSW (Washburn University School of Social Work), MSW (University of Kansas, School of Social Welfare), Ph.D. (University of Kansas, School of Social Welfare)

Bob Prue² Associate Professor of Social Work; MSW, Ph.D. (University of Kansas)

Amy Simmons² Assistant Teaching Professor and MSW Program Director, BSW (University of Central Missouri), MSW (University of Missouri-Kansas City)

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

⁴ Located at UM-St. Louis campus

Graduate Graduate Degree:

- Master of Social Work (p. 1004)

Courses

SOC-WK 5510 Foundation Field Practicum I Credits: 3

Field practicum is a central component in the student's professional education. Field placements provide the student with a range of practice experience to incorporate theoretical learning and to develop the knowledge, values, and skills for professional social work practice. Learning takes place in community settings (16.25 hours weekly/260 hours per semester).

Prerequisites: SOC-WK 5530; SOC-WK 5534 (or as co-requisites).

Co-requisites: SOC-WK 5532, SOC-WK 5536.

SOC-WK 5511 Foundation Field Practicum II Credits: 3

The field practicum experience is continued from Foundation Field Practicum I (SOC-WK 5510), students will complete 16.25 hours weekly/260 hours in the spring semester. The foundation field practicum places emphasis on the application of skills for generalist social work practice in community settings preparing students for generalist social work practice within the micro, mezzo and macro frameworks.

Prerequisites: SOC-WK 5510; SOC-WK 5532; SOC-WK 5536; SOC-WK 5531 (or co-requisite); SOC-WK 5565 (or co-requisite).

Co-requisites: SOC-WK 5533; SOC-WK 5550.

SOC-WK 5512 Advanced Field Practicum I Credits: 3

The focus of the advanced field practicum is to develop mastery in the area of concentration by increasing skills in practice approaches, examining relevant policies, integrating theoretical learning and applying research knowledge. Field instruction takes place in community agency settings (16.25 hours weekly/260 hours per semester).

Prerequisites: SOC-WK 5511 or SOC-WK 5538.

Co-requisites: SOC-WK 5540, SOC-WK 5578.

SOC-WK 5513 Advanced Field Practicum II Credits: 3

The field practicum experience continues from Advanced Field Practicum I (SOC-WK 5512), completing 16.25 hours weekly/260 hours in the spring semester. The advanced field practicum places emphasis on the student's ability to select and use multiple approaches to social work within micro, mezzo and macro frameworks.

Prerequisites: SOC-WK 5512, SOC-WK 5540, SOC-WK 5578.

Co-requisites: SOC-WK 5541, SOC-WK 5579.

SOC-WK 5530 Human Behavior Theory Credits: 3

This course focuses on the critique, contextualization, and application of human behavior theory to social work practice with individuals in the social environment. The perspectives of social justice, empowerment, and strengths are emphasized.

SOC-WK 5531 Human Behavior: Macro Perspectives in the Social Environment Credits: 3

This theory course applies macro social work perspectives to the broader understanding of human behavior within large systems, organizations, communities, and society. Social justice, empowerment, and strengths perspectives are emphasized.

Prerequisites: SOC-WK 5530 (or co-requisite).

SOC-WK 5532 Foundation Social Work Practice I Credits: 3

This course examines the fundamental ethics, values, knowledge, and skills of generalist social work practice. In this course the first three steps of the Generalist Intervention Model are applied to effectively pre-plan, engage, and assess across all levels of practice (micro, mezzo, and macro).

Prerequisites: SOC-WK 5530, SOC-WK 5534 (or as co-requisites).

Co-requisites: SOC-WK 5510, SOC-WK 5536.

SOC-WK 5533 Foundation Social Work Practice II Credits: 3

This second generalist social work practice course involves interacting with evidence based practice models and group facilitation. Application of the final steps of the Generalist Intervention Model (planning, implementation/intervention, evaluation, termination, and follow-up) will be deployed across all levels of practice (micro, mezzo, and macro).

Prerequisites: SOC-WK 5510, SOC-WK 5532, SOC-WK 5536, SOC-WK 5531 (or co-requisite), SOC-WK 5565 (or co-requisite).

Co-requisites: SOC-WK 5511, SOC-WK 5550.

SOC-WK 5534 Social Welfare Programs and Policies Credits: 3

This course examines social policies that direct current social service trends at local, state, and federal levels. This course teaches a model of analysis that examines the context in which policy decisions are made and the effects that social service programs and policies have on people's lives.

SOC-WK 5536 Social Work Research Methods Credits: 3

This course introduces students to the fundamental knowledge and skills of social work research such as practice evaluation, program planning, and other facets of professional social work practice. Emphasis on application of social research methods in actual practice situations will be used to assist students in skill development.

Prerequisites: SOC-WK 5530; SOC-WK 5534 (or as co-requisites).

Co-requisites: SOC-WK 5510; SOC-WK 5532.

SOC-WK 5538 Advanced Standing Seminar Credits: 6

The Advanced Standing Seminar will provide a bridge between the bachelor of social work and the advanced level MSW Concentration year. This course is practice-centered and emphasizes knowledge, values, and skills, which are unique to social work and form our approach to generalist practice, human behavior, and research.

Prerequisites: Advanced Standing MSW Student.

SOC-WK 5540 Advanced Social Work Practice I Credits: 3

This course prepares students with an advanced generalist practice perspective in order to evaluate and integrate theory, values, and skills in a rapidly changing social work environment.

Prerequisites: SOC-WK 5511 or SOC-WK 5538.

Co-requisites: SOC-WK 5512.

SOC-WK 5541 Advanced Social Work Practice II Credits: 3

The course examines leadership, organizational, and management competencies for professional practice in social service agencies and skills for community organizing.

Prerequisites: SOC-WK 5540.

Co-requisites: SOC-WK 5512.

SOC-WK 5542 Gerontological Social Work Credits: 3

This course provides an overview of social service practice with older adults. The course examines population demographics, contextual aspects of aging, and approaches to effective advanced generalist practice in treatment and community settings.

SOC-WK 5544 Children, Families and their Communities: The Child Welfare System Credits: 3

This course examines child centered, family centered and neighborhood based child welfare policy and practice. Institute of Medicine reports and the Family First Prevention Services Act that funds evidence-based, research-informed and promising practices are closely examined in light of adoption of new programs and practices by Missouri and Kansas.

SOC-WK 5546 Behavioral Health and Addictions in Social Work Practice Credits: 3

This course provides the knowledge and skills necessary to effectively address mental illness, substance misuse or abuse, and co-occurring disorders within the framework of advanced generalist practice. In the course students will apply social work values, ethics, and competencies to advanced generalist practice skills with individuals, families, and groups experiencing mental health and substance abuse disorders.

SOC-WK 5547 Grief and Loss in Social Work Practice Credits: 3

This course provides a comprehensive study of grief and loss from a professional social work perspective that includes current theories, evidence-based frameworks, and intervention strategies from a strengths-based perspective. The course will address many forms of special losses, such as suicide, homicide, HIV/AIDS, war-related grief, bankruptcy, divorce and other life transitional events that may or may not involve death and dying.

SOC-WK 5549 Social Work Practice with Immigrants and Refugees Credits: 3

This course advances knowledge, skills and professional values for social work practice with immigrants and refugees covering the U.S. immigration system, migration processes, barriers to readjustment and cultural competency, and effective intervention on behalf of immigrants and refugees.

SOC-WK 5550 Program Evaluation Credits: 3

This course builds on the content of Research Methods and is designed to enable students to apply the methods of social research to the evaluation of Generalist Social Work Practice. This course employs an experiential learning technique that places students in an immersive experience that involves collaboration, research design, critical analysis of program intervention, and group process.

Prerequisites: SOC-WK 5510, SOC-WK 5532, SOC-WK 5536.

Co-requisites: SOC-WK 5531, SOC-WK 5565.

SOC-WK 5560 Psychopathology in Social Work Practice Credits: 3

This course utilizes the DSM to teach diagnostic criteria, while simultaneously examining ecological and systemic factors that contribute to diagnostic rates. Explore of the biopsychosocial factors which contribute to the accuracy and effectiveness of diagnosis and treatment will be covered.

Prerequisites: SOC-WK 5511 or SOC-WK 5538.

SOC-WK 5561 Social Work in Health Care Credits: 3

This course builds on a foundation of direct social work practice in the context of the health care systems in the United States. The social work role in the medical model will be analyzed along with the roles of nursing and allied health professionals.

Prerequisites: SOC-WK 5511 or SOC-WK 5538.

SOC-WK 5562 Family Organization and Development Credits: 3

This course focuses through The Family Life Cycle, a developmental stage theory that supports family-centered practice. The course provides skills to assess competent and constraining interactions and to use this assessment to identify contributing factors to family achievements and behaviors of concern.

SOC-WK 5563 Life Span Issues in Developmental Disabilities Credits: 3

The need for interdisciplinary process in the human services sector, which supports inclusiveness and quality of life of individuals, is covered. The course covers cultural competence, person-centered and community-based application of services for their implications in planning and delivery of services.

SOC-WK 5564 Advanced Group Interventions in Social Work Credits: 3

This course provides specialized learning in group interventions from an advanced generalist perspective. The course includes the broad spectrum of clinical uses for group as well as the application of group skills within community and administrative practice.

SOC-WK 5565 Systemic-Oppression: Social and Economic Justice Credits: 3

This course presents theoretical concepts that relate issues of social and economic injustice to structural and systemic oppression. This course examines formal and informal social policy that fosters the creation of support of oppressive social structures. A generalist and structural approach to social work engages the student in the examination of the barriers to justice and equality; ranging from internalization to globalization.

Prerequisites: SOC-WK 5534.

SOC-WK 5566 Family and Community Violence Credits: 3

This course examines the sources and forms of community and family violence and its impact on individuals, families and communities. Prevention and intervention models will be studied and developed.

Prerequisites: SOC-WK 5511 or SOC-WK 5538.

SOC-WK 5567 Collaborative Family-Centered Practice Credits: 3

This course presents the emergence, activities, and elements of collaborative family-centered practice. Multi-systemic Therapy and Wraparound are critically examined along with their implementation supports and challenges. Research supporting each model and its theory of change are closely examined.

SOC-WK 5568 School Social Work Practice Credits: 3

This course examines the knowledge and skills required for the roles and functions of school social work in K-12 settings. Students will apply various theories and evidence based practices to school social work, while developing an understanding of how to address the needs of students and their families within the context of school.

SOC-WK 5569 Core Concepts of Child and Adolescent Trauma Credits: 3

This course prepares students for trauma-informed, evidence-based practice. Based on core concepts, the course uses a problem-based learning approach through the use of in-depth case studies.

Prerequisites: SOC-WK 5511 or SOC-WK 5538.

SOC-WK 5575 Advanced Generalist Community Practice Credits: 3

This course covers community social work practice, addressing values, knowledge, and skills essential for community social change. Models of community practice are addressed to facilitate the development of skills in social planning, community development, and community collaboration strategies.

SOC-WK 5577 Sexuality in the Helping Professions Credits: 3

This course is a survey of issues related to integrating human sexuality across a lifespan in the practice of social services. Using a biopsychosocial perspective, emphasis will be placed on historical, political, social, cultural, familial, and individual differences in sexual and reproductive attitudes, values, and behaviors.

SOC-WK 5578 Capstone I Credits: 3

This course is the first half of a yearlong cohort-style course that provides concentration level MSW students the opportunity to critically and creatively present their field of interest in Social Work. The Capstone Course will integrate and apply all knowledge and skills learned previously in classroom, and will culminate in the student preparing for and presenting in the annual UMKC School of Social Work Conference held during the spring semester.

Prerequisites: SOC-WK 5512 (or co-requisite), SOC-WK 5540 (or co-requisite).

SOC-WK 5579 Capstone II Credits: 3

This course is the second half of a yearlong cohort-style course that provides concentration level MSW students the opportunity to critically and creatively present their field of interest in Social Work. The Capstone Course will integrate and apply all knowledge and skills learned previously in classroom, and will culminate in the student preparing for and presenting in the annual UMKC School of Social Work Conference held during the spring semester.

Prerequisites: SOC-WK 5513 (or co-requisite).

SOC-WK 5580 Special Topics In Social Work Credits: 1-3

These seminars are designed to examine relevant and innovative areas emerging in social work practice which are not available in the regular course offerings. Topics, instructors, and prerequisites are listed in the semester bulletin.

Prerequisites: Completion of foundation year.

SOC-WK 5590 Readings And Investigations In Social Work Credits: 1-3

Under the direction of a faculty member, individual students may pursue an in-depth area of study in generalist social work practice, including a research project of the student's choice.

SOC-WK 5899 Required Graduate Enrollment Credit: 1

One Hour Course required to remain continuously enrolled while the student finishes requirements for the Social Work degree.

Prerequisites: Permission of the Department

Master of Social Work

Student Learning Outcomes

Students graduating from this program will:

- Make ethical decisions by applying the standards of the NASW Code of Ethics, relevant laws and regulations, models for ethical decision-making, ethical conduct of research, and additional codes of ethics as appropriate to context (CSWE 1:1, SLO1)
- Use reflection and self-regulation to manage personal values and maintain professionalism in practice situations (CSWE 1:2, SLO2)
- Demonstrate professional demeanor in behavior; appearance; and oral, written, and electronic communication (CSWE 1:3, SLO3)
- Use technology ethically and appropriately to facilitate practice outcomes (CSWE 1:4, SLO4)
- Use supervision and consultation to guide professional judgement and behavior (CSWE 1:5, SLO5)
- Apply and communicate understanding of the importance of diversity and difference in shaping life experiences in practice at the micro, mezzo, and macro levels (CSWE 2:1, SLO6)
- Present themselves as learners and engage clients and constituencies as experts of their own experiences (CSWE 2:2, SLO7)
- Apply self-awareness and self-regulation to manage the influence of personal biases and values in working with diverse clients and constituencies (CSWE 2:3, SLO8)
- Apply their understanding of social, economic, and environmental justice to advocate for human rights at the individual and system levels (CSWE 3:1, SLO9)
- Engage in practices that advance social, and environmental justice (CSWE 3:2, SLO10)
- Use practice experience and theory to inform scientific inquiry and research (CSWE 4:1, SLO11)
- Apply critical thinking to engage in analysis of quantitative and qualitative research methods and research findings (CSWE 4:2, SLO12)
- Use and translate research evidence to inform and improve practice, policy, and service delivery (CSWE 4:3, SLO13)
- Identify social policy at the local, state, and federal level that impacts well-being, service delivery, and access to social services (CSWE 5:1, SLO14)
- Assess how social welfare and economic policies impact the delivery of and access to social services (CSWE 5:2, SLO15)
- Apply critical thinking to analyze, formulate, and advocate for policies that advance human rights and social, economic and environmental justice (CSWE 5:3, SLO16)
- Apply knowledge of human behavior and social environment, person-in-environment, and other multidisciplinary theoretical frameworks to engage with clients and constituencies (CSWE 6:1, SLO17)
- Use empathy, reflection, and interpersonal skills to effectively engage diverse clients and constituencies (CSWE 6:2, SLO18)
- Collect and organize data, and apply critical thinking to interpret information from clients and constituencies (CSWE 7:1, SLO19)
- Apply knowledge of human behavior and the social environment, person-in-environment, and other multidisciplinary theoretical frameworks in the analysis of assessment data from clients and constituencies (CSWE 7:2, SLO20)

- Develop mutually agreed-on intervention goals and objectives based on the clinical assessment of strengths, needs, and challenges, within clients and constituencies (CSWE 7:3, SLO21)
- Select appropriate intervention strategies based on the assessment, research knowledge, and values and preferences of clients and constituencies (CSWE 7:4, SLO22)
- Critically choose and implement interventions to achieve practice goals and enhance capacities of clients and constituencies (CSWE 8:1, SLO23)
- Apply knowledge of human behavior and the social environment, person-in-environment, and other multidisciplinary theoretical frameworks in interventions with clients and constituencies (CSWE 8:2, SLO24)
- Use inter-professional collaboration as appropriate to achieve beneficial practice outcomes (CSWE 8:3, SLO25)
- Negotiate, mediate, and advocate with and on behalf of diverse clients and constituencies (CSWE 8:4, SLO26)
- Facilitate effective transitions and endings that advance mutually agreed on goals (CSWE 8:5, SLO27)
- Select and use appropriate methods for evaluation of outcomes (CSWE 9:1, SLO28)
- Apply knowledge of human behavior and the social environment, person-in-environment, and other multidisciplinary theoretical frameworks in the evaluation of outcomes (CSWE 9:2, SLO29)
- Critically analyze, monitor, and evaluate intervention and program processes and outcomes (CSWE 9:3, SLO30)
- Apply evaluation findings to improve practice effectiveness at micro, mezzo, and macro levels (CSWE 9:4, SLO31)

Plan of Study

The following course of study is a typical schedule for a full-time student. Enrollment in some elective courses require completion of all foundation study. The plan of study is subject to change.

Regular Program

Year I			
Fall Semester	Credits	Spring Semester	Credits
SOC-WK 5510		3 SOC-WK 5511	3
SOC-WK 5532		3 SOC-WK 5533	3
SOC-WK 5530		3 SOC-WK 5531	3
SOC-WK 5534		3 SOC-WK 5565	3
SOC-WK 5536		3 SOC-WK 5550	3
		15	15
Year II			
Fall Semester	Credits	Spring Semester	Credits
SOC-WK 5512		3 SOC-WK 5513	3
SOC-WK 5540		3 SOC-WK 5541	3
SOC-WK 5578		3 SOC-WK 5579	3
Elective		3 Elective	3
Elective		3 Elective	3
		15	15

Total Credits: 60

Advanced Standing Program

Students who have received a Bachelor of Social Work degree from a Council on Social Work Education accredited program, may apply to our MSW program as "Advanced Standing."

Year I					
Summer Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
SOC-WK 5538	6	SOC-WK 5512	3	SOC-WK 5513	3
		SOC-WK 5540	3	SOC-WK 5541	3
		SOC-WK 5578	3	SOC-WK 5579	3
		Elective	3	Elective	3

Elective	3 Elective	3
6	15	15

Total Credits: 36

The graduate social work program grants the M.S.W. degree when students have completed the following degree requirements:

1. 60 credit hours of class (48 hours) and field (12 hours) for regular program students.
2. 36 credit hours of class (30 hours) and field (6 hours) for advanced standing students.
3. To remain in good standing, students must maintain a cumulative GPA of 3.0
4. Students take four electives (12 credit hours)

Code	Title	Credits
Elective Options		
SOC-WK 5542	Social Services With Older Adults	
SOC-WK 5544	Families, Communities and Child Welfare	
SOC-WK 5546	Mental Health and Substance Abuse in Social Work Practice	
SOC-WK 5547	Grief and Loss in Social Work Practice	
SOC-WK 5549	Social Work Practice with Immigrants and Refugees	
SOC-WK 5560	Psychopathology: A Competency Based Assessment Model in Social Work Practice	
SOC-WK 5561	Social Work in Health Care	
SOC-WK 5562	Family Organization and Development	
SOC-WK 5563	Life Span Issues in Developmental Disabilities	
SOC-WK 5564	Advanced Group Interventions in Social Work	
SOC-WK 5566	Family and Community Violence	
SOC-WK 5567	Collaborative Strengths-Based Practice: Multi-System Interventions	
SOC-WK 5568	School Social Work Practice	
SOC-WK 5569	Core Concepts of Child and Adolescent Trauma	
SOC-WK 5575	Advanced Generalist Community Practice	
SOC-WK 5577	Sexuality and Social Work Practice	
SOC-WK 5580	Special Topics In Social Work	
SOC-WK 5590	Readings And Investigations In Social Work	
PUB-ADM 5526	The Politics of Administration	
PUB-ADM 5548	Leadership for Public Service	
LAW 8815S	Leadership In Disability Studies: A Multidisciplinary Approach	

Women's, Gender, and Sexuality Studies

(816) 235-1116

wgs@umkc.edu

<http://cas.umkc.edu/wgs> (<http://cas.umkc.edu/wgs/>)

Mailing Address

Dr. Brenda Bethman, Director
 Women's and Gender Studies Program
 University of Missouri-Kansas City
 Haag Hall, Room 208
 5120 Rockhill Road
 Kansas City, MO 64110-2499

Program Description

First established in the 1980s, Women's, Gender and Sexuality Studies (WGSS) at UMKC is one of 650 such programs in the United States. WGSS is both an inter- and multi-disciplinary academic program devoted to the critical analysis of how gender, race, class, ethnicity, and sexuality contribute to the diversity of women's and men's experiences. The program's interdisciplinary nature and cross-cultural academic training broadens students' understanding of gender and the experiences of women and men, girls and boys, in all cultures and societies. By placing gender at the center of scholarly inquiry, we not only examine the assumptions, methods, insights, and claims of the traditional academic curriculum but broaden it through our research interests, publications, and courses to add cutting edge feminist research, scholarship, and activism.

The WGSS program offers an undergraduate minor as well as an internship. WGSS courses are offered by numerous UMKC departments, and a full list of courses scheduled is available every semester from the WGSS office.

A minor in Women's, Gender and Sexuality Studies requires 18 credits. Nine credits must be in upper division courses (that is, 300 and 400) and no more than nine credits may overlap with your major. Reading courses on selected topics may be arranged with individual faculty members.

More information is available at the program website at <http://cas.umkc.edu/wgs> (<http://cas.umkc.edu/wgs/>).

Educational Goals and Student Learning Outcomes

The educational goals for students in the Women's, Gender and Sexuality Studies program are:

- To explore the historical development and contemporary manifestation of gender-based inequalities.
- To generate new knowledge about women's lives and resistances in U.S. and global contexts.
- To advance critical research, thinking and writing skills as integral to professional development and political engagement.
- To foster understandings about how to transform inequalities of race, class, gender, sexuality and nations through direct engagement with communities in service learning.

Specifically, students will have the opportunity to acquire certain knowledge, skills and experience:

Knowledge

Students studying Women's, Gender and Sexuality Studies will acquire knowledge about:

- The multidisciplinary nature and interdisciplinary methods of Women's, Gender and Sexuality Studies scholarship.
- The historical and contemporary cultural, social, political and economic contexts of gender in the United States and globally.
- The interaction of gender with other culturally constructed categories, such as race, age, sexuality, etc., in order to foster a greater understanding of diversity.

Skills

Students studying Women's, Gender and Sexuality Studies will have the skills to:

- Think across disciplines.
- Understand and utilize the theories and methods of the various disciplines that contribute to Women's, Gender and Sexuality Studies.
- Apply their knowledge to a variety of careers in business, nonprofit work and the public sector, as well as be qualified for graduate studies in any social science.
- Be knowledgeable activists for the human rights of all women and men, irrespective of cultural biases and stereotypes.

Experience

Students studying Women's, Gender and Sexuality Studies will be experienced in:

- Academic research and analysis in a variety of academic fields and disciplines.
- Professional and respectful interactions with disagreeing others in public discussions of gender issues (students will become teachers).
- Maintaining a recognition of human diversity and analyzing each human issue from a race, class and gender perspective (at a minimum).

Undergraduate

Undergraduate Degrees:

- Minor in Women's, Gender, and Sexuality Studies (p. 1008)

Courses

WGS 1EC Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1ED Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1EE Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1EF Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1EG Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1EH Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1EI Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 1EJ Women Gender Studies Elective Credits: 99
Transfer Credit

WGS 201 Introduction To Women's, Gender, and Sexuality Studies Credits: 3

This class provides an introduction to the interdisciplinary field of women's, gender, and sexuality studies. The focus of this course will be the many ways gender is integral to our understanding of our world and the communities in which we live.

WGS 301 Introduction to Feminist Theory Credits: 3

This course covers a wide variety of feminist theories and theoretical perspectives, primarily since the 1960s, and is devoted to understanding and evaluating this body of work and the insights and possibilities for change that it suggests.

WGS 3EA UL Women Gender Studies Elect Credits: 99
Transfer Credit

WGS 3EB UL Women Gender Studies Elect Credits: 99
Transfer Credit

WGS 3EC UL Women Gender Studies Elect Credits: 99
Transfer Credit

WGS 3ED UL Women Gender Studies Elect Credits: 99
Transfer Credit

WGS 405 Special Topics In Women's, Gender, and Sexuality Studies Credits: 1-3

Each time this course is offered a different area of Women's and Gender Studies will be covered. This course may be repeated for credit when the topic changes.

WGS 408 Gender, Health, and Development in Senegal Credits: 3

This course examines women's economic empowerment, health education initiatives, philanthropy, and social entrepreneurship in West Africa and Senegal in particular. In the main city of Dakar we will visit indigenous and global nonprofits to study their policies and processes. The culture, both urban and rural, will be experienced in order to provide a unique perspective on the Senegalese and their culture.

WGS 484 Women's, Gender, and Sexuality Studies Internship Credits: 1-4

The Women's, Gender, and Sexuality Studies Internship Program is an opportunity for undergraduate students to gain on-site experience. Students will receive 1-4 hours of academic credit while learning and working in off- or on-campus placements. Students will engage in the ongoing feminist effort to integrate research with social activism as they apply academic knowledge to their work experience and consider how practical experience informs or alters theory. Internship experiences may take place on or off-campus, such as at the UMKC Women's Center or a local battered women's shelter. The Women's Center Director serves as coordinator for all internship experiences.

Prerequisites: WGS 201.

WGS 499 Women's, Gender, and Sexuality Studies: Senior Seminar Credits: 3

This capstone course focuses on research leading to a term paper on a Women's, Gender, and Sexuality Studies Topic.

Minor in Women's, Gender, and Sexuality Studies

Student Learning Outcomes

Students graduating from this program will:

- explore the historical development and contemporary manifestation of gender-based inequalities.
- generate new knowledge about women's lives and resistances in U.S. and global contexts.
- advance critical research, thinking and writing skills as integral to professional development and political engagement.
- foster understandings about how to transform inequalities of race, class, gender, sexuality and nations through direct engagement with communities in service learning.

The minor in WGSS offers an excellent inter- and multi-disciplinary curriculum that examines women, girls and gender throughout history and across cultures. WGSS courses teach critical thinking through an examination of the historical and contemporary problems facing women locally, nationally and globally. Students expand their understanding of gender difference, cultural diversity and social change as they complete an 18-hour program of study from among a wide variety of classes in numerous fields and disciplines. WGSS courses in history, sociology, psychology, criminal justice, English, religion, political science, law and other areas enable students to pursue a specialized focus which enhances their major in the humanities, social sciences or natural sciences. The minor also provides sufficient flexibility to allow for the creation of a course of study especially suited to the individual interests of students.

Program Requirements

A minor in Women's, Gender, and Sexuality Studies requires 18 credits. Nine credits must be in upper division courses (that is, 300 and 400) and no more than nine credits may overlap with your major. Reading courses on selected topics may be arranged with individual faculty members.

Code	Title	Credits
Required Courses		
WGS 201	Introduction To Women's, Gender, and Sexuality Studies	3
WGS 301	Introduction to Feminist Theory	3
Additional Courses		
Approved social sciences and humanities courses ¹		12
ANCH 304	Telling Stories: History, Memory, and American Life	
ART-HIST 315	Arts Of African and New World Cultures	
BLKS 321	The Black Family and Male-Female Relationships	
CJC 430	Women, Crime And Criminal Justice	
CJC 431	Hate & Bias Crimes	
ENGLISH 123	True Lives: Autobiographical Arts and Acts	
ENGLISH 242	Women Writing/Women Reading	
ENGLISH 344WI	Women & Literary Culture: Genre Focus	
ENGLISH 433	Histories Of Writing, Reading, And Publishing	
ENGLISH 441	Girls And Print Culture	
ENGLISH 450	Special Readings	
ENGLISH 455	Studies In The Novel 1740-1900	
HLSC 325	Human Sexuality	
HISTORY 369	Women and Work in Early America	
HISTORY 412A	Medieval Women & Children	
HISTORY 428A	History Of The Body	
LLS 201	Introduction to Latinx and Latin American Studies	
POL-SCI 345	Women and Politics	
PSYCH 305	Psychology of Gender	
SOCIOL 101	Sociology: An Introduction	
SOCIOL 306	Culture, Emotion, and Identity	
SOCIOL 310R	Families And The Life Course	
SOCIOL 411	Sociology Of Human Sexuality	
SOCIOL 418	Feminist Theories	
SOCIOL 440R	Sociology Of Medicine	
Total Credits		18

¹ The remaining 12 hours must include a minimum of 3 hours of social sciences credit and 3 hours of humanities credit and be chosen from an approved list of courses. No more than three credits from 100 level courses can count towards the minor.

Special Opportunities

- Fellowships & Awards (p. 1010)
- Dual Credit High School/College Partnerships (HSCP) (p. 1010)
- Independent Study (p. 1010)
- Scholarships (p. 1010)
- Student Council (p. 1010)
- Study Abroad (p. 1010)
- Undergraduate Research (p. 1011)

Arts and Sciences Student Council

The council aims to provide an interdisciplinary body in which students can provide input on decisions and policies of the College of Arts and Sciences. The council works to enhance student-faculty interaction and communication; allocate its authorized budget; and ensure that Arts and Sciences students' needs, desires and attitudes are correctly represented to the administration.

Dual Credit High School/College Partnerships (HSCP)

The College offers advanced students in many Kansas City area high schools the opportunity to earn UMKC credit prior to high school graduation through High School/College Partnerships (<http://www.umkc.edu/hscp/>). Qualified students may enroll in introductory college courses that meet general requirements for a bachelor's degree.

Fellowships and Awards

UMKC's Study Abroad and Global Engagement (SAGE) Office assists students who want to apply for major fellowships that support continued undergraduate study and graduate school. The SAGE website identifies an extensive list of these fellowships for both national and international study, including, but not limited to the Truman, Goldwater, Udall, Fulbright, Rhodes, Marshall, Jack Kent Cooke, NSEP Boren, and Rotary. These are highly competitive awards that demand careful planning and a commitment of time and effort. All fellowships require applicants to have a high GPA. In addition, typical eligibility criteria include a record of community service, evidence of undergraduate research or original work, strong faculty references, and a commitment to future academic or public service. A number of the fellowships require an on-campus review and nomination before a candidate can move forward to the national competition. Most of these fellowships provide substantial financial support as well as opportunities for travel and specialized seminars with fellow grantees. For additional information please call (816) 235-5759 or visit <https://info.umkc.edu/international> (<http://www.umkc.edu/international/>).

Independent Study

The opportunity to undertake independent study is offered by many departments in the College of Arts and Sciences to students who qualify. Generally, the student receives the individual attention of a professor in the chosen field of study and completes a project that may involve any topic considered appropriate by that professor to the academic needs of the student. Typical kinds of independent study include: special reading topics, creative work in the humanities, research projects, performances in the arts or fieldwork experiences.

Scholarships

For scholarship information please visit <http://cas.umkc.edu/scholarships/>

Study Abroad

International Academic Programs

Student Success Center, Room 120

(816) 235-5759

<http://www.umkc.edu/international> (<http://www.umkc.edu/international/>)

In collaboration with International Academic Programs, the College of Arts and Sciences helps make available to its students a variety of study abroad programs that provide an exciting way to add a global dimension to their UMKC education through exploring and sharing the cultures of other countries.

Study abroad programs are available for a summer, a semester or an academic year. Students can earn credit towards their degree, and with careful planning, they should lose no time toward graduation. Study abroad is affordable since financial aid and scholarships are applicable to many programs, and other grants and scholarships are available specifically for study abroad.

The exchange university consortium, Mid-American Universities International, InterFuture, foreign exchanges offered through the Department of Foreign Languages and Literatures, and the Missouri-London program are among the many program choices available. Among the possible destinations are:

- Argentina
- Australia
- Austria
- Belgium
- Chile
- Costa Rica
- Czech Republic
- Denmark

- England
- Finland
- France
- Germany
- Greece
- Iceland
- Ireland
- Italy
- Korea
- Lithuania
- Malta
- Mexico
- Netherlands
- New Zealand
- Norway
- Portugal
- Scotland
- Slovenia
- South Africa
- Spain
- Sweden
- Switzerland

For more information regarding study abroad and related scholarships, please visit <http://www.umkc.edu/international> (<http://www.umkc.edu/international/>). Additionally, the UMKC Study Abroad Coordinator is available at (816) 235-5790.

Undergraduate Research

Undergraduate research opportunities are available in many disciplines within the College of Arts and Sciences. Interested students should speak with faculty members in their major department. When selecting a faculty mentor for undergraduate research, students should consider their own research or creative project ideas, courses they have taken, as well as faculty research interests.

Student Services

- Advising System (p. 1011)
- Applied Language Institute (p. 1013)
- Study Abroad (p. 1020)
- General Undergraduate Degree Requirements & Information (p. 1017)
- Major and Minor Requirements (p. 1018)
- Degree Requirements (p. 1014)
- Credit by Examinations (p. 1014)

Advising System

Scofield Hall, Room 9
711 E. 51st Street
(816) 235-1148
<https://cas.umkc.edu/student-services/> (<http://cas.umkc.edu/advising/>)

Our Vision

Guiding, supporting, and inspiring students to achieve academic excellence

Our Mission

The mission of the UMKC College of Arts and Sciences (CAS) Student Services Office (<https://cas.umkc.edu/student-services/>) is to guide students toward academic success in higher education.

Advisors within the College of Arts & Sciences (CAS) are directly responsible for advising current and prospective Arts and Sciences undergraduate students on general education requirements and how to apply them to their degree program. Advisors assist students with selecting majors, monitoring academic progression, and fulfilling graduation requirements while educating them on campus resources, university policies and procedures, and options for graduate or professional schools. Advisors are role models who teach students how to navigate through the educational journey, encouraging students to actively engage themselves in their education. The CAS Student Services Office creates an atmosphere promoting autonomous life-long learning where students accept responsibility and ownership for their personal academic progression, degree completion, and goal achievement.

Advisors within CAS are committed to serve as a bridge among students, faculty, and staff. The CAS Student Services Office provides training and development for professional and faculty advisors to ensure they are effectively meeting the needs of students. Advisors support CAS's commitment to educate students in the arts and sciences, providing them with a breadth of knowledge valuable to the intellectual and social community. Advising allows for the promotion of understanding of these general education goals which play a key role in the development of students becoming productive contributors to society. Due to the unique relationship between advisors and students, advisors play an integral role in recruitment, retention, and student success for CAS and UMKC as a whole.

As students progress through their higher education journey at UMKC, advisors in CAS Student Services foster and faculty advisors in CAS departments encourage students toward achieving academic success.

Faculty and Staff Advisors

- Assist students in choosing majors and planning their academic programs.
- Inform students about the general education requirements of CAS and relate them to their major requirements.
- Advise students on class selection and registration.
- Offer advice on educational and career goal setting.
- Assist students in locating support services on campus.
- Review degree audits and perform graduation status checks.
- Connect students with faculty on campus.
- Review academic policies and procedures with students.
- Help students with other related issues and problems of an academic nature.

Academic advising responsibilities are distributed among faculty advisors and professional advisors in CAS in the following manner:

- Undergraduate and graduate faculty advisors in each department or program:
 - Advise students in their major field of study.
 - Advise students about departmental student organizations as well as internship or undergraduate research opportunities within the department.
 - Advise students concerning graduate study requirements.
- Professional and graduate assistant advisors in the CAS Student Services Office:
 - Advise undergraduate students for general and overall degree requirements.
 - Advise bachelor of liberal arts students.
 - Advise students who are on probation.
 - Help all undergraduates with special requests and problems.
 - Evaluate transfer courses.
 - Review degree audits prior to graduation on all bachelor's degree-seeking students.
 - Communicate with individual students and with the Registration and Records Office to confirm that all degree requirements will be met in the graduating semester.

While academic advising is not required for all students, it is recommended that students seek academic advising each semester to avoid problems later. Certain undergraduate majors do require academic advising each semester. Students required to secure an advisor's approval and release before enrolling include:

- All freshmen.
- All sophomores with 45 or fewer credit hours.
- Probationary students.
- Students requesting overloads or credit/no credit option.
- Undergraduate majors in film & media arts, history, physics, and studio art.
- Graduate majors in English, geosciences, and sociology.

When the next semester's course schedule is published in Pathway, students should contact their academic advisor. Students who promptly seek academic advising have a better chance of securing their first choice of courses and times. While the CAS Student Services Office sees students on an appointment as well as walk-in basis, most faculty advisors require an appointment.

Faculty advisors in each department assist graduate students in planning their academic programs and inform them about the degree requirements of the programs. Graduate students required to secure an advisor's approval before enrolling include majors in chemistry, English, geosciences, and sociology.

Applied Language Institute (ALI)

5301 Rockhill Road
816- 235-1233
816-235-5437 (fax)
<http://www.umkc.edu/ali> (<http://www.umkc.edu/ali/>)

Program Description

The Applied Language Institute (ALI) is a joint program of UMKC and The Metropolitan Community College (MCC). The Institute's mission is to offer comprehensive English-as-a-Second-Language (ESL) instruction for academic, personal or professional purposes as well as language acquisition and cross-cultural classes and seminars. In addition, the Institute aims to provide students with an understanding of U.S. culture and values, particularly within the educational environment, while acknowledging and valuing students' own cultures and languages.

Our intensive ESL program offers up to 27 hours of instruction per week in Listening/Speaking, Reading/Vocabulary, Grammar, Writing, U.S. Culture, and Test of English as a Foreign Language (TOEFL) Preparation. Classes are small and offered at all levels of instruction from beginning through advanced. In addition, students have access to a multimedia language resource center. Our teaching and administrative staff is friendly, supportive, and understanding of the needs of international students in the United States.

Regular programs run from late August through December (Fall), January through May (Spring), and June and July (Summer). Additionally, the ALI offers a variety of specialized short-term and group programs that include language and cultural/academic education.

English Proficiency Requirement

Proficiency in English is essential to success in academic programs at UMKC. The ALI's role at UMKC is to ensure that all non-native English speakers either already have, or have an opportunity to acquire these necessary skills. Prior to enrollment, newly-admitted ALI students, and international academically-admitted students who have a TOEFL score below 100, or an IELTS score below 6.5 are required to take the English Evaluation Examination administered by the ALI. Based on results of the English Evaluation Examination, students must enroll in and successfully complete the ALI coursework indicated as necessary. For academic students, coursework is determined by the ALI in consultation with the student's academic unit.

The only international students exempted from this admissions policy are:

- Native English speakers from English-speaking countries such as Canada, England, the Republic of Ireland, Australia and New Zealand.
- Non-native English speakers who hold degrees or diplomas from post-secondary institutions in English-speaking countries (such as the United States, Canada, England, the Republic of Ireland, Australia and New Zealand), provided that they have spent a minimum of two years of successful full-time study and English was the medium of instruction.

Grades and GPA

All ALI coursework is graded according to UMKC policies and is used in the calculation of a student's grade point average (GPA).

- **Academic Probation and Ineligibility**
 - Academic status is assessed at the end of every term, whether the student is full time or part time for that term.
 - A summer session is considered the same as a semester for the purpose of determining academic actions.
 - Students are notified of academic actions via their UMKC e-mail address.
 - Students will be placed on academic probation if their GPA falls below 2.0.
 - Once students are placed on academic probation, they have two semesters to raise their cumulative GPA to the level required (2.0 for undergraduate students, 3.0 for graduate students).
 - During those two semesters, students term GPA must be at least 2.0 for undergraduate students and 3.0 for graduate students to be allowed to continue. (Note: some academic units may have higher GPA requirements.)
 - Students who fail to meet the criteria as stated above will be ineligible to re-enroll without permission of the College of Arts and Sciences Academic Standards Committee
- **Credit/Non-Credit**

- ALI students registered as pass/fail, who fail two or more courses during an academic term, will be placed on academic probation.
- Students who are placed on academic probation must not fail one or more courses per semester during the following two academic semesters.
- Students who fail to meet the criteria as stated above will be ineligible to re-enroll without permission of the College of Arts and Sciences Academic Standards Committee.

Faculty

Tammy Adams; lecturer; B.A. (University of the Pacific, CA); M.A. (University of Missouri-Kansas City)

Juanita Blackton; adjunct instructor; B.B.A (Eastern Michigan University); MA (University of Central Missouri)

Chelsey Butts; adjunct instructor; B.A. (Tulane University); M.S.E., M.A. (University of Kansas)

Kathryn DeBenedetti; lecturer; B.A. (Southern Oregon University); M.A. (Canterbury Christ Church University, Kent, England)

Shelby Estelle; adjunct instructor; B.S. (University of Nebraska); M.A. (University of Central Missouri)

Deborah Garza; adjunct instructor; B.A., M.A. (University of Kansas)

Talyn Good; lecturer; B.A. (University of Missouri); M.A. (University of Kansas)

Stephen Holland-Wempe; ESL specialist; B.A. (Rockhurst University); M.A. (School for International Training)

Joseph (Clint) Hughes; lecturer; B.A. (Southwest Missouri State University)

Emily Kirklin; adjunct instructor; B.A. (Michigan Technology University); M.A.T. (University of Southern California)

Alma (Estelle) Manning; adjunct instructor; B.A., M.A. (University of Missouri-Kansas City)

Michael Meeder; adjunct instructor; B.A. (Sarah Lawrence College); M.A. (Arizona State University)

Monica Mingucci; director; B.A. (University of São Paulo); M.A. (Central Missouri State University); PhD (University of Missouri-Kansas City)

Patrick Mitchell; lecturer; B.A. (Rockhurst University); M.A. (University of Missouri-Kansas City)

Janine O'Shea; lecturer; B.A. (University of Kansas); M.A. (University of Missouri-Kansas City); M.B.A. (Rockhurst University)

Fiorillo (Phil) Ruggiero; lecturer; B.A. (Queens College); M.A. (University of Kansas)

Samantha Sagastume; lecturer; B.A. (Northwest Missouri State University); M.A. (University of Missouri-Kansas City)

Charles Sailors; adjunct instructor; B.A. (Southern Nazarene University); M.A. (Nazarene Theological Seminary)

Adam Shoemaker; associate director; B.A. (Rockhurst University); M.A. (University of Missouri-Kansas City)

Michael Turner; lecturer; B.A. (Truman State University); M.A. (University of Oregon)

Deirdre Wood; adjunct instructor; B.A. (Drake University); M.A. (New York University)

Credit by Examination

Students may gain credit by any or all of the four methods listed below:

- International Baccalaureate (IB) (<http://www.umkc.edu/registrar/transfer-credit/default.asp>).
- Advanced Placement (AP) (<http://www.umkc.edu/registrar/transfer-credit/default.asp>).
- College Level Examination Program (CLEP) (<http://www.umkc.edu/registrar/transfer-credit/default.asp>).
- Departmental Exam (<http://www.umkc.edu/registrar/transfer-credit/default.asp>).

See the General Undergraduate Academic Regulations and Information section of this catalog for additional information.

Degree Requirements

Requirements for Bachelor's Degrees

The College of Arts and Sciences values the distinctive benefits of a traditional liberal arts education for students and society and therefore adds these degree requirements to work in tandem with UMKC Essentials (p. 479).

The College of Arts and Sciences offers three degree options: the bachelor of arts, the bachelor of liberal arts, and the bachelor of science.

General Differences between B.A., B.L.A and B.S. General Requirements

The CAS degree requirements for the bachelor of arts, the bachelor of liberal arts, and the bachelor of science degrees are the same, with the following exceptions:

- Only the bachelor of arts degree requires foreign language (competence at the third-semester level)
- Only the bachelor of liberal arts degree requires a minor (not a major).
- Only the bachelor of science degree requires a minimum of 60 hours in math and science.

CAS Degree Requirements

1. Junior/Senior-level Writing Intensive Course.

Upper-level (300/400 level) Writing Intensive courses are designated with WI, PW or LW following the course number. One Writing Intensive courses must be completed during the junior or senior year and after completion of English 225 (or its equivalent).

2. Foreign Language

Bachelor of arts students are required to demonstrate competence at the third-semester level of a foreign language.

- a. Students with high school or other foreign language experience are strongly recommended to take the language placement exam, which can be accessed on the Department of Foreign Languages and Literatures website (<http://cas.umkc.edu/foreignlanguages/>).
- b. Students who have satisfactorily completed two years of a foreign language in high school will be exempt from the 110 college-level course and will be required to complete only two additional courses (120 college-level and above) in the same foreign language. Students who completed four years of the same foreign language in high school must complete only one additional sophomore level (211 or above) course in the same language.
- c. Credits earned in HSCP dual enrollment courses in high school count as courses taken in the Foreign Languages and Literatures department.
- d. UMKC currently recognizes specific scores on the AP and IB foreign language exams to count as credit earned, so these credits would be recognized as fulfilling the first year (110 and 120) of the language requirement. Inquiries may be directed to an academic advisor in the Arts and Sciences Academic Advising Office, 9 Scofield Hall.
- e. Students whose education through eighth grade or the equivalent has been in a language other than English and in a non-English speaking country shall be exempt from the foreign language requirement for the CAS degree requirements. Students must bring an exemption form to the Department of Foreign Languages and Literatures for an official signature. Students who cannot document their schooling as indicated above, but who are proficient in all four skills (reading, writing, speaking, understanding) of a language other than English may be able to take a proficiency test. The test should be certified by the American Council of Teachers of Foreign Languages (ACTFL) or a similar accrediting agency. Contact the Department of Foreign Languages and Literatures for information about such exams and the level of proficiency required for exemption from the foreign language requirement.
- f. Students will not receive college credit towards a degree for any of the above exemptions. If a student skips over a class, for whatever reason, the student will not get credit as if the class had been taken.
- g. Students who have had more than two years of a foreign language in high school may not enroll in the 110-level course of that language at UMKC without specific permission of either the section head/coordinator for that language or the chair of the Department of Foreign Languages and Literatures in cases where there is no course coordinator (i.e., students who have taken three or more years of French may not enroll in FRENCH 110, those who have taken three or more years of Spanish may not enroll in SPANISH 110, and the same for all other languages taught at UMKC).
- h. Heritage speakers may not enroll in 110-level courses without permission of the language coordinator or section head for their language, or the chair of the Department of Foreign Languages and Literatures in cases where there is no course coordinator. (Note: A heritage speaker is someone who grows up with a certain family language in the home which is different from the dominant language in the country. In the case of the United States, the dominant language is English. A student who grows up in a family in which they speak Spanish, Chinese, Arabic, Russian, etc., would be a heritage speaker of that language.)

3. Laboratory Science Experience.

Every student must take one laboratory science in any science area.

4. Missouri Constitution course.

Every student must fulfill the Missouri state requirement to take a course covering the United States Constitution and the Missouri State Constitution before graduation. Courses that currently satisfy this requirement are:

- a. POL-SCI 210
- b. HISTORY 101, HISTORY 102
- c. CJC 364;

5. Additional Requirements and Restrictions:

- a. A minimum of 120 total credit hours is required for graduation.
- b. A minimum of 30 credit hours of coursework must be taken at UMKC.
- c. At least 36 credit hours must be taken at the 300/400 level.

- d. At least 12 credit hours must be taken at the 300/400 level in the major department at UMKC.
- e. A 2.0 overall GPA is required for graduation. However, the required major GPA may be higher, as determined by each department individually.
- f. A maximum of 3 hours of one-credit activity courses in physical education may be applied toward the 120 credit-hour minimum.

Transfers with an Associate of Arts Degree from a Regionally Accredited Institution

Students transferring into the College of Arts and Sciences with an Associate of Arts degree from either another regionally accredited Missouri institution or from a regionally accredited Kansas institution must complete the following requirements for baccalaureate degrees in the College:

Bachelor of Arts

- Foreign Language 211 (or equivalent).
- Junior/senior-level Writing Intensive course.

Bachelor of Liberal Arts

- Junior/senior-level Writing Intensive course.

Bachelor of Science

- Junior/senior-level Writing Intensive course.
- 60 credit hours minimum (including hours in the major) in math and science.

Transfers with Certified 42-hour block from another Missouri Institution

Students transferring into the College of Arts and Sciences with a certified 42-hour block of general education credit from another Missouri institution must complete the following requirements for baccalaureate degrees in the College:

Bachelor of Arts

- Foreign Language 211 (or equivalent).
- Junior/senior-level Writing Intensive course.

Bachelor of Liberal Arts

- Junior/senior-level Writing Intensive course.

Bachelor of Science

- Junior/senior-level Writing Intensive course.
- 60 credit hours minimum (including hours in the major) in math and science.

UMKC's 42-Credit Hour Certified General Education Core for Students Transferring to Another Missouri Institution

College of Arts and Sciences students wishing to complete the 42-hour core should consult with an academic advisor in the Arts and Sciences Academic Advising Office, 9 Scofield Hall.

Anthropology	Social and Behavioral Sciences
Architecture	Arts & Humanities
Art/Art History	Arts & Humanities
Black Studies	Social and Behavioral Sciences (selected courses) and Arts & Humanities (selected courses)
Classical/Ancient Studies	Social and Behavioral Sciences (selected courses), Arts & Humanities (selected courses), and Science & Math (selected courses)
Communication Studies	Arts & Humanities
Criminal Justice/Criminology	Social and Behavioral Sciences
Economics	Social and Behavioral Sciences
English Language/Literature	Arts & Humanities
Environmental Science	Science & Math
Environmental Studies	Social and Behavioral Sciences
Family Studies	Social and Behavioral Sciences
Foreign Language/Literatures	Arts & Humanities

Geography	Social and Behavioral Sciences (selected courses) and Science & Math (selected courses)
Geology	Science & Math
Gerontology	Social and Behavioral Sciences
History	Social and Behavioral Sciences
Humanities	Arts & Humanities
Latina/Latino Studies	Social and Behavioral Sciences (selected courses) and Arts & Humanities (selected courses)
Mathematics and Statistics	Science & Math
Natural Science	Science & Math
Philosophy	Arts & Humanities
Physical Science	Science & Math
Physics and Astronomy	Science & Math
Political Science	Social and Behavioral Sciences
Psychology	Social and Behavioral Sciences
Religious Studies	Arts & Humanities
Social Science	Social and Behavioral Sciences
Social Work	Social and Behavioral Sciences
Sociology	Social and Behavioral Sciences
Urban Planning & Design	Social and Behavioral Sciences
Urban Studies	Social and Behavioral Sciences
Women's & Gender Studies	Arts & Humanities (selected courses) and Social and Behavioral Sciences (selected courses)

General Undergraduate Degree Requirements & Information

Registration Approvals

In addition to the information below, see the earlier College of Arts and Sciences (CAS) section entitled Advising System.

All new students and students who have fewer than 45 credit hours are required to secure an advisor's approval to register for classes. In addition, undergraduate majors in film and media arts, history, physics, and studio art, and graduate students in English, geosciences, and sociology must secure an advisor's approval to register.

Any student on academic probation, requesting an overload, or requesting the credit/no credit option, must secure an advisor's approval before completing registration.

Students must have permission of the instructor or faculty advisor before they are allowed to register in Directed Field Experience, Directed Readings, Individual Research or any other courses specified by a department.

All students in CAS are also subject to any special signatures required by other academic units at UMKC.

Repeated Courses

If a course is repeated at one of the four UM campuses, the hours and grade points of both the original and repeated courses are used in computing the grade-point average. Only the earned hours from the last repeated enrollment will apply toward degree requirements or total hours required for graduation.

Hour and GPA Requirement

A minimum of 120 hours is required for graduation. Of those hours, 36 must be at the 300-400 level. A minimum cumulative grade-point average of 2.0 is required as well as a 2.0 in the major. (Some majors have additional GPA requirements. Students should consult the appropriate section of this catalog for their major.)

Professional School Credit

A maximum of 30 acceptable semester hours (2.0 GPA or better) of study in professional schools may be applied toward the bachelor's degree. Acceptable professional schools for this purpose are law and medicine. This credit is elective credit and does not satisfy any specific degree requirement.

Writing Intensive Requirement

Writing Intensive courses, designated with WI, PW, or LW following the course number, are intended to help students learn to express themselves formally and coherently in discursive prose. Writing in this connection is to be regarded not as a corpus of art or information to which students should be exposed, but as a crucial skill, the teaching of which is among the primary missions of CAS. It is assumed that extended and intensive writing can be equated with contemplation and concentration on the subject matter; students learn by writing in any field.

Each Writing Intensive course includes several writing assignments and these assignments form an integral part of students' efforts to progress in the course. A review and revision cycle is used with systematic feedback. The students' writing might address philosophical concerns, methods, or specific topics, but their work is always based on exposure to published expository writing. While the exercises may take different forms, they may include:

1. Prewriting; e.g., outlines, journals, free-writing exercises and organizational notes.
2. Submission of preliminary drafts for oral and written responses by the instructor (peer response also might be incorporated).
3. Revision of content, organization, mechanics and style.

Students will prepare a number of different assignments of varying lengths and intent. An extended essay or term paper is expected in all Writing Intensive classes. Examinations may incorporate essay questions.

Graduation Procedure

After completion of 75-90 credit hours, students should apply for graduation (<https://www.umkc.edu/registrar/academic-programs/graduation/>) in Pathway. After the application is filed, CAS Student Services will review the degree audit and notify students of their status towards degree completion through UMKC Connect. Students will be sent a "Flag" or "Kudo" in UMKC Connect that indicates:

- Any remaining general education core and CAS degree requirements.
- Any deficiencies for the major/minor. Students are referred to their faculty advisor for any questions pertaining to major or minor portions of the degree audit.
- Remaining minimum hours, junior/senior level hours, residence requirements, minimum major and minor hours, and grade-point average.

If students have not already met with the faculty advisor for their program to review the major/minor portions of the degree audit, then they are encouraged to do as soon as the application for graduation is submitted.

There are several other important components of the graduation process that the student is solely responsible for completing:

- All students are required to take HEIghten, administered by the Assessment Office.
- Students with majors must complete the Major Field Exam, if it is required for their program.
- Students should review their degree audit every semester to make sure they are still making progress towards graduating during the semester for which they have applied.
- Students are responsible for making sure their address and telephone numbers are correct in the student information system.
- Students must check their UMKC e-mail account regularly for important and relevant graduation and other information.
- Any incomplete grade on a student's transcript must be completed and recorded in the Registrar's Office by the end of the semester in which he/she is graduating.
- Any missing transcripts must be received by the Office of Admissions by the end of the semester in which a student is graduating.

Reapplying for Graduation

If a student does not graduate in the semester for which he/she has applied, he/she must reapply for graduation (<https://www.umkc.edu/registrar/academic-programs/graduation/>). CAS cannot extend a student's application to the next semester without written notification from the student.

Exceptions

Exceptions to academic regulations must be approved by the Academic Standards Committee of CAS. To seek exceptions, students must file a "Petition for Exception" form in the CAS Student Services Office, 9 Scofield Hall.

Major and Minor Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. The College of Arts and Sciences (CAS) strongly encourages students to consult faculty advisors and the UMKC Career Services Office counselors for assistance in choosing suitable academic and career goals. To select a major or minor, students must file a "Declaration of Major" form in the CAS Student Services Office, 9 Scofield Hall. For specific major or minor requirements, see the program requirements described in the appropriate academic departmental section of the catalog.

Degree Program Major

The undergraduate degree-seeking student in CAS must fulfill the requirements for a degree program (major) as specified in the appropriate part of this catalog. The minimum is 30 semester hours.

A minimum of 12 semester hours at the upper-level (300/400-level) in the degree program (major) must be earned in the major department at UMKC. A minimum of a C average in the major is required.

CAS encourages students to seek advising early in their academic careers regarding choice of a major. Students must file a formal "Declaration of Major" form in the CAS Student Services Office in order to declare or change their major.

Multiple Majors

See Multiple Major & Double Degree Policy (p. 489) under Undergraduate Regulations and Information.

Combined and Double Degree Programs

For information on Double Degree, see Multiple Major & Double Degree Policy (p. 489) under Undergraduate Regulations and Information.

In coordination with several of the professional schools, CAS students may earn combined degrees. Combined degree programs are offered in law and medicine. In the combined degree program, 30 credit hours in the professional schools may count toward the fulfillment of the baccalaureate degree. All degree requirements of the College must be fulfilled. The professional hours are generally considered upper-level elective (blanket) credit. In this manner, the two degrees are earned concurrently and the student's program is accelerated considerably. Students are advised to check with the advising offices of the appropriate schools before making their plans.

Minor Program

An academic minor in CAS is required for the bachelor of liberal arts program, but is optional for the bachelor of arts and bachelor of science programs, and should be declared no later than the beginning of the student's senior year.

A minimum of 18 hours is required in a minor area. At least nine of those hours must be upper-division courses. The courses and total number of hours are determined by the CAS department or interdisciplinary program granting the minor. A minimum of nine hours for the minor must be earned at UMKC.

A student interested in a minor should consult a faculty advisor. Minors offered in CAS include the following: actuarial science; anthropology; art history; art and visual communication; astronomy; studio art; bioethics and medical humanities; black studies; classical and ancient studies; communication studies; criminal justice and criminology; economics; English creative writing; English language and literature; English manuscript, print culture, and editing; English writing; environmental studies; environmental sustainability; film studies; French; geography; geology; German; German studies; gerontology; history; international studies; latinx and Latin American studies; mathematics; medieval and early modern studies; philosophy; physics; political science; psychology; sociology; Spanish; studio art; urban studies; and women's, gender, and sexuality studies.

Exceptions

Exceptions to CAS policies must be approved by the Academic Standards Committee of CAS. To seek exceptions, students must file a "Petition for Exception" form in the CAS Student Services Office, 9 Scofield Hall.

Pre-Professional Programs

Prerequisites for advanced professional programs in law and the health professions can be satisfied as a part of any degree program in the College of Arts and Sciences.

Pre-Medicine, Pre-Dentistry and Pre-Health Advising

Please see the additional catalog section on *Pre-Medicine/Pre-Health* for more detailed information on pre-medicine, pre-dentistry and pre-health.

Program Coordinator:

Cynthia Eick McDonald

Scofield Hall (<http://www.umkc.edu/virtualtour/scofield.asp>), Room 9

711 East 51st Street

(816) 235-6098

Some of the most popular pre-professional programs in health care include:

- Pre-Dental Hygiene
- Pre-Dentistry
- Pre-Medicine (allopathic and osteopathic)

- Pre-Occupational Therapy
- Pre-Optometry
- Pre-Physical Therapy
- Pre-Respiratory Therapy
- Pre-Veterinary Medicine

Pre-Law Advising

Specific details on the College's pre-law program can be found in the *Pre-Law* section of this catalog.

Program Coordinator:

Nicholas Chappell

Scofield Hall (<http://www.umkc.edu/virtualtour/scofield.asp>), Room 9
711 East 51st Street
(816) 235-5874

Study Abroad Programs

International Academic Programs

Student Success Center, Room 120

(816) 235-5759

<http://www.umkc.edu/international> (<http://www.umkc.edu/international/>)

In collaboration with International Academic Programs, the College of Arts and Sciences helps make available to its students a variety of study abroad programs that provide an exciting way to add a global dimension to their UMKC education through exploring and sharing the cultures of other countries.

Study abroad programs are available for a summer, a semester or an academic year. Students can earn credit towards their degree, and with careful planning, they should lose no time toward graduation. Study abroad is affordable since financial aid and scholarships are applicable to many programs, and other grants and scholarships are available specifically for study abroad.

The exchange university consortium, Mid-American Universities International, InterFuture, foreign exchanges offered through the Department of Foreign Languages and Literatures, and the Missouri-London program are among the many program choices available. Among the possible destinations are:

- Argentina
- Australia
- Austria
- Belgium
- Chile
- Costa Rica
- Czech Republic
- Denmark
- England
- Finland
- France
- Germany
- Greece
- Iceland
- Ireland
- Italy
- Korea
- Lithuania
- Malta
- Mexico
- Netherlands
- New Zealand
- Norway

- Portugal
- Scotland
- Slovenia
- South Africa
- Spain
- Sweden
- Switzerland

For more information regarding study abroad and related scholarships, please visit <http://www.umkc.edu/international> (<http://www.umkc.edu/international/>). Additionally, the UMKC Study Abroad Coordinator is available at (816) 235-5790.

Conservatory

James C. Olson Performing Arts Center (<http://www.umkc.edu/virtualtour/performing-arts.asp>)
 4949 Cherry Street
 (816) 235-2900
conservatory@umkc.edu
<http://conservatory.umkc.edu/>

Mailing Address

University of Missouri-Kansas City
 Conservatory of Music and Dance
 4949 Cherry Street
 Kansas City, MO 64110-2229

Dean:

Diane Helfers Petrella

Associate Dean of Academic and Faculty Affairs:

Andrew Granade

Associate Dean for Enrollment Management and Performance/Operations:

James Snell

Associate Dean for Undergraduate Studies:

Aidan Soder

Accreditation

UMKC is an accredited institutional member of the National Association of Schools of Music (1933), the National Association of Schools of Dance (2008), the Council for the Accreditation of Educator Preparation (1961), and the North Central Association of Colleges and Schools.

Scholarships

Scholarships or Special Awards

Scholarships are available to Conservatory students and are awarded on the basis of ability (demonstrated at the audition) and academic standing. Scholarships are awarded for one year but can be renewed annually, provided students maintain the appropriate grade level, continue satisfactory performance in the major performance area, and participate in major ensembles as prescribed.

Applicants for Conservatory scholarships must complete all regular admissions procedures in order to be considered.

In accordance with the code of ethics of the National Association of Schools of Music, the acceptance of financial aid by a candidate is considered a declaration of intent to attend the institution, and each candidate will be so informed. The code further declares that such a student may not consider any other offer from an institutional member of the NASM except with the written consent of the music executive of the first institution. Similarly, a transfer applicant cannot be considered for financial aid without the written recommendation of the head of the music department from which the transfer is being made.

Faculty

*** Members of UMKC Graduate Faculty # Members of UMKC Doctoral Faculty + Located at UM-St. Louis campus**

Gary Bernard Abbott; assistant professor of dance (modern).

***Marita A. Abner**; assistant teaching professor (bassoon); M.M. (Yale University); B.A. (Swarthmore College).

Michelle Alexander; assistant teaching professor ; D.M.A. (University of Minnesota); M.M. (New England Conservatory of Music)

#*Keith Benjamin; curators' distinguished professor of music (trumpet); D.M.A. (Eastman School of Music); M.M. (University of Northern Iowa); B.M.E. (Morningside College).

Mitch Butler; associate professor (jazz studies); D.M.A. (University of Texas-Austin)

#*Jane M. Carl; professor of music (clarinet); D.M.A. (University of Michigan); M.M. (University of Michigan); B.M. (University of Michigan).

Sean Chen; Milsap artist in residence

#*Chen Yi; Lorena Searcy Cravens/Millsap/Missouri Distinguished Professor of Music (composition); D.M.A. (Columbia University); M.A. (Central Conservatory of Music, Beijing); B.A. (Central Conservatory of Music, Beijing).

#*JoDee Davis; associate professor of music (trombone); D.M. (Indiana University); M.M. (University of Northern Iowa); B.M. (University of Northern Iowa).

#*Steven D. Davis; Rose Ann Carr Millsap Missouri Distinguished Professor of Music (conducting, wind symphony); M.M. (University of Minnesota); B.M.E. (Florida State University).

#*Alison DeSimone; assistant professor of music (musicology); Ph.D. (University of Michigan); B.A. (Vassar College).

***Beth Loeber Elswick**; associate teaching professor of music (music theory); D.M.A. (University of Missouri - Kansas City); M.S.Ed. (Missouri State University); B.M., B.S. (University of Arizona; Missouri State University).

#*William A. Everett; curators' distinguished professor of music (musicology); Ph.D. (University of Kansas); M.M. (Southern Methodist University); B.M., summa cum laude (Texas Tech University).

#*Raymond Scott Feener; associate professor of music (voice); D.M.A. (Florida State University); M.M. (Ohio University); B.M. (Ohio University).

***Hali Fieldman**; associate professor of music (music theory); Ph.D. (University of Michigan); M.M. (Eastman School of Music); B.M. (Peabody Institute).

***Joseph Genualdi**; professor of music (violin); Artist Diploma (The Curtis Institute).

Alon Goldstein; Jack Strandberg/Missouri Endowed Chair and Distinguished Visiting Professor in Piano; M.M. (Johns Hopkins University)

#*Andrew Granade; professor of music (musicology); Ph.D. (University of Illinois); M.M. (University of Illinois); B.M. (Ouachita Baptist University).

***Martin Hackleman**; associate teaching professor of music (horn).

#*Lani Hamilton; assistant professor of music (music education); Ph.D. (University of Texas - Austin); M.M. (University of Texas - Austin); B.M. (University of Miami)

Dee Anna Hiett; associate professor of dance (modern).

#*Celeste Johnson; associate professor of music (oboe); M.M. (Eastman School of Music); B.M. (University of Illinois).

David Justin; associate professor of dance (ballet); M.A. (University of Birmingham, U.K.); Certificate (Royal Academy of Dramatic Arts, London).

***Maria Kanyova**; associate professor of music (voice); D.M.A. (University of Kansas); M.M. (University of Kansas); B.M.E. (UMKC Conservatory of Music and Dance).

#*Benny Kim; associate professor of music (violin); M.M. (The Juilliard School); B.M. (The Juilliard School).

#*Scott Lee; associate professor of music (viola); M.M. (Mannes College of Music); B.M. (The Juilliard School)

Kenneth Lidge; associate teaching professor of music (music theory); D.M.A. (University of Missouri - Kansas City); M.M. (University of Illinois-Champaign); B.M.E. (University of Wisconsin-Eau Claire).

#*Michael Mermagen; associate professor of music (cello); M.M. (The Juilliard School); B.M. (Peabody Conservatory).

#*Dale W. Morehouse; associate professor of music (voice, opera); M.M. (SUNY-Binghamton); B.A. (University of Central Florida).

#*Joseph Parisi; professor of music (music education, instrumental music); Ph.D. (Florida State University); M.M. (Florida State University); B.M. (State University College of New York at Potsdam).

***Diane Helfers Petrella**; professor of music (piano, piano pedagogy); D.M.A. (University of North Texas); M.M. (University of Wisconsin-Madison); B.M. (Eastern Illinois University).

#*Nicholas Petrella; adjunct professor of percussion; D.M.A. (University of Iowa).

***Natalia Rivera;** associate teaching professor of music (vocal coach-accompanist, foreign language for singing); D.M.A. (University of Kansas); M.M. (University of Minnesota); B.M. (New England Conservatory).

***Amy Robertson;** assistant professor of music (music therapy); Ph.D. (Florida State University); M.M.T. (Florida State University); B.M. (Oklahoma City University).

#*Charles R. Robinson; professor of music (music education, choral music); Ph.D. (Florida State University); M.A. (California State University, Long Beach); B.M.E. (Florida State University).

#*Thomas Rosenkranz; associate professor (piano); D.M.A. (Eastman School of Music).

***Paul Rudy;** curators' distinguished professor of music (composition); D.M.A. (University of Texas at Austin); M.M. (University of Colorado, Boulder); B.A. (Bethel College).

#*Zachary Shemon; associate professor of music (saxophone); M.M. (University of Michigan); B.M. (University of Michigan).

#*James Snell; associate professor of music (percussion); D.M.A. (University of Missouri - Kansas City); M.M. (Southern Methodist University); B.M. (University of Illinois).

#*Aidan Soder; associate professor of music (voice); D.M.A. (Rice University); M.M. (Rice University); B.M. (University of Nebraska at Omaha).

#*Thomas Stein; associate professor of music (tuba, euphonium); M.M. (University of Michigan); B.M. (University of Michigan).

#*David Thurmaier; associate professor of music (music theory); Ph.D. (Indiana University); M.A. (Eastman School of Music); B.M. (University of Illinois-Champaign).

Ronald G. Tice; associate professor of dance (ballet); B.F.A. (University of Minnesota).

***Sarah Tyrrell;** associate teaching professor of music (musicology); Ph.D. (University of Kansas); M.M. (New England Conservatory); B.M. (Kansas State University).

***Robert Watson, Jr.;** William and Mary Grant/Missouri Endowed Professor in Jazz Studies (jazz saxophone); B.M. (University of Miami).

#*Zhou Long; distinguished professor of music (composition); D.M.A. (Columbia University); B.A. (Central Conservatory of Music, Beijing, China).

Emeritus Faculty

Olga Ackerly; associate professor emeritus of music (musicology); Ph.D. (University of Kansas); M.Ph., M.A., M.M. (Manhattan School of Music); B.M. (Manhattan School of Music).

Inci Bashar; professor emeritus of music (voice); LL.B (University of Istanbul); (Istanbul's Civic Conservatory of Music); (Hochschule fur musick, Munich); (Ankara State Opera Studio); (Former member of the Cologne, Dortmund and Istanbul state operas).

Shirley Bean; associate professor emeritus of music (music theory); D.M.A. (University of Missouri - Kansas City) M.M. (University of Missouri - Kansas City); B.M.E. (University of Missouri - Kansas City).

Hugh Brown; associate professor emeritus of music (viola).

Nancy Cochran; professor emeritus of music (horn); M.M. (Ball State University); B.M. (University of Wisconsin-Madison).

John Ditto; professor emeritus of music (organ); D.M.A. (Eastman School of Music); M.M. (University of Michigan); B.M. (Drake University).

Eph Ehly; professor emeritus of music (choral music, choral conducting); D.M.A. (University of Colorado); M.A. (George Peabody College for Teachers); B.A. (Kearney State College).

Gustavo R. Halley; associate professor emeritus of music (voice); D.M. (Florida State University)

Alexander W. Hamilton; associate professor emeritus of music (music education); Ph.D. (University of Texas at Austin); M.Ed. (University of Arkansas); B.S.E (University of Arkansas).

Linda Ross Happy; associate professor emeritus of music (class piano); D.M.A. (University of Colorado); M.M. (Northwestern University); B.M.E. (University of Nebraska).

Mary Pat Henry; professor emeritus of dance (ballet); M.F.A. (Florida State University); B.F.A. (University of Utah).

Tiberius Klausner; professor emeritus of music (violin); Diploma (National Academy of Music, Budapest); Premiere Prix (Conservatoire National de Musique, Paris); Diploma (The Juilliard School).

Wanda Lathom-Radocy; professor emeritus of music (music therapy); Ph.D. (University of Kansas); M.M.E. (University of Kansas); B.M.E. (The University of Kansas).

John R. Leisenring; professor emeritus of music (trombone/jazz studies); D.M.A. (University of Illinois); M.M. (University of Wisconsin-Eau Claire); B.M. (University of Wisconsin-Eau Claire).

Ruth Anne Rich; professor emeritus of music (piano); D.M.A. (Eastman School of Music); M.M. (Peabody Conservatory of Music); B.M. (Florida State University); (Diplome de Virtuosite (Schola Cantorum, Paris); License d'Enseignement (L'Ecole Normale de Musique, Paris); Licentiate in Piano Performance (Royal Academy of Music, London).

Merton Shatzkin; professor emeritus of music (music theory); Ph.D. (Eastman School of Music); M.M. (Eastman School of Music); Diploma (The Juilliard School).

Joan Sommers; professor emeritus of music (accordion); Associate Diploma and Licentiate Diploma (Accordion Institute of America in conjunction with the British College of Accordionists)

Timothy Timmons; associate professor emeritus of music (saxophone); M.M. (Northwestern University); B.M. (University of Tulsa).

Undergraduate Undergraduate Programs

The Conservatory offers the following undergraduate programs. Please select the links below to view program specific requirements.

Dance

- Bachelor of Fine Arts in Dance (p. 1030)

Music

- Bachelor of Arts: Music (p. 1054)
- Bachelor of Music Education (p. 1063)
- Bachelor of Music: Jazz Studies (p. 1077)
- Bachelor of Music: Music Composition (p. 1081)
- Bachelor of Music: Music Performance-Guitar Option (p. 1085)
- Bachelor of Music: Music Performance-Piano Option (p. 1090)
- Bachelor of Music: Music Performance-Voice Option (p. 1094)
- Bachelor of Music: Music Performance-Wind, Strings, Percussion Option (p. 1099)
- Bachelor of Music: Music Theory Option (p. 1103)

Theatre

- Bachelor of Arts in Theatre (p. 1117)
- Minor in Theatre (p. 1123)

Admissions

New Students

New students must meet the general requirements for admission to the University. Additionally, many degrees require an audition and/or interview in the applicant's major performance field to determine they have met minimum requirements for admission to the Conservatory.

Music Education

Music Education applicants are reviewed by both the Music Education Faculty, and appropriate applied faculty. Applicants must demonstrate facility in their applied performance area and a strong academic record in addition to well-defined attitudes and goals toward music in elementary and secondary education (see fitness-to-teach).

- Music Education applicants must meet at least one of the following requirements:
- Have an ACT score of at least a 21
- Be at the 50 percentile or higher in class rank
- Have a high school grade-point average of 2.5 or better
- Music Education applicants will interview with the Music Education Faculty in a group setting to be scheduled on their chosen audition day.

Transfer Students

All undergraduate transfer music students must:

1. Be admitted to the University and the Conservatory.
2. Present complete official transcripts.
3. Audition for applied placement.
4. Take a theory examination for validation of theory level (Music majors only).

All undergraduate transfer dance students must:

1. Be admitted to the University and the Conservatory.
2. Present complete official transcripts.
3. Audition for placement in ballet and modern.

Transfer students who are admitted into the Conservatory are expected to fulfill all requirements of their declared degree. The University and Conservatory will recognize as many transferable credits as possible, but the curriculum and curricular standards must be fulfilled. This may result in additional semesters of study.

Minimum Grade Requirements

1. Music majors must earn a grade of C or better in all Conservatory classes required for the degree in order to receive course credit.
2. Dance majors must earn a grade of C or better in all **Technique & Theory** classes in order to receive course credit and to progress to the next appropriate class level. All remaining coursework follows UMKC grading policy ([/undergraduate-academic-regulations-information/grading-options-auditing-courses/grading/](#) (p. 485))
3. Theatre majors must earn a grade of C- or better in all required theatre classes in order to receive course credit.

Note: Some programs may require a higher minimum course grade.

Conservatory Policy Statements (Undergraduate)

Revised 2/11/15 (SMC)

Adopted by the faculty 4/7/15

Course Repetition Policy

1. A Conservatory student may retake a Conservatory course only once without approval unless that course is designed to be repeatable for credit (e.g. Ensemble).
2. If the student fails to meet minimum grade standards for a second time, a petition may be filed with the Associate Dean of Undergraduate Studies requesting a third and final attempt.
3. If a third attempt is granted and is unsuccessful the student may be dismissed from the program.

* (Minimum grade criteria for Conservatory courses can be found in the Undergraduate Catalog)

Late Drop Policy

UMKC policy:

- Eligible students may withdraw from their classes during the withdraw schedule period that is provided in the Academic Calendar. After the fourth week through the eighth week students will receive an automatic W on their transcript.
- After the eighth week, students will be assessed academically and, if they are failing at the time of withdrawal, they will be given a grade of WF (withdrawn failing) at the discretion of the faculty member. A WF is not calculated in the grade-point average.
- After the twelfth week students must petition their home academic unit before being allowed to withdraw from a course. Students who want to withdraw from all of their classes must follow the Total ("term") Withdraw Policy

Conservatory Policy:

1. The Conservatory will follow the UMKC policy for late drops.
2. Approval for dropping after the twelfth week will be given only when there are extenuating circumstances, such as illness or injury. Approval will not be granted due to dissatisfaction with the grade.
3. A petition must be submitted to the Associate Dean responsible for undergraduate studies no later than the 14th week of the semester.
4. Dropping courses could adversely affect a student's Conservatory scholarship eligibility.

Retroactive Add Policy

1. Under normal circumstances, a student will not be allowed to add courses retroactively.
2. If there are extenuating circumstances, a petition form requesting a retroactive add may be submitted to the Associate Dean of Undergraduate Studies.

Graduation “Walking” Policy

A student that has applied for graduation and has 6 or less credits to complete by the end of that semester may walk in the commencement ceremony under the following conditions:

1. The student is in good academic standing.
2. The student has successfully satisfied the Constitution requirement (p. 487).
3. The student has made a commitment to complete the remaining credit hours by the following semester (unless courses needed are not offered until the subsequent semester)*.
 - a. Failure to enroll for that semester by two weeks prior to the commencement ceremony will result in a revoking of the walking privileges.
 - b. *Music Therapy Students - Once enrolled in CONS 410 (Internship), have a maximum of two semesters to complete the course.

Graduate Graduate Programs

Music

- Ph.D. (Interdisciplinary) Music Education (p. 1035)
- Doctor of Musical Arts Degrees (p. 1036)
- Graduate Certificates (p. 1043)
- Master of Music Degrees (p. 1046)
- Master of Arts Degrees (p. 1045)

Theatre

- Master of Fine Arts in Theatre
 - Acting and Directing
 - Design and Technology

General Information

The Conservatory offers graduate programs leading to the following degrees: master of arts in music; master of arts in music (music therapy emphasis); master of fine arts in acting or design and technology; master of music in music composition, conducting, musicology, music theory and performance; master of music education; doctorate of musical arts in music composition, conducting and performance. The Conservatory participates in the Interdisciplinary Ph.D program (<http://sgs.umkc.edu/interdisciplinary-ph-d-studies-at-umkc/>) for students who desire music education as their coordinating discipline and education as a co-discipline. Graduate students in the Conservatory are also subject to the regulations, listed in the General Graduate Academic Regulations and Information (<http://umkc-preview.courseleaf.com/general-graduate-academic-regulations-information/>) section of this catalog.

Admission Requirements

Admission to the UMKC Conservatory does not constitute an approval of major. Graduate students attending the UMKC Conservatory do not have a major until divisional requirements are met and an approved planned program of study is filed.

Requirements for Admission

All students applying for admission must:

- Complete an application for admission.
- Submit transcripts of all prior work.
- Music students must possess a minimum overall grade-point average of 3.0 for all prior coursework.

Meet admission standards listed below:

- Acting
 - Audition to enter the program either on campus or at another approved offsite audition.
- Choral Conducting

- Possess a bachelor's degree in music.
- Master's and doctoral degrees: live interview/choral conducting students are required to audition before enrolling in applied lessons but may be admitted without an applied audition.
- Design and Technology
 - Interview and present a portfolio of material either on campus or at another approved offsite event.
- Master of Arts in Music
 - Achieve the level of (APPLIED INSTRUMENT) 302 at the audition and submit area of concentration approval form.
- Music Composition
 - Possess a bachelor's degree in music.
 - Master's and doctoral degrees: submit portfolio of compositions for evaluation.
- Music Education
 - Possess a bachelor's degree in music.
 - Master's degree: document completion of a bachelor's degree in music education or the equivalent/have an acceptable interview with faculty from this discipline/provide evidence of musical proficiencies applicable to music education settings.
- Musicology
 - Possess a bachelor's degree in music.
 - Possess a minimum grade-point average of 3.0 in undergraduate music history courses.
 - Submit examples of writing. (The writing sample should be either 1) a research paper on some aspect of the major field - can be an earlier term paper from the baccalaureate degree or 2) a senior project from the baccalaureate degree.)
 - Possess reading knowledge in at least one language other than English.
- Music Theory
 - Possess a bachelor's degree in music theory or the equivalent.
 - Possess a minimum grade-point average of 3.0 in undergraduate music theory courses.
 - Submit examples of writing.
 - Translate a selection into English from either French or German using a dictionary.
- Music Therapy Master's degree:
 - Possess a bachelor's degree in music therapy from an NASM-accredited or the equivalent institution and have current CBMT Professional status, or (b) Possess a bachelor's degree in music or music education from an NASM-accredited or the equivalent institution.
 - Students who do not have the appropriate music therapy professional status will take coursework that covers undergraduate music therapy requirements.
 - An audition in the student's applied area is required for diagnostic and prescriptive purposes for those not having current music therapy professional status.
 - A simulation of music therapy clinical skills is required for those entering with music therapy professional status.
 - A successful interview with the music therapy faculty is also required for admittance.
 - Performance
- Possess a bachelor's degree in music.
- Master's degree: achieve (APPLIED INSTRUMENT) 5501 level on the major instrument at an audition.
- Doctoral degree: achieve (APPLIED INSTRUMENT) 5601 on the major instrument at an audition.
- Orchestral/Wind Conducting
 - Possess a bachelor's degree in music.
 - Master's and doctoral degrees: live interview/applied audition.
- Performer's Certificate
 - Possess a bachelor's degree in music.
 - Achieve (APPLIED INSTRUMENT) 5501 at an audition.
 - Interview with faculty/coaches in the applied area.
 - Submit a standard resume including performance experiences.
- Artist's Certificate
 - Possess a master's degree in music.
 - Achieve (APPLIED INSTRUMENT) 5601 at an audition.
 - Interview with faculty/coaches in the applied area.
 - Submit a standard resume including performance experiences.

Matriculation Examination

The matriculation exam applies to all students whose degree program requires a 5500-level music history and/or music theory class. The matriculation examination in aural skills, music theory, and music history must be completed by students before enrolling for the term of admission.

Students must pass all sections of the exam with a 70% or higher *or* complete review courses (CONSVTY 421A / CONSVTY 421B / CONSVTY 421C, CONSVTY 422A / CONSVTY 422B / CONSVTY 422C with a grade of B- or higher) before enrolling in graduate-level theory and history courses.

Students in the MM in Performance: Vocal Emphasis must demonstrate proficiency in Italian, German, and French lyric diction.

Graduate Assistantships, Fellowships and Scholarships

Graduate assistantships are available with stipends varying for the academic year depending upon assignment. Assistantships are available in accompanying, acting, conducting, instrumental ensembles, jazz, keyboard skills, music composition, music education, musicology, music theory, percussion, recording, saxophone, theatre design and technology, and voice. Recipients are typically expected to devote 10 hours a week (more for appointments above the .25 level) in assigned duties. Applicants for assistantships should have and maintain a minimum 3.0 (B) grade-point average.

Students who wish to apply for assistantships or fellowships should visit Conservatory Admissions (<https://conservatory.umkc.edu/admissions/>) for application materials and a list of current positions. Applications must be submitted by March 1. Awards will be made by April 1, and a letter of acceptance or rejection sent to the applicant by April 15. Awarding a graduate assistantship is contingent upon admission.

For information concerning assistantships, fellowships and other forms of student financial aid and scholarships, contact the

Conservatory Admissions Office
(816) 235-2932
cadmissions@umkc.edu

and the

Financial Aid and Scholarships Office
University of Missouri-Kansas City
5115 Oak St.
Kansas City, MO 64110-2499
<http://www.sfa.umkc.edu> (<http://www.sfa.umkc.edu/>)

Master's Degrees General Information

The master of arts in music, master of music, and master of music education degree programs require a minimum of 30 semester hours; at least 18 hours must be numbered 5500 or above. No 300- or 400-level courses may be included in a master's program if required in the comparable baccalaureate degree at the UMKC Conservatory. CONSVTY 5599 (<http://umkc-preview.courseleaf.com/search/?P=CONSVTY%205599>), CONSVTY 5598 (<http://umkc-preview.courseleaf.com/search/?P=CONSVTY%205598>) or CONSVTY 5589 (<http://umkc-preview.courseleaf.com/search/?P=CONSVTY%205589>) is required on all degree programs except performance. With the approval of the supervisory committee and the principal graduate adviser, students can transfer hours equal to 20 percent of the planned program from an accredited institution other than UMKC, but any such transfer credit must be less than seven years old at the time the degree is awarded. The official time limit for the completion of the master's degree is seven years.

MFA Theatre

The Master of Fine Arts in Theatre is a three-year program requiring a minimum of 60 credit hours. The department offers an MFA in Acting and an MFA in Design and Technology. Students who choose to pursue an MFA in Design and Technology must choose an emphasis in one of the following areas:

- Design (scenic design, costume design and technology, lighting design, sound design).
- Technology (technical direction, stage management)

Acting Emphasis

Continuation in the program is dependent upon satisfactory progress as determined by faculty evaluation at the end of each academic year. The concluding requirements of the MFA degree for the design and technology candidate will be a final master's competency exam consisting of a presentation of portfolio that includes classroom projects and produced work. The concluding requirement of the MFA in Acting is the Creative Contract, a thesis project that includes a self-directed 20-minute performance (original or existing text), and an oral defense of the project with performance faculty. The student's supervisory committee chair will report the results of the final competency examination in writing to the candidate, the Conservatory Advising Office, the School of Graduate Studies, and file a copy with the Registrar.

Design Emphasis

Those choosing a design emphasis will be prepared to compete for United Scenic Artist Local 829 membership as scenic designers, lighting designers, costume designers or sound designers. They also will be prepared to design in professional theatre centers and in major universities and colleges.

Technology Emphasis

• Technical Direction

Candidates specializing in technology will be trained to compete for jobs as technical directors or assistant technical directors and other supervisory technical positions, or other entertainment-business-related positions.

• Stage Management

Stage management candidates serve as assistant stage managers the first semester or first year, as stage managers the second year, and serve a residency in the last semester. They also work as production assistants for the Kansas City Repertory Theatre shows. Candidates in stage management are trained to compete for jobs as Actors' Equity.

Continuation in the program is dependent upon satisfactory progress as determined by faculty evaluation at the end of each academic year. The concluding requirements of the MFA degree for the design and technology candidate will be a final master's competency exam consisting of a presentation of portfolio that includes classroom projects and produced work. The student's supervisory committee chair will report the results of the final competency examination in writing to the candidate, the Conservatory Advising Office, the School of Graduate Studies, and file a copy with Registrar.

MFA students are subject to the General Graduate Academic Requirements (<https://catalog.umkc.edu/general-graduate-academic-regulations-information/>) of the University for graduate study.

Comprehensive Examination

Music students must take the comprehensive examination during or after the last term of coursework. It is designed to last a total of eight hours and the content is at the discretion of the supervisory committee. The examination is offered during the fifth week of fall and spring semesters and may be scheduled for master's students during a summer session with the approval of the supervisory committee. If taken in the summer, the questions may not be graded until the Fall Semester. Students must be enrolled during the term the comprehensive examination is administered.

Project Option for Comprehensive Examination

Music students in master's degree programs and the DMA in Composition wishing to opt for a Project in lieu of exam questions must inform the adviser during the advising session in the semester prior to taking the Comprehensive Exam.

Procedures:

1. As soon as possible after the advising session has taken place:
 - a. Student secures the agreement of a faculty member to be their Comprehensive Exam Project Chair.
 - b. Student secures the agreement of two additional faculty to be committee members for the project.
 - c. Student creates a half-page Project Description to include a timeline and secures all three signatures on the document. One copy should remain with the Chair, another copy must be given to the advisor, and a third copy should be retained by the student
 - d. The Comprehensive Exam Coordinator notifies the Chair when the Project Description has been received and the student has completed the online comprehensive Exam form.
2. Before the end of the semester when the project is to be completed:
 - a. The student completes the project by the approved timeline and provides appropriate documentation to the committee members. For events, students must provide video documentation for any committee members who were unable to attend.
3. By the time semester grades are due:
 - a. Each committee member prepares and submits a report on the project, together with a grade of high pass, pass or fail, to the Chair.
 - b. The Chair submits all reports and grades to the Comprehensive Exam Coordinator. Students must receive a grade of pass or high pass from each committee member to pass the Comprehensive Project. Students are allowed to do further work on the project at the discretion of the Comprehensive Exam Committee.

Degree Requirements

Retention and Minimum Grades

Conservatory graduate students must maintain a 3.0 graduate grade-point average in order to remain in good standing. A maximum of two courses not exceeding three hours of credit in each course at the 5500 or 5600 level in which C's are received shall be acceptable for the planned program of any advanced degree. No grade lower than a 3.0 (B) is acceptable in the major field.

Ensemble Requirements

All graduate students in the master of music and doctor of musical arts performance degree programs must enroll in Conservatory Wind Ensemble, Conservatory Wind Symphony or Conservatory Orchestra every semester if their major instrument is an orchestral instrument. Master of music students in vocal performance must participate in Conservatory Concert Choir or Conservatory Singers for a minimum of two semesters.

All graduate students in the doctor of musical arts conducting degree program are required to participate in at least one major ensemble, as advised by the conducting faculty, during each term of enrollment as a full-time student.

Foreign Language Proficiency Requirements

Master's students in musicology and theory, as well as doctoral students in choral and orchestral conducting and keyboard and vocal performance must satisfy language requirements for the degree.

For all MM students in musicology, theory, and vocal performance as well as doctoral students in choral and orchestral conducting and keyboard and vocal performance *who speak English as their first language*, a grade of B- (2.7) or better in a first-semester, sophomore-level foreign language course is required. A language proficiency test may be substituted for course requirements, provided it documents language capabilities equivalent to the completion of a first-semester, sophomore-level, course. In such cases, the student must notify the Conservatory Associate Dean for Graduate Studies of the process and results.

Doctoral students in choral and orchestral conducting or keyboard and vocal performance *who speak English as a second language* must achieve a score of 100 on the TOEFL iBT exam. If students have not completed a TOEFL exam with a score greater than 100 before arriving at UMKC, they must complete a language test in English provided by UMKC's Applied Language Institute. All courses recommended by ALI must be successfully completed and a score of 100 on the TOEFL, or the equivalent as determined by ALI must be achieved. This policy applies to all ESL students regardless of the number of years they have studied in the United States.

Dance

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Bachelor of Fine Arts in Dance

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate the fine technical skills of a professional performing dance artist.
- Employ the expressive skills of a professional performing dance artist.
- Synthesize advanced choreographic skills with compositional form.
- Produce original choreography with the use of appropriate production elements.
- Show an understanding of dance in an historical, cultural, and stylistic context.

Program Prerequisites

1. Students applying for the dance program must have previous training in ballet and/or modern dance.
2. Applicants will be admitted, upon approval of the dance faculty, following mandatory auditions by the prospective student.
3. All applicants who are accepted to the Dance Division will be admitted on a provisional basis and officially enter the dance program after the completion of the first two semesters. If evidence shows that the BFA dance major is unable to meet required proficiency standards in dance technique courses, dancers will be counseled to pursue another degree or a more suitable dance program at the time of end of year conferences.

Transfer students

Transfer who are admitted into the dance program are expected to fulfill all requirements of the BFA degree. The Dance Division will recognize as many transferable credits as possible, but curriculum and curricular standards must be fulfilled, possibly resulting in additional semesters of study.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Throughout their programs of study, all dancers are expected to maintain general physical fitness and dance aesthetic as prescribed by the dance faculty. Health and dance aesthetic requirements, and many other details, are contained in the Conservatory Dance Student Handbook that is furnished to all dance students. Dance Division Website (<http://conservatory.umkc.edu/content.cfm?cont=%22%27%22X%20%0A>)

Progression

The student will be allowed to repeat a technique level after the initial year for only two semesters - for example: if 141B and 142B have been completed and the ballet faculty does not feel the student is ready to move up to the 200 level, the student will be allowed to repeat the 100 level for only two semesters. If progress in the class still has not been accomplished by that fourth semester, the student will not be allowed to continue in the dance program.

All Dance majors must achieve the 200-level in Ballet or Modern Technique by the Junior year.

All Dance majors must successfully complete the 400-level *Technique and Theory* courses in either Ballet or Modern – and at least the 300-level *Technique and Theory* courses in the alternative area – in order to graduate.

Code	Title	Credits
Ballet Technique and Theory		
8 semesters of the following determined by skill level and placement with a minimum grade of C:		
DANCE 141B	Ballet Technique and Theory I	3
DANCE 142B	Ballet Technique And Theory II	3
DANCE 241B	Ballet Technique And Theory III	3
DANCE 242B	Ballet Technique And Theory IV	3
DANCE 341B	Ballet Technique And Theory V	3
DANCE 342B	Ballet Technique And Theory VI	3
DANCE 441B	Ballet Technique And Theory VII	3
DANCE 442B	Ballet Technique And Theory VIII	3
Modern Technique and Theory		
8 semesters of the following determined by skill level and placement with a minimum grade of C:		
DANCE 141M	Modern Dance Technique and Theory I	3
DANCE 142M	Modern Dance Technique and Theory II	3
DANCE 241M	Modern Dance Technique And Theory III	3
DANCE 242M	Modern Technique And Theory IV	3
DANCE 341M	Modern Dance Technique And Theory V	3
DANCE 342M	Modern Dance Technique And Theory VI	3
DANCE 441M	Modern Dance Technique And Theory VII	3
DANCE 442M	Modern Dance Technique And Theory VIII	3
Dance History, Theory and Related Studies		
DANCE 107	Dance Production I	1
DANCE 108	Dance Production II	1
DANCE 118	Analysis of Movement	1
DANCE 120	Ballet Pedagogy and Analysis	1
DANCE 301	Dance Science and Kinesiology	3
DANCE 304	Fundamentals of Body Alignment and Pilates	1
DANCE 305	History Of Dance I	3
DANCE 306	History Of Dance II	3
Composition		

DANCE 216	Composition I	2
DANCE 218A	Composition II	2
DANCE 218B	Composition III	2
DANCE 319A	Composition IV	2
DANCE 319B	Composition IV, Advanced Choreographic Design	2
Jazz		
DANCE 260	Jazz I	1
DANCE 261	Jazz II	1
Performance Techniques		
DANCE 416A	Dance Forms I	1
DANCE 416B	Dance Forms II	1
Ensemble		
DANCE 310	Conservatory Dance Ensemble (1 CH taken 6 semesters)	6
Pas De Deux		
4 semesters of the following:		
DANCE 313A	Partnering/Pas De Deux I	1
DANCE 313B	Partnering/Pas De Deux II	1
DANCE 413A	Advanced Pas De Deux I	1
DANCE 413B	Advanced Pas De Deux II	1
Ballet Variations/Modern Rep/Men's Classes		
4 semesters of the following:		
DANCE 405A or DANCE 213C or DANCE 415A	Modern Dance Repertory I Men's Class I Variations I	1
DANCE 405B or DANCE 213D or DANCE 415B	Modern Dance Repertory II Men's Class II Variations II	1
DANCE 414A or DANCE 414B	Men's Variations I Men's Variations II	1
DANCE 415A or DANCE 415B	Variations I Variations II	1
Senior Capstone		
DANCE 493	Senior Capstone Project I	1
DANCE 494	Senior Capstone Project II	1
Electives		
ART-HIST 110	Introduction to the History of Art: Pyramids to Picasso (Recommended)	3

Total Credits 95

GPA Minimum: 2.0

Total Credit hours: 128

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
DANCE 141B, 241B, 341B, or 441B ^{CC}		3 DANCE 142B, 242B, 342B, or 442B ^{CC}	3
DANCE 141M ^{CC}		3 DANCE 142M ^{CC}	3
DANCE 107		1 DANCE 108	1
DANCE 118		1 DANCE 120	1
ENGLISH 110		3 DANCE 216	2
GEFSE 101		3 ENGLISH 225	3
		MATH 116 or STAT 115	3
		14	16

Second Year

Fall Semester	Credits	Spring Semester	Credits
DANCE 141B, 241B, 341B, or 441B ^{CC}		3 DANCE 142B, 242B, 342B, or 442B ^{CC}	3
DANCE 241M ^{CC}		3 DANCE 242M ^{CC}	3
DANCE 218A		2 DANCE 218B	2
DANCE 305		3 DANCE 260	1
DANCE 310		1 DANCE 306	3
COMM-ST 110, 140, or 277		3 DANCE 310	1
GECRT-AH 101		3 GECRT-SC 101	3
		18	16

Third Year

Fall Semester	Credits	Spring Semester	Credits
DANCE 241B, 341B, or 441B		3 DANCE 242B, 342B, or 442B	3
DANCE 341M		3 DANCE 342M	3
DANCE 261		1 DANCE 304	1
DANCE 301		3 DANCE 310	1
DANCE 310		1 DANCE 319B	2
DANCE 319A		2 DANCE 405B, 213D, or 415B	1
DANCE 405A, 213C, or 415A		1 DANCE 313B or 413B	1
DANCE 313A or 413A		1 DANCE 416A	1
GECRT-SS 101		3 GECDV 201	3
		18	16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
DANCE 341B or 441B		3 DANCE 342B or 442B	3
DANCE 341M or 441M		3 DANCE 342M or 442M	3
DANCE 310		1 DANCE 310	1
DANCE 313A or 413A		1 DANCE 313B or 413B	1
DANCE 414A, 415A, or 405A		1 DANCE 414B, 415B, or 405B	1
DANCE 416B		1 DANCE 494	1
DANCE 493		1 GECUE 201	3
HISTORY 101, 102, or POL-SCI 210		3 General Elective (ART-HIST 110 recommended)	3
		14	16

Total Credits: 128

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

Conservatory Phone 816-235-2900

Conservatory Website conservatory.umkc.edu (<http://conservatory.umkc.edu/>)

Music

- Graduate Programs (p. 1035)
- Undergraduate Programs (p. 1054)

Graduate Programs

- Ph.D. (Interdisciplinary) Music Education (p. 1035)
- Doctor of Musical Arts Degrees (p. 1036)
- Graduate Certificates (p. 1043)
- Master of Arts Degrees (p. 1045)
- Master of Music Degrees (p. 1046)
- Master of Music Education (p. 1053)

Ph.D. (Interdisciplinary): Music Education

Program Requirements

The Conservatory participates in the Interdisciplinary Ph.D. Program (<http://sgs.umkc.edu/interdisciplinary-ph-d-studies-at-umkc/>) for students who desire music education as their coordinating discipline and curriculum and instruction as a co-discipline. Students with a background in music therapy

can elect music education as their coordinating discipline and choose from possible co-discipline options in consultation with the music therapy faculty.

Application is made through the School of Graduate Studies (<http://sgs.umkc.edu>).

Student Learning Outcomes

Students will demonstrate a thorough degree of knowledge in the primary discipline and co-discipline.

Students will demonstrate interdisciplinarity in their writing by integrating methods, theories, paradigms, concepts, etc. from more than one discipline.

Students will demonstrate an ability to use proper investigation techniques for their chosen disciplines.

Students will effectively use oral and written forms of communication to convey their ideas

Program Goals

Grounding in the primary and co-disciplines: Students will have a solid grounding in theories, concepts and methodologies of two or more disciplines.

Integrate the principles and theories of each of the disciplines: Enables students to acquire the skills of interdisciplinary scholarship and research.

Effectively communicate findings and approaches to solving interdisciplinary research problems: Students will effectively use oral and written forms of communication to convey their ideas.

Research skills in each discipline: Acquire research skills in each discipline such as approaches, methods, ethical principles, and tools to pursue a research line of inquiry.

Form effective teams with diverse scholars across disciplines: Provides opportunities for individuals to gain skills in working within a collaborative environment with diverse scholars across disciplines to solve novel research questions.

Doctor of Musical Arts Degrees

- Conducting (p. 1039)
- Music Composition (p. 1041)
- Performance (p. 1041)

Program Requirements

Ordinarily, doctor of musical arts candidates will be expected to show from 75 to 90 hours of approved coursework beyond the bachelor's degree (including the master's degree) on their planned programs. Approximately 80 percent of the coursework on the planned program must be at the graduate level (5500-5600).

If it is of acceptable quality and appropriate to the student's program, graduate credit not to exceed more than one-half the total credit earned beyond the bachelor's degree may be transferred from another institution to a doctoral program. Except for courses included in the earned master's degree, work done at institutions other than UMKC must have been completed within nine years of the awarding of the degree. A D.M.A. or Ph.D. student must take and pass the doctoral comprehensive examination and advance to candidacy within five years from the beginning of doctoral coursework (within four years if entering with a master's degree in the same or closely related field). After the establishment of degree candidacy, a maximum of five years will be allowed for completion of degree requirements. D.M.A. students in conducting and performance must demonstrate proficiency in one foreign language. All D.M.A. students must satisfy the residency requirement. Residency for the D.M.A. cannot begin until the first term of enrollment as a D.M.A. student at the Conservatory. The residency requirement for the D.M.A. may be satisfied in any one of the following ways: 1) two adjacent semesters with a minimum of nine hours each, or 2) one semester with a minimum of nine hours and two summer sessions with a minimum of five hours each, provided that the full-time semester is adjacent to one of the summer sessions [it is expected that the summer sessions will be consecutive], or 3) completion of 24 hours within 18 consecutive months.

The Supervisory Committee

The supervisory committee for students seeking the doctor of musical arts shall consist of three faculty members who will approve the planned program of study and the doctoral research plan, and agree to serve as the three faculty responsible for writing and grading the major portion of the doctoral comprehensive examination.

Comprehensive Examinations

The Comprehensive Examinations consist of three separate exams.

First Exam Procedures

The First Exam focuses on Music History and Music Theory and is designed to assess students' foundational knowledge for advanced study.

Students will be eligible to take the First Exam after earning a B in CONSVTY 5593/5593N Research and Bibliography in Music or passing the matriculation exam in the same subject. The exams will be given the seventh Saturday of each semester and students will take the exam in their second full year (and no later than the first semester of their third year of coursework). The exams will consist of two three-hour sections that cover an integrated application of ideas from music history and music theory and will be designed, proctored, and graded by all full-time faculty members holding degrees in those two areas. Based on the collective recommendation of the faculty, students will be assigned a grade of high pass, pass, or fail for each section of the exam. Students who fail to pass any portion of the exam will be allowed to retake those portions the following semester. Students are allowed to retake portions of the exam they failed one time and must fully pass the First Exam to be eligible to take the Second Exam and continue to candidacy.

Second Exam Procedures

The Second Exam tests students' understanding of their chosen field of study and are required for advancement to candidacy. These exams are held the fifth week of both the Fall and Winter/Spring semesters and must be taken after the end of coursework and before work begins on doctoral projects. Students wishing to take the exams should notify their committee chair of their intentions and submit a complete Comprehensive Exam Request Form to the graduate advising office by at least the last week of classes the semester before they take the exam. Testing is proctored from 9:00 until 5:00 each day of that week, and students are responsible for arranging their schedules and signing up for the times in which they plan to take the test.

The Second Exam is administered by a D.M.A. Committee made up of a faculty chair and two other faculty members. Students are responsible for selecting their chairs, who normally will be the principle instructor or director of research, and then the remainder of their committee in consultation with the chair. The committee members are communicated to the advising office through signatures on the Comprehensive Exam Request Form.

Each D.M.A. student is given eight hours in which to answer questions submitted by the three members of his or her committee. Each member of the committee must contribute to the Second Exam, and while the number of hours for questions given to each member is at the chair's discretion, typical practice is four hours for the chair and two hours for each member (Each "hour" of questions should take approximately one hour to complete).

Committee members must submit their questions to the chair by the Wednesday of the third week of the semester. The chair then submits the entire exam to the Comprehensive Exam Coordinator by the end of the third week of the semester. It is the chair's responsibility in consultation with the committee to ensure that there are no overlaps in questions and that the exam adequately examines the field of study. Content of the examination questions should reflect the content of study specific to each student's degree. Members of the D.M.A. Committee are responsible for determining the appropriate focus for questions. Those questions should not function as a retesting of course information, but as an assessment of a student's understanding and ability to connect and apply course content more broadly.

Grading for the Second Exam

Once a student has completed the exam, the Comprehensive Exam Coordinator distributes written responses to the faculty responsible for each question. That faculty member grades the responses and relays their recommendation of high pass, pass, or fail to the committee chair and the Comprehensive Exam Coordinator. Students must receive a grade of pass or high pass on each question to pass the Second Exam and advance to candidacy. Students are allowed to retake portions of the exam they failed one time, and the format of that retest is at the discretion of the committee member responsible for the question.

Third Exam Procedures

At the conclusion of all doctoral points needed for the D.M.A. degree and contingent upon successful completion of the Second Exam, members of the student's D.M.A. Committee will reconvene for a two-hour oral defense of the work done during candidacy for the degree. In the case of areas that require dissertations, the dissertation defense acts as the Third Exam. For all other areas, the Third Exam is expected to consist of questions synthesizing the student's work in all areas of study in their doctoral documents and/or performances. The Committee Chair will schedule the Third Exam, which may be postponed at the Chair's discretion. The Third Exam is the last step in the conferral of D.M.A. degrees.

DMA Research / Artistic Applications

4 points required

DMA Research

Dissertation (4 hrs/4 points)

CONS 5699 – Supervised by five committee members, graded by major professor, reviewed by university, paper filed in library.

All students in the DMA program in Composition must complete a dissertation to satisfy degree requirements. This usually takes the form of an extended composition in a format approved by the composition faculty. Students in the DMA Conducting and DMA Performance programs may

choose to satisfy degree requirements pertaining to doctoral research by writing a dissertation (other options for Conducting and Performance majors are described in the next section).

Other Doctoral Research Options

DMA students in Conducting and Performance may choose to satisfy doctoral research requirements through projects other than the dissertation. Five (5) options are currently offered. They include support papers for recitals, extended research papers, additional courses in research methodology, music products that might include compositions, arrangements, or performance editions, and, finally, an additional recital. Students must complete four "points" of research credit to fulfill the doctoral research requirement. These points can come from almost any combination of the five categories or, in some cases, can come from a single category. Projects can be initiated at any point during the program of study but at least one project reflecting the student's ability to work independently must be completed after comprehensive exams are passed. Students must complete a DMA Research Applications Proposal (available from the Graduate Advising Office) and gather the signatures of the appropriate project supervisors as well as the supervisory committee. This document should be submitted to the Graduate Advising Office before in-depth research is begun.

Specifics for each doctoral research option are outlined hereafter:

Doctoral Recital Support Paper

(worth 1 point apiece; maximum of two points from this category for conducting majors and three for performance majors) [CONS 5697P for Performance majors; CONS 5697BP for Conducting majors]

The Recital support paper should be approximately 25-50 pages in length. It should address some aspect of the recital such as unusual pedaling specifications in a piece, biographical information about the composers, unusual aspects of performance practice, aspects pertaining to the form of the pieces, etc. The paper is supervised and graded by the student's applied teacher, assuming that the faculty member holds some type of graduate faculty status. A copy of the final paper should be submitted for the student file.

Doctoral Research Problems

(worth 2 points apiece; students may do one or two projects from this category) [CONS 5698]

The Doctoral research paper should be approximately 50-75 pages in length. It may address any aspect of interest to the student and supervisor. Examples might include an extensive analysis of compositions by a single composer, literature dealing with performance anxiety, an analysis of a particular genre in a designated time period, etc. The doctoral research paper can be an extensive review of literature. The paper can be supervised and graded by any willing faculty member holding some type of graduate faculty status. A copy of the final paper should be submitted for the student file.

Additional Research Courses

(worth 1 point for each 3 credit hour course; students may take a maximum of two courses for doctoral research credit) [e.g., CONS 5594A and B]

The Conservatory requires CONS 5593 Introduction to Research and Bibliography for the DMA degree. Any course beyond CONS 5593 that specifically addresses research methodology as its primary focus may be considered for credit in this category. The Conservatory offers three courses, which may be taken for credit including Advanced Research and Bibliography (CONS 5693), Introduction to Descriptive and Experimental Research in Music (CONS 5594A) and Advanced Descriptive and Experimental Research in Music (CONS 5594B). Courses from other UMKC departments could also be considered. Courses that include research but do not specifically focus on methodology can not be included in this category. Students completing 2 points from this category must combine the additional research courses with a Doctoral Research Problems project (CONS 5698).

Doctoral Music Product

(credit is variable from 1-4 points depending on the length and complexity of the product; students may do 1-4 projects from this category) [CONS 5698B]

While the dissertation, doctoral recital paper, doctoral research problem, and to some extent the additional research course, will deal with "traditional" research expressed in standard writing formats, the doctoral music product allows a student to create through the medium of music. Products can take the form of original compositions, arrangements or transcriptions of music, or the creation of performance editions of existing works. The pieces should include a bibliography of sources consulted while developing the product and an analysis of the work recognizing specific performance or rehearsal challenges. The scope of the product, including the amount of credit to be awarded for the project, is developed in consultation with the supervisory committee. The project is supervised and graded by an appropriate, willing faculty member with some type of graduate faculty status. If composition faculty are to serve as supervisors for a project, certain prerequisite skills or classes may be required. A copy of the final music product with documentation should be submitted for the student file.

Additional Recital

(maximum of 1 point from this category) [CONS 5697C]

The extra recital is supervised by the applied or conducting teacher. The recital is graded in the same manner as other recitals for the Conducting and Performance degrees.

Doctor of Musical Arts: Conducting

Student Learning Outcomes

Students graduating from this program will:

- Students will demonstrate an advanced level of musicality and artistic expression
- Students will demonstrate a fluency of conducting technique.
- Students will rehearse an ensemble at a high level of effectiveness and artistry.
- Students will demonstrate an advanced familiarity with the stylistic characteristics and repertory of each major musical style period.
- Students will demonstrate superior understanding of the historical and analytical components of music and will be able to communicate this understanding effectively in both written and oral formats.

Choral Interest Area

Required Courses

Code	Title	Credits
CONSVTY 5500-5600	Music History (three courses required) ¹	9
CONSVTY 5500-5600	Music Theory (three courses required)	9
CONSVTY 5593 or CONSVTY 5593N	Introduction To Research And Bibliography In Music Introduction to Research and Bibliography in Music	3
Take the following course 6 times:		12
CONSVTY 5582A or CONSVTY 5582B or CONSVTY 5582C	Advanced Choral Conducting - Technique Advanced Choral Conducting - Style Advanced Choral Conducting-Rehearsal Techniques	
Take the following course 4 times:		8
CONSVTY 5587	Seminar In Choral Literature	
CONSVTY 5697B	Doctoral Conducting Performance ²	6
Select four "research points" from the following: ³		4
CONSVTY 5697	Doctoral Recital	
CONSVTY 5698	Research Problems	
CONSVTY 5699	Dissertation Research	
Total Credits: 51 (minimum)		

¹ All doctoral students are required to complete three graduate music history courses. One must be a period course (CONSVTY 5555-CONSVTY 5559B), one must be a seminar course, and the remaining course may be either. Any substitutions must be approved by the music history faculty.

² Conducting recitals may be done with the approval of the major faculty advisor at any time after successful completion of the Graduate Approval of Major. Two public performances with supporting documents are required for the degree.

³ Students may enroll in only 1 point or 1 credit of doctoral research points prior to successful completion of the First Exam of comprehensive exams. Two rehearsal/lecture demonstrations must be completed. Participation in at least one major ensemble, as advised by the conducting faculty, during each term of enrollment as a full-time student is required.

Language Requirement

A proficiency in one foreign language is required. See this section (p. 1026) of the catalog for options.

Orchestral Interest Area

Required Courses

Code	Title	Credits
CONSVTY 5500-5600	Music History (three courses required) ²	9
CONSVTY 5500-5600	Music Theory (three courses required)	9
CONSVTY 5593 or CONSVTY 5593N	Introduction To Research And Bibliography In Music Introduction to Research and Bibliography in Music	3
Take 3 semesters of either of the following courses:		6
CONSVTY 5583A or CONSVTY 5583B	Advanced Instrumental Conducting Advanced Instrumental Conducting - Orchestra	

Take the following course 3 times:		6
CONSVTY 5586A	Seminar In Orchestral Literature	
CONSVTY 5582A	Advanced Choral Conducting - Technique	2
or CONSVTY 5582B	Advanced Choral Conducting - Style	
or CONSVTY 5582C	Advanced Choral Conducting-Rehearsal Techniques	
Applied Music (APPLIED INSTRUMENT) 5500A ¹		3
CONSVTY 5697B	Doctoral Conducting Performance ³	8
Select four "research points" from the following: ⁴		4
CONSVTY 5697	Doctoral Recital	
CONSVTY 5698	Research Problems	
CONSVTY 5699	Dissertation Research	
Total Credits: 50 (minimum)		

- ¹ Each Doctor of Musical Arts Conducting student in the Orchestral interest area must audition for placement with the applied faculty on their primary instrument. Applicants who are placed at the 5601 level on their applied instrument will not be required to complete additional studies on that instrument. If the applicant qualifies for applied music at the 5500A level, a minimum of two credit hours of 5500A is required. If the applicant does not qualify for applied music at the 5500A level, then the student must enroll in applied music until completion of the 5500A level or until graduation. Orchestral conducting majors are also required to enroll in at least two additional semesters of applied study as advised by their major professor.
- ² All doctoral students are required to complete three graduate music history courses. One must be a period course (CONSVTY 5555 - CONSVTY 5559B), one must be a seminar course, and the remaining course may be either. Any substitutions must be approved by the music history faculty.
- ³ Conducting recitals may be done with the approval of the major faculty advisor at any time after successful completion of the Graduate Approval of Major. Two public performances with supporting documents are required for the degree.
- ⁴ Students may enroll in only 1 point or 1 credit of doctoral research points prior to successful completion of the First Exam of comprehensive exams. Two rehearsal/lecture demonstrations must be completed. Participation in at least one major ensemble, as advised by the conducting faculty, during each term of enrollment as a full-time student is required.

Language Requirement

A proficiency in one foreign language is required. See this page (p. 1026) of the catalog for options.

Wind Interest Area

Required Courses

Code	Title	Credits
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
or CONSVTY 5593N	Introduction to Research and Bibliography in Music	
CONSVTY 5500-5600	Music History (three required) ¹	9
CONSVTY 5500-5600	Music Theory (three required)	9
CONSVTY 5576	Professional Aspects Of College Teaching	2
Take six semesters of the following course (12 credits total):		
CONSVTY 5586B	Seminar In Wind/Band Literature	2
Take four semesters of the following course (8 credits total):		
CONSVTY 5583C	Advanced Instrumental Conducting - Band	2
Take two semesters of the following course (4 credits total):		
CONSVTY 5697B	Doctoral Conducting Performance ²	2
Select four "research points" from the following (4 credits total): ³		
CONSVTY 5697	Doctoral Recital	
CONSVTY 5698	Research Problems	
CONSVTY 5699	Dissertation Research	
Electives (selected in consultation with conducting faculty)		3
Total Credits: 54 (minimum)		

- ¹ All doctoral students are required to complete three graduate music history courses. One must be a period course (CONSVTY 5555 - CONSVTY 5559B), one must be a seminar course, and the remaining course may be either. Any substitutions must be approved by the music history faculty. CONSVTY 5559 A/B, Music from 1900-1945 and Music from 1945-Present strongly encouraged.

- ² Conducting recitals may be done with the approval of the major faculty advisor at any time after successful completion of the Graduate Approval of Major. Two public performances with supporting documents are required for the degree.
- ³ Students may enroll in only 1 point or 1 credit of doctoral research points prior to successful completion of the First Exam of comprehensive exams. Two rehearsal/lecture demonstrations must be completed. Participation in at least one major ensemble, as advised by the conducting faculty, during each term of enrollment as a full-time student is required.

Language Requirement

There is no language requirement for the DMA in Conducting, Wind Interest Area.

Doctor of Musical Arts: Music Composition

Student Learning Outcomes

Students graduating from this program will:

- Students will clearly articulate their musical voice as creative artists, and their skills as collaborators with performers and generative artists.
- Students will demonstrate their mastery of technical skills in music composition, analysis, and of style, genre and media.
- Students will develop their skills as artists, collaborators, and speakers, to promote their work.
- Students will build their careers as composers and academics through arts advocacy, mentoring and/or teaching.

Required Courses

Code	Title	Credits
Take the following course 3 times:		9
CONSVTY 5533	Advanced Composition	
CONSVTY 5533 or CONSVTY 5534	Advanced Composition Advanced Electronic Music Composition	3
CONSVTY 5699	Dissertation Research ¹	6
CONSVTY 5512	Career Paths in Composition	3
Conservatory 5500-5600	Music History (three courses) ²	9
Conservatory 5500-5600	Music Theory (three courses)	9
CONSVTY 5593 or CONSVTY 5593N	Introduction To Research And Bibliography In Music Introduction to Research and Bibliography in Music	3
Electives		9
Total Credits		51

- ¹ An extended work in a format approved by the composition faculty. Final document must be uploaded to ProQuest.
- ² All doctoral students are required to complete three graduate music history courses. One must be a period course (CONSVTY 5554, CONSVTY 5555, CONSVTY 5556, CONSVTY 5557, CONSVTY 5558, CONSVTY 5559A, CONSVTY 5559B), one must be a seminar course, and the remaining course may be either. Any substitutions must be approved by the musicology faculty.

Doctor of Musical Arts: Performance

Student Learning Outcomes

Instrumental

1. To present three superior level public solo recitals and a lecture recital that are artistically convincing, and historically and theoretically accurate.
2. To understand and be able to communicate the historical and analytical components of music.
3. To reflect on broader dimensions of their own musical experience.
4. To be familiar with advanced research resources in music.
5. Develop competence in the following fundamental performance areas: Technique, Tone, Expression, Intonation and Rhythm.

Keyboard

1. To present three superior level public solo recitals and a lecture recital that are artistically convincing, and historically and theoretically accurate.
2. To demonstrate an understanding of (and be able to communicate about) the historical and analytical components of music.
3. To reflect on and apply the broader dimensions of their own musical experience.
4. To demonstrate the ability to research an original topic and present their findings in written and oral forms.

Voice

1. To present three superior level public solo recitals and a lecture recital which are artistically mature, historically and theoretically informed, and stylistically and linguistically accurate.
2. To understand and be able to communicate the historical and analytical components of music, not only in coursework but also in other situations relevant to the degree: lecture recitals, doctoral projects, dissertation, teaching (as a GTA or private teacher elsewhere).
3. To reflect on and apply the broader dimensions of their own musical experiences.
4. To demonstrate a familiarity and practical knowledge with advanced research resources in music.

Required Courses

Code	Title	Credits
CONSVTY 5500-5600	Music History (three required) ⁴	9
CONSVTY 5500-5600	Music Theory (three required)	9
CONSVTY 5593 or CONSVTY 5593N	Introduction To Research And Bibliography In Music Introduction to Research and Bibliography in Music	3
(APPLIED INSTRUMENT) 5601 ^{1,2}		4
Take the following course 3 times:		12
CONSVTY 5697	Doctoral Recital ^{1,2,3}	
For Pedagogy courses see specific areas below		3
CONSVTY 5697A	Doctoral Lecture Recital ²	4
Select four "research points" from the following: ⁵		4
CONSVTY 5697	Doctoral Recital	
CONSVTY 5698	Research Problems	
CONSVTY 5699	Dissertation Research	
Total Credits		48

- ¹ A minimum of one semester of (APPLIED INSTRUMENT) 5601 is required before the first Doctoral Recital. Voice majors, with the approval of the Vocal Studies Division, may enroll in CONSVTY 5697 any semester to receive credit for a major UMKC opera role (one time only).
- ² Concurrent enrollment in (APPLIED INSTRUMENT) 5300 is required for each semester of enrollment in (APPLIED INSTRUMENT) 5601 and CONSVTY 5697. In addition, voice majors must register for a minimum of 4 semesters of VOICE 5200 concurrent with enrollment in VOICE 5601 or CONSVTY 5697.
- ³ Performance majors must enroll in (APPLIED INSTRUMENT) 5601; CONSVTY 5697; or CONSVTY 5697A, each semester of registration until the recital requirement has been fulfilled.
- ⁴ All doctoral students are required to complete three graduate music history courses. One must be a period course (CONSVTY 5554, CONSVTY 5555, CONSVTY 5556, CONSVTY 5557, CONSVTY 5558, CONSVTY 5559A, CONSVTY 5559B), one must be a seminar course, and the remaining course may be either. Any substitutions must be approved by the musicology faculty.
- ⁵ Students may enroll in only 1 point or 1 credit of doctoral research points prior to successful completion of the First Exam of comprehensive exams.

Language Requirement

A proficiency in one foreign language is required for DMA in Performance students majoring in voice and keyboard. See this page (p. 1026) of the catalog for options. DMA in Performance students majoring in orchestral instruments and guitar do not have a foreign language requirement.

Notes

Voice Majors

Must enroll in:

Code	Title	Credits
CONSVTY 5591H	Advanced Pedagogy I - Voice	2
Select one of the following:		2
CONSVTY 5566A	Advanced Vocal Literature: French Melodies	
CONSVTY 5566B	Advanced Vocal Literature: German Lieder	
CONSVTY 5566C	Advanced Vocal Literature: Nationalistic Art Songs	
CONSVTY 5566D	Advanced Vocal Literature: 20Th Century Amer & Engl Art Songs	

CONSVTY 5548

Opera Literature

Total Credits

4

Voice majors must pass the diction proficiency test in French, German and Italian.

Instrumental Majors

Must enroll in:

Code	Title	Credits
Take both of the following:		
CONSVTY 5591N	Pedagogy of Instrumental Music	1
CONSVTY 5445	Teaching and Learning in Music	2
Total Credits		3

All students whose major is an orchestral instrument must be enrolled in Conservatory Wind Symphony, Wind Ensemble or Conservatory Orchestra for a minimum of two semesters.

A maximum of three semesters of an ensemble can be counted on any D.M.A. planned program of study.

Must include three major works of chamber music in the recital component of the degree as determined in consultation with students' applied professor. These works may be performed on one program, or spread among the three recitals.

Keyboard Majors

Must enroll in:

Code	Title	Credits
Take one of the following:		
CONSVTY 5325	Graduate Piano Pedagogy I	3
CONSVTY 5326	Graduate Piano Pedagogy II	
CONSVTY 5591E	Group Piano Pedagogy	
CONSVTY 5592E	Advanced Piano Pedagogy	
Total Credits		3

Piano majors must enroll for a total of two semesters (two credits) of chamber music and one semester of CONSVTY 5569 (two credits). One of the three recitals (CONSVTY 5697) must include at least one major chamber work.

Graduate Certificates

Artist's Certificate (p. 1043)

Performer's Certificate (p. 1044)

Artist's Certificate

Student Learning Outcomes

Instrumental

1. To present three public performances that exhibit the highest degree of instrumental/vocal competence and artistry.
2. To gain broad experience in a significant amount of repertoire.
3. To present a business plan that assists their career plan.
4. To make contacts with people in the music world who can help them in their career.

Keyboard

1. To present three public performances that exhibit the highest degree of instrumental/vocal competence and artistry.
2. To demonstrate proficiency in a significant amount of repertoire.
3. To present a business plan that assists their career plan.
4. To make contacts with people in the music world who can help them in their career, and demonstrate an understanding of the principles of effective professional networking.

Voice

1. To present three public performances that exhibit the highest degree of instrumental/vocal competence and artistry.
2. To gain broad experience in a significant amount of repertoire.
3. To present a business plan that assists their career plan.
4. To make contacts with people in the music world who can help them in their career.

Code	Title	Credits
	Lessons and Recitals (Solo Experiences) ¹	16
	Electives ²	13
Total Credits: 29 (minimum)		

- ¹ Instrumental Students - Lessons = 4 hours, recitals = 12 hours; Piano Students - Lessons = 4 hours, recitals = 12 hours. One recital must include a complete concerto accompanied by second piano, and one recital must include at least one major chamber work. Voice Students - Lessons = four hours, recitals, opera roles, and/or oratorio roles = 12 hours.
- ² Instrumental Students - Students must enroll in one large ensemble and one chamber ensemble each semester; Keyboard Students - Chamber music, literature and pedagogy courses are recommended; Voice Students - Opera workshop, vocal literature, history of opera, vocal pedagogy, related arts courses in theater and art, as well as independent study experiences in language and performance are recommended.
- ³ Voice students - Will enroll in Vocal Coaching concurrently with lessons and recitals.

Note: Voice students must pass the diction proficiency test in French, German and Italian.

Performer's Certificate

Student Learning Outcomes

Instrumental

1. To present two public performances that exhibit the highest degree of instrumental/vocal competence and artistry.
2. To gain broad experience in a significant amount of repertoire.
3. To present a business plan that assists their career plan.
4. To make contacts with people in the music world who can help them in their career.
5. Demonstrate competence in the following fundamental performance areas: Technique, Tone, Expression, Intonation and Rhythm.

Keyboard

1. To present two public performances that exhibit the highest degree of instrumental/vocal competence and artistry.
2. To demonstrate proficiency in a significant amount of repertoire.
3. To present a business plan that assists their career plan.
4. To make contacts with people in the music world who can help them in their career, and demonstrate an understanding of the principles of effective professional networking.

Voice

1. To present two public performances that exhibit the highest degree of instrumental/vocal competence and artistry.
2. To gain broad experience in a significant amount of repertoire.
3. To present a business plan that assists their career plan.
4. To make contacts with people in the music world who can help them in their career.

Code	Title	Credits
	Lessons and Recitals (Solo Experiences) ¹	16
	Chamber and Ensemble Work (Collaborative Experiences) and/or Prescribed Electives	8
	Music Literature/Pedagogy ²	3-5
Total Credits: (minimum)		27-29

- ¹ Instrumental and keyboard students: four hours of lessons and 12 hours of recitals. Piano students are required to present three public recitals. Voice students: eight hours of lessons and eight hours of recitals.
- ² Instrumental students, three hours; keyboard students, five hours; voice students, four hours.
- ³ Voice students - Will enroll in Vocal Coaching concurrently with lessons and recitals.

Note: Voice students must pass the diction proficiency test in French, German and Italian.

Master of Arts Degrees

- Master of Arts: Music (p. 1045)
- Master of Arts: Music Therapy Option (p. 1045)

Master of Arts: Music

Student Learning Outcomes

Students graduating from this program will:

- Write at a publishable level about music in a way that demonstrates a high level of musical comprehension.
- Be able to explore music within a variety of contexts, in order to provide insight and demonstrate comprehension of advancing musical concepts.
- Create original music-based works, using the vehicle that serves as an appropriate academic focus.

Required Courses

Code	Title	Credits
Area of Concentration ¹		9
CONSVTY 5500-5600	Music Theory ²	3
CONSVTY 5500-5600	Music History ³	3
CONSVTY 5593 or CONSVTY 5594A	Introduction To Research And Bibliography In Music Introduction To Experimental Research In Music	3
CONSVTY 5598	Research Problems	2
Applied Music Study ⁴		2
Electives		8
Total Credits		30

- ¹ The area of concentration is developed by the student with guidance and approval of the supervisory committee as part of the planned program. Nine hours of work in one discipline must be completed. Examples of concentration areas include (but are not limited to): Composition, Conducting, Education, Musicology, Jazz, Performance, Theory.
All students applying for the Master of Arts in Music with an area of concentration in Jazz must audition on their applied instrument for the jazz studies faculty. No other audition is required. Applied lesson requirements will be fulfilled within the Jazz Division during the student's course of study.
- ² Elective credit may be substituted for students pursuing an area of concentration in music theory.
- ³ Elective credit may be substituted for students pursuing an area of concentration in music history.
- ⁴ If the applicant qualifies for applied lessons at the 302 level, a minimum of two credit hours is required. If the applicant does not qualify for applied lessons at the 302 level, the student must enroll in applied lessons for three terms or until completion of the 302 level. Students who chose a performance area of concentration must complete a minimum of one semester of 5500A. A total of nine hours of lessons/ensembles is required for an applied area of concentration.

Master of Arts: Music Therapy Emphasis

Student Learning Outcomes

1. Graduate students will initiate the skills of community contact, planning, and collaboration in order to complete an advanced clinical experience within the community for 1-2 semesters prior to finishing their degree.
2. Graduate students will demonstrate advanced knowledge of a selected population and/or clinical area of practice as evidenced by treatment plan and implementation that are informed by a theoretical framework and the therapeutic function of music by the end of their advanced clinical rotation(s).
3. Graduate students will use advanced clinical musicianship in practice as demonstrated by the use of bar chords and advanced strumming and fingerpicking techniques on guitar, and advanced accompaniment patterns on piano, as well as composition for therapeutic effectiveness by the end of their advanced clinical rotation(s).
4. Graduate students will demonstrate an understanding of a theoretical framework to inform practice and research in an area of specialty before completing their degree.
5. Graduate students will develop a project that supports translational research before completing their degree.

Required Courses

Code	Title	Credits
Required:		
CONSVTY 5544	Advanced Clinical Experience	2
CONSVTY 5542	Clinical Supervision in Music Therapy	3
CONSVTY 5541	Theories and Practice of Music Therapy	3
Take the following course two times:		4
CONSVTY 5545	Seminar In Music Therapy	
CONSVTY 5500-5600 Music History or Music Theory		3
Total hours in this section: 15		
Specialization in Clinical Research:		
CONSVTY 5594A	Research and Analysis in Music and Behavior	3
CONSVTY 5594B	Research Applications in Music and Behavior	3
RES-ME 5700	Introduction To Research Methodology	2-3
CONSVTY 5599	Thesis	3
OR		
CONSVTY 5589	Academic Portfolio	
Total hours in this section: 12		
Electives in Area of Special Interest (suggested options):		
VOICE, PIANO or GUITAR 5500C (applied lesson)		
Gerontology		
Health Services Administration		
Gerontology Administration		
Counseling Psychology and Counselor Education		
Education		
Sociology		
Total hours in this section: 7		
Total Credits: 34		

Master of Music Degrees

- Master of Music: Conducting (p. 1046)
- Master of Music: Music Composition (p. 1048)
- Master of Music: Music Theory (p. 1048)
- Master of Music: Musicology (p. 1049)
- Master of Music: Performance-Keyboards (p. 1050)
- Master of Music: Performance-Orchestral and Guitar (p. 1051)
- Master of Music: Performance-Woodwinds (p. 1051)
- Master of Music: Performance-Voice (p. 1052)

Master of Music: Conducting

Student Learning Outcomes

Students graduating from this program will:

- Students will be comfortable with basic conducting gestures.
- Students will be able to rehearse an ensemble effectively and will be able to identify ensemble faults in pitch, rhythm, intonation, precision, and balance.
- Students will demonstrate basic levels of musicality and expression in their conducting.
- Students will be able to articulate in written and oral formats the stylistic characteristics of each major musical style period.
- Students will be able to list and define the characteristics of the core repertory for their field of study.
- Students will be able to analyze the historical and analytical components of music in both written and oral formats.

Choral Interest Area

Required Courses

Code	Title	Credits
CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593 or CONSVTY 5593N	Introduction To Research And Bibliography In Music Introduction to Research and Bibliography in Music	3
Take 4 semesters of the following:		4
CONSVTY 5580	Advanced Choral Conducting-Masters Level	
Take 4 semesters of the following:		8
CONSVTY 5587	Seminar In Choral Literature	
CONSVTY 5597A	Master's Conducting Performance ¹	4
CONSVTY 5598	Research Problems	2
Electives ²		3
Total Credits: 30 (minimum)		

¹ One public performance is required, as is one rehearsal or lecture demonstration.

² Recommended electives for the Choral track include applied voice and vocal pedagogy.

Orchestral Interest Area

Required Courses

Code	Title	Credits
CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593 or CONSVTY 5593N	Introduction To Research And Bibliography In Music Introduction to Research and Bibliography in Music	3
CONS 5583 Advanced Instrumental Conducting (any two from 5583A or 5583B)		4
CONSVTY 5582A or CONSVTY 5582B or CONSVTY 5582C	Advanced Choral Conducting - Technique Advanced Choral Conducting - Style Advanced Choral Conducting-Rehearsal Techniques	2
Take 2 semesters of the following:		4
CONSVTY 5586A	Seminar In Orchestral Literature	
Applied Music ¹		2-6
CONSVTY 5597A	Master's Conducting Performance ²	4
CONSVTY 5598	Research Problems	2
Electives		1-5
Total Credits: 30 (minimum)		

¹ Orchestral Applied Requirement: The applicant must enroll in applied music the first term of registration as a full-time, degree-seeking student. Progress will be measured by the following:

1. If the applicant qualifies for applied music at the 401 level, a minimum of two credit hours is required.
2. If the applicant does not qualify for applied music at the 401 level, the student must enroll in applied music for a minimum of two terms, until completion of the 401 level, or until graduation.
3. In addition, instrumental conducting majors will be required to enroll in two terms of applied music on other appropriate instruments, as advised by the conducting faculty.

² One public performance is required, as is one rehearsal or lecture demonstration.

Wind Interest Area

Required Courses

Code	Title	Credits
CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3

or CONSVTY 5593N	Introduction to Research and Bibliography in Music	
CONSVTY 5583 Advanced Instrumental Conducting (any two from 5583A or 5583C)		4
Take 2 semesters of the following:		4
CONSVTY 5586B	Seminar In Wind/Band Literature	
Applied Music ¹		2-6
CONSVTY 5597A	Master's Conducting Performance ²	4
CONSVTY 5598	Research Problems	2
Electives		1-5
Total Credits: 30 (minimum)		

¹ The Applied Music requirement can be met through any type of instruction focused on the applied study of any instrument or voice. These experiences must be selected in consultation with the major professor.

² One public performance is required, as is one rehearsal or lecture demonstration.

Master of Music: Music Composition

Student Learning Outcomes

Students graduating from this program will:

- Students will develop their musical voice as creative artists, and consistently produce works.
- Students will develop mastery of analytical and technical skills in a variety of media and genres.
- Students will develop their skills as collaborators with performers and generative artists and promote their work.
- Students will refine their ability to speak and write about their music and the music of their time, and build audiences through mentoring, teaching and advocating new music.

Required Courses

Code	Title	Credits
CONSVTY 5500- CONSVTY 5600	Music History	3
CONSVTY 5500- CONSVTY 5600	Music Theory	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
or CONSVTY 5593N	Introduction to Research and Bibliography in Music	
Take the following course 3 times:		9
CONSVTY 5533	Advanced Composition	
CONSVTY 5531	Advanced Orchestration	3
CONSVTY 5599	Thesis ¹	4
Electives		5
Total Credits		30

¹ An appropriate composition. A score must be filed in the Conservatory Library.

Master of Music: Music Theory

Student Learning Outcomes

1. Students will be able to demonstrate insight into musical works of moderate complexity through written analyses of those works (both in classes and in a thesis).
2. Students will be able to convey familiarity and moderate fluency with standard music-theoretical and analytical concepts.
3. Students will be able to utilize music-theoretical knowledge and insight to initiate substantial scholarly work in analysis, theory, and pedagogy (in music theory or a related field).

Required Courses

Code	Title	Credits
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
or CONSVTY 5593N	Introduction to Research and Bibliography in Music	
Music History (Graduate Level)		3

CONSVTY 5526A	Introduction to Schenkerian Theory and Analysis	3
CONSVTY 5591G	Pedagogy of Music Theory	3
CONSVTY 5523	Analytical Procedures	3
CONSVTY 5528	Introduction to Post-Tonal Theory	3
CONSVTY 5598	Research Problems	2
CONSVTY 5599	Thesis	6
Electives		6
CONSVTY 5518	Current Issues and Trends in American Music Theory	3
Total Credits		35

Piano Proficiency Requirement

The Conservatory's undergraduate piano proficiency requirement must be met.

Applied Music Requirement

Successful completion of one of the following is required:

- If the student qualifies for applied music at the 302 level, then no applied study is required.
- If the student does not qualify through audition for applied music at the 302 level, then the student must enroll for applied study for three semesters or until the 301 jury is passed.

Foreign Language Requirement

For all masters students in Music Theory, a grade of B- (2.7) or better in a first-semester, sophomore-level foreign language course or C (2.0) work or better in each of two junior-level courses or in one senior-level literature or civilization course is viewed as an adequate demonstration of foreign language skills. Students must study French or German. A language proficiency test, if provided by language instructors or departments, may be substituted for course requirements provided it documents language capabilities equivalent to the previously described courses. In such cases, a letter from the university language professor, describing the process and results, must be forwarded to the Conservatory Associate Dean for Graduate Studies.

Master of Music: Musicology

Student Learning Outcomes

Students graduating from this program will:

- Students will be able to express original and substantive ideas about music in writing.
- Students will be able to speak at a professional level about music in a variety of forums.
- Students will be able to use basic research resources in music effectively.
- Students will be able to apply various historical and critical perspectives to their own study of music.

Required Courses

Code	Title	Credits
CONSVTY 5500-5600	Music History (four courses, two periods and two of choice)	12
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593 or CONSVTY 5593N	Introduction To Research And Bibliography In Music Introduction to Research and Bibliography in Music	3
Applied Music 5500A (or three terms in the same performing medium at any level) ¹		2
CONSVTY 5591K	Pedagogy of Music History	3
CONSVTY 5693	Advanced Research and Bibliography In Music	3
CONSVTY 5598	Research Problems	2
CONSVTY 5599	Thesis	6
Electives		1-3
Total Credits: 35 (minimum)		

¹ Elective credit may be substituted if the 5500A level of an applied instrument is achieved at the audition.

Language Requirements

For all M.M. students in Musicology, a grade of B- (2.7) or better in a first-semester, sophomore-level foreign language course. Students must study French, German or Italian unless the substitution of another language is approved by the supervisory committee. A language proficiency test may be substituted for course requirements, provided it documents language capabilities equivalent to the completion of a first-semester, sophomore-level course. This must be approved in advance by the supervisory committee. In such cases, a letter describing the process and results must be forwarded to the chair of the supervisory committee, the musicology area coordinator and the Conservatory Associate Dean for Graduate Studies.

Supervisory Committee

The Supervisory Committee, which consists of at least two musicology faculty plus one other member, is assigned to approve the planned program and prepare and grade the comprehensive examination. The committee must be selected before the student completes two terms of enrollment.

Graduate Approval of Major

Complete CONSVTY 5593, CONSVTY 5591K, and CONSVTY 5693 with a grade of at least A-; one graduate-level music history course with a grade of at least A-; and present a scholarly paper before a public forum on a topic agreed to in advance by the musicology faculty (the duration of the presentation is to be at least 20 minutes)."

Master of Music: Performance-Keyboards

Student Learning Outcomes

1. To present two high-level public solo recitals that are correct technically and artistically convincing.
2. To demonstrate an understanding of (and be able to communicate about) the historical and analytical components of music.
3. To reflect on and apply the broader dimensions of their own musical experience.
4. To demonstrate the ability to research an original topic and present their findings in written and oral forms.

Required Courses

Code	Title	Credits
CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593 or CONSVTY 5593N	Introduction To Research And Bibliography In Music Introduction to Research and Bibliography in Music	3
CONSVTY 5569	Graduate Piano Literature Seminar	2
Take two semesters of the following course:		8
PIANO 5501	Graduate Piano - Masters Performance ^{1,2}	
Take two semesters of the following course:		8
CONSVTY 5597	Master's Recital ^{2,3}	
Choose one of the following courses:		
CONSVTY 5325	Graduate Piano Pedagogy I	3
or		
CONSVTY 5326	Graduate Piano Pedagogy II	3
or		
CONSVTY 5591E	Group Piano Pedagogy	3
or		
CONSVTY 5592E	Advanced Piano Pedagogy	3
Take two semesters of the following course:		2
CONSVTY 5305A	Principles of Chamber Music	1
Electives ⁴		4
Total Credits: 36		

¹ A minimum of one semester of applied music (5501) is required before the first recital. PIANO 5501 or CONSVTY 5597 is required each semester of enrollment until the recital requirement is met.

² Concurrent enrollment in PIANO 5300 is required for each semester of enrollment in PIANO 5501 and CONSVTY 5597.

³ Piano students are required to present two public recitals.

⁴ Recommended electives include: CONSVTY 5325, CONSVTY 5326, CONSVTY 5591E, CONSVTY 5592E, CONSVTY 5503, CONSVTY 5571, CONSVTY 5572

Master of Music: Performance-Orchestral and Guitar

Student Learning Outcomes

1. To present two high-level public solo recitals that are correct technically and artistically convincing.
2. To understand the historical and analytical components of music.
3. To reflect on broader dimensions of their own musical experience.
4. To be familiar with basic research resources in music.
5. Develop competence in the following fundamental performance areas: Technique, Tone, Expression, Intonation and Rhythm.

Required Courses

Code	Title	Credits
CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
or CONSVTY 5593N	Introduction to Research and Bibliography in Music	
Take the following courses 2 times each: ^{1,2}		16
(APPLIED INSTRUMENT) 5501		
CONSVTY 5597	Master's Recital	
Take the following course 4 times:		4
CONSVTY 5305A	Principles of Chamber Music	
Enroll in one of the following each semester: ³		4
CONSVTY 5302	Orchestra	
CONSVTY 5306A	Conservatory Wind Ensemble	
CONSVTY 5306C	Wind Symphony	
CONSVTY 5591N	Pedagogy of Instrumental Music	1
Electives (Non-applied music courses)		2
Total Credits		36

¹ A minimum of one semester of applied music (5501) is required before the first recital. (APPLIED INSTRUMENT) 5501 or CONSVTY 5597 is required each semester of enrollment until the recital requirement is met.

² Concurrent enrollment in (APPLIED INSTRUMENT) 5300 is required for each semester of enrollment in (APPLIED INSTRUMENT) 5501 and CONSVTY 5597.

³ Those students majoring in guitar may substitute approved elective or chamber music credit.

Master of Music: Performance-Woodwinds

Student Learning Outcomes

1. To present two high-level public solo recitals that are correct technically and artistically convincing.
2. To understand the historical and analytical components of music.
3. To reflect on broader dimensions of their own musical experience.
4. To be familiar with basic research resources in music.

Required Courses

Code	Title	Credits
CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
or CONSVTY 5593N	Introduction to Research and Bibliography in Music	
(APPLIED INSTRUMENT #1) 5501 ^{1,2}		4
(APPLIED INSTRUMENT #2) 5500A ³		2
(APPLIED INSTRUMENT #3) 5500A ³		2
Take the following course 4 times		
CONSVTY 5591N	Pedagogy of Instrumental Music ⁴	1

Take the following course 2 times: 8

CONSVTY 5597	Master's Recital	
Electives/Ensemble ⁵		5
Total Credits: 34 (minimum)		

- ¹ A minimum of one semester of applied music is required before the recital. Not more than one-half of the total hours counted toward the planned program may be in applied music and recitals.
- ² Concurrent enrollment in (APPLIED INSTRUMENT) 5300 is required for each semester of enrollment in (APPLIED INSTRUMENT) 5501 and CONSVTY 5597.
- ³ A graded half recital during the second semester of study on instruments #2 and #3 is required.
- ⁴ Enroll in pedagogy on four different instruments.
- ⁵ Two semesters of participation in a major ensemble are required on instrument #1. One semester of ensemble participation each is required on instruments #2 and #3.

Note: Jury approval of the 101(2) applied level or higher on instruments #4 and #5 is required before graduation.

Master of Music: Performance-Voice

Student Learning Outcomes

Students graduating from this program will:

- 1. The student will demonstrate correct vocal technique required of a soloist.
- 2. The student will synthesize and apply the historical and analytical components of music as it applies to the vocal repertoire;
- 3. The student will identify and apply proper linguistic grammar, diction, and idiomatic pronunciation as it pertains to the operatic and art song repertoire;
- 4. The student will demonstrate proper stage movement, musical/textual artistry, and acting skills through workshop and live performances;
- 5. The student will examine and apply techniques of basic historical research in music.

Voice Emphasis

Required Courses

Code	Title	Credits
CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
VOICE 5502	Applied Voice	2
CONSVTY 5593 or CONSVTY 5593N	Introduction To Research And Bibliography In Music Introduction to Research and Bibliography in Music	3
CONSVTY 5597	Master's Recital ²	4
CONSVTY 5548	Opera Literature	2
Take the following course two times:		8
VOICE 5501	Graduate Voice - Masters Performance ¹	
Take the following course two times:		2
VOICE 5200	Vocal Coaching: Recital and Operatic Repertoire	
Select one of the following courses:		2
CONSVTY 5566A	Advanced Vocal Literature: French Melodies	
CONSVTY 5566B	Advanced Vocal Literature: German Lieder	
CONSVTY 5566C	Advanced Vocal Literature: Nationalistic Art Songs	
CONSVTY 5566D	Advanced Vocal Literature: 20Th Century Amer & Engl Art Songs	
Conservatory Choral Ensemble (2 semesters required)		2
CONSVTY 5577	Advanced Vocal Diction	2
CONSVTY 5517	Advanced Opera Workshop: Audition Techniques	1
Electives ³		2
Total Credits		36

- 1 Concurrent enrollment in VOICE 5300 is required for each semester of enrollment in VOICE 5501 and CONSVTY 5597.
- 2 The Master's Recital is typically taken in either semester three or four.
- 3 Recommended electives include: VOICE 5200, CONSVTY 5566A, CONSVTY 5566B, CONSVTY 5566C, CONSVTY 5566D, CONSVTY 5591H, CONSVTY 5116

Notes:

Not more than one-half the total hours counted toward the planned program may be in applied music and recitals.

A minimum of one semester of applied music (5501 or 5502) is usually required before the vocal solo recital. However, Voice Performance majors, with the approval of the Vocal Studies Division, may enroll in 5597 Masters Recital for any semester. The Master's Recital is typically taken in either semester 3 or 4.

A student may not concurrently enroll in CONSVTY 5597 with either VOICE 5501 or VOICE 5502 in the same semester.

Diction Proficiency Test

The Vocal Studies Division Coaching Faculty will administer the Diction Proficiency Test for French, German and Italian during the first week of the fall semester. This proficiency test must be passed. Remedial diction courses may be recommended. If these remedial courses are taken for no credit/grade, students will be required to re-take and pass the proficiency test.

Language Requirement

All MM students in Voice Performance must receive a grade of B- (2.7) or better in a second-semester, freshman-level foreign language course.

Students must study French, German, or Italian. Another language may be substituted provided the student documents language capabilities equivalent to the completion of a second-semester, freshman-level course and the substitution is approved by the Vocal Studies Division (VSD) faculty in advance. A student who has not formally completed the required language courses, but is able to demonstrate competency at the suggested level, may petition to be tested by members of the voice or coaching faculty at a scheduled time during their UMKC audition day. In such cases, a letter describing the process and results must be forwarded to the Chair of VSD and the Conservatory Associate Dean of Graduate Studies.

Opera Role

Each student in the MM in Voice Performance degree must audition for an opera role a minimum of two semesters. Students who are cast and accept a role in the opera productions are required to enroll in either CONSVTY 5516 (Major Role) or CONSVTY 5116 (Minor Role). The VSD Faculty will determine if a role is "major" or "minor," based on the level of difficulty of preparation and performance of the particular opera role. Enrollment in CONSVTY 5516 and CONSVTY 5116 will include vocal coaching hours during the rehearsal period for the assigned opera role. Opera auditions for the academic year will typically occur either at the end of the spring semester or the beginning of the fall semester.

Master of Music Education**Student Learning Outcomes**

Students graduating from this program will:

- MME students will demonstrate a basic understanding of current music education issues and their impact on the education of children.
- MME students will demonstrate a historical perspective on music education practice.
- MME students will demonstrate acceptable musicianship skills in performance, rehearsal, and classroom environments.
- MME students will demonstrate ability to reflect upon their own practice as music educators
- MME students will demonstrate ability to investigate contemporary teaching approaches and techniques available to the music educator.
- MME students will demonstrate the necessary skills to review and design music materials, curriculum, and research related to music teaching and learning.

Required Courses

Code	Title	Credits
CONSVTY 5591G	Pedagogy of Music Theory	3
CONSVTY 5042	Styles and Genres in Music	3
CONSVTY 5574	Contemporary Issues in Music Education	3
choose ONE of the following courses (2 credits total):		
CONSVTY 5540A	Seminar In Adv Music Education Methods For Elementry Teachers	2
CONSVTY 5540B	Advanced Methods In Instrumental Music	2
CONSVTY 5540C	Advanced Methods In Choral Music	2
choose ONE of the following courses (3 credits total):		

CONSVTY 5589	Academic Portfolio	3
or CONSVTY 5599	Thesis	
choose ONE of the following RESEARCH courses (3 credits total):		
CONSVTY 5594A	Research and Analysis in Music and Behavior	3
or CONSVTY 5585	Introduction to Descriptive Research in Music	
or CONSVTY 5578	Research for Music Teachers	
Methods/Materials/Music Electives (e.g., CONSVTY 5445, 5540x, 5582x, 5583x, 5586x, 5587x, Summer Workshops, Applied Music)		8
Electives		5
TOTAL: 30 hours minimum		

Undergraduate Programs

- Bachelor of Arts: Music (p. 1054)
- Bachelor of Music Education (p. 1063)
- Bachelor of Music: Jazz Studies (p. 1077)
- Bachelor of Music: Music Composition (p. 1081)
- Bachelor of Music: Music Performance-Guitar (p. 1085)
- Bachelor of Music: Music Performance-Piano (p. 1090)
- Bachelor of Music: Music Performance-Voice (p. 1094)
- Bachelor of Music: Music Performance-Wind, Strings, Percussion (p. 1099)
- Bachelor of Music: Music Theory (p. 1103)

Bachelor of Arts: Music

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate the ability to write effectively about music in a technical, cultural and historical context.
- Apply concepts from written theory, aural skills, sight-reading, sight-singing, and keyboard skills to attain fluency in western music.
- Synthesize concepts in music from a historical and technical construct to inform ideas about community and culture.
- Demonstrate thinking beyond disciplinary boundaries, leading to innovation in all fields.
- Synthesize ideas or solutions into a coherent whole by drawing from more than one field to create a novel product or idea.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH; Satisfied in program requirements below)		
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
CONSVTY 151 (MUSE; satisfies GECRT-AH course requirement)		3
Musicianship		
CONSVTY 141	Musicianship I	4
CONSVTY 142	Musicianship II	4
CONSVTY 241	Musicianship III	4
Music History		
CONSVTY 351	History of Music in Western Civilization I	3
CONSVTY 352	History of Music in Western Civilization II	3
Keyboard Skills		
CONSVTY 110	Keyboard Skills I	1
CONSVTY 123	Keyboard Skills II	1
CONSVTY 223	Keyboard Skills III	1
Capstone Project		
CONSVTY 490	Independent Study	3
Applied Lessons and Studio (5 semesters in one instrument) ¹		
Instrument 101 (Freshmen Instrument I)		2
Instrument 102 (Freshmen Instrument II)		2
Instrument 201 (Sophomore Instrument I)		2
Instrument 202 (Sophomore Instrument II)		2
Instrument 301 (Junior Instrument I)		2
Instrument 300 (Studio-5 semesters)		
Ensemble		5
Choose from the following to be taken for 5 semesters:		
CONSVTY 302	Orchestra	
CONSVTY 306A	Conservatory Wind Ensemble	
CONSVTY 306C	Wind Symphony	
CONSVTY 307B	University Singers	
CONSVTY 307C	Conservatory Singers	
CONSVTY 308A	Conservatory Concert Choir	
Electives		
Music Electives ²		15
General Electives ³		33
Total Credits		90

¹ BASSOON, CELLO, CLARINET, Euphonium (EUPHNM), FLUTE, GUITAR, HORN, OBOE, Percussion (PERCSN), PIANO, Saxophone (SAXOPH), String Bass (STR-BASS), Trombone (TROMB), TRUMPET, TUBA, VIOLA, VIOLIN, VOICE.

² Nine credit hours must be at the 300 level and above. Students are encouraged to take other coursework in their field: Pedagogy of their applied instrument; instrument literature; Conducting; chamber music; or additional keyboard classes.

³ Students are encouraged to take other non-music Conservatory classes (in the Theatre and Dance divisions), as well as coursework in non-Conservatory fields.

Minimum Grade: C or better in all CONSVTY or Instrument specific coursework

GPA Minimum: 2.0

Total Credit hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 141 ^{CC}		4 CONSVTY 142 ^{CC}	4
CONSVTY 110 ^{CC}		1 CONSVTY 123 ^{CC}	1
Instrument 101		2 Instrument 102	2
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
GEFSE 101		3 CONSVTY 151	3
COMM-ST 110, 277, or 140		3 MATH 116 or STAT 115	3
		14	14

Second Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 241 ^{CC}		4 Instrument 202	2
CONSVTY 223 ^{CC}		1 Instrument 300	0
Instrument 201		2 CONSVTY 3XX Ensemble	1
Instrument 300		0 CONSVTY XXX Music Major Elective	3
CONSVTY 3XX Ensemble		1 CONSVTY 3XX/4XX Music Major Elective	3
ENGLISH 110		3 ENGLISH 225	3
GECRT-SC 101		3 GECRT-SS 101	3
General Elective		3	
		17	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 351		3 CONSVTY 352	3
CONSVTY 3XX/4XX Music Major Elective		3 CONSVTY 3XX/4XX Music Major Elective	3
CONSVTY XXX Music Major Elective		3 GECDV 201	3

Instrument 301	2 General Elective	3
Instrument 300	0 General Elective	3
CONSVTY 3XX Ensemble	1	
GECUE 201	3	
	15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
HISTORY 101, 102, or POL-SCI 210		3 CONSVTY 490 (Capstone)	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective (3XX/4XX if needed)		3 General Elective	3
General Elective		3 General Elective	3
	15		15

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

Conservatory Phone 816-235-2900

Conservatory Website conservatory.umkc.edu (<http://conservatory.umkc.edu/>)

Bachelor of Arts: Music Therapy Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Be able to play and accompany self, using multiple keys and accompaniment patterns on the guitar and piano while singing in a pleasing tone quality.
- Lead and interact with others in a manner that engages them in the music-based therapy experience.
- Be able to sight read simple songs using voice, guitar and piano.
- From a listening experience, transcribe and create a simple, yet complementary harmonic accompaniment pattern to an unfamiliar musical recording of contemporary music.
- Describe the music therapy treatment process for various populations served by music therapists.
- Demonstrate professional business and advocacy skills.

Additional Admission Criteria

1. Students should be able to qualify for Applied Lessons, for two hours of credit in their major performance area.
2. Emotional stability and good physical stamina are also essential for a music therapist.
3. Applicants are required to complete an interview with a music therapy faculty member prior to admission.

Licensure

Graduates may apply for membership by contacting the American Music Therapy Association (AMTA). For Board Certification, graduates may contact the Certification Board for Music Therapy (CBMT). All coursework must be completed before beginning CONSVTY 410. Therapy students are required to enroll in a professional liability insurance program.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH; Satisfied in program requirements below)		
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3

Civic & Urban Engagement Course (GECUE)	3
Total Credits	27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Students must earn a grade of C or better in all major coursework.

Code	Title	Credits
CONSVTY 151 (MUSE; satisfies GECRT-AH course requirement)		3
Keyboard Skills		
CONSVTY 110	Keyboard Skills I	1
CONSVTY 123	Keyboard Skills II	1
CONSVTY 223	Keyboard Skills III	1
Applied Lessons and Studio ¹		
Instrument 101 (Freshman Instrument I)		2
Instrument 102 (Freshman Instrument II)		2
Instrument 201 (Sophomore Instrument I)		2
Instrument 202 (Sophomore Instrument II)		2
Instrument 300 (Studio-4 semesters)		
Musicianship		
CONSVTY 141	Musicianship I	4
CONSVTY 142	Musicianship II	4
CONSVTY 241	Musicianship III	4
CONSVTY 242	Musicianship IV	4
Music History and Literature		
CONSVTY 351	History of Music in Western Civilization I	3
CONSVTY 352	History of Music in Western Civilization II	3
Technique		
CONSVTY 315	Music Therapy Piano Techniques	2
CONSVTY 316	Music Therapy Guitar Techniques	2
CONSVTY 373G	Instrumental Techniques Guitar	1

CONSVTY 379A	Music Therapy Clinical Applications - Group Leading Techniques	2
CONSVTY 379B	Music Therapy Clinical Applications - Music Therapy Interventions	2
CONSVTY 379C	Music Therapy Clinical Applications: Music Therapy Singing Techniques	1
CONSVTY 379D	Music Therapy Clinical Applications - Music Therapy Repertoire	1
Ensemble (4 semesters from the following)		4
CONSVTY 302	Orchestra	
CONSVTY 306A	Conservatory Wind Ensemble	
CONSVTY 307B	University Singers	
CONSVTY 306C	Wind Symphony	
CONSVTY 307C	Conservatory Singers	
CONSVTY 308A	Conservatory Concert Choir	
Clinical Foundations		
Music Therapy		
CONSVTY 138	Music Therapy Foundations	2
CONSVTY 317	Music Therapy Ensemble and Improvisation Techniques	3
CONSVTY 344	Anatomy for Music Therapy Practice	2
CONSVTY 366	Clinical Foundations II	3
CONSVTY 395	Clinical Foundations I	3
CONSVTY 410	Internship	1
CONSVTY 410A	Advanced Music Therapy Principles and Applications	3
CONSVTY 407A	Music Therapy Principles and Applications	3
CONSVTY 435	Psychological Foundations of Music	3
PSYCH 210	General Psychology	3
Electives		
Electives (Psychology or counseling)		9
Electives (Non-music)		6
Total Credits		92

¹ BASSOON, CELLO, CLARINET, Euphonium (EUPHNM), FLUTE, GUITAR, HORN, OBOE, Percussion (PERCSN), PIANO, Saxophone (SAXOPH), String Bass (STR-BASS), Trombone (TROMB), TRUMPET, TUBA, VIOLA, VIOLIN, VOICE

Minimum GPA: 2.0

Total Credit Hours: 122

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 141 ^{CC}		4 CONSVTY 142 ^{CC}	4
CONSVTY 110 ^{CC}		1 CONSVTY 123 ^{CC}	1
Instrument 101		2 Instrument 102	2
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
CONSVTY 138		2 CONSVTY 373G	1
GEFSE 101		3 CONSVTY 151	3
ENGLISH 110		3 ENGLISH 225	3
		16	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 241 ^{CC}		4 CONSVTY 242	4
CONSVTY 223 ^{CC}		1 CONSVTY 315	2
Instrument 201		2 Instrument 202	2
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
CONSVTY 316		2 CONSVTY 317	3
CONSVTY 379A		2 CONSVTY 379B	2
COMM-ST 110, 277, or 140		3 MATH 116 or STAT 115	3
		15	17

Third Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 351		3 CONSVTY 352	3
CONSVTY 395		3 CONSVTY 366	3
CONSVTY 379C		1 CONSVTY 379D	1
PSYCH 210		3 CONSVTY 435	3
GECRT-SS 101		3 PSYCH XXX Elective	3
GECRT-SC 101		3 GECDV 201	3
		16	16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 407A		3 CONSVTY 410	1
CONSVTY 344		2 CONSVTY 410A	3
GECUE 201		3 PSYCH XXX Elective	3
General Elective (Non-Music)		3 PSYCH XXX Elective	3

General Elective (Non-Music)	3 HISTORY 101, 102, or POL-SCI 210	3
	14	13

Total Credits: 122

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

Conservatory Phone 816-235-2900

Conservatory Website conservatory.umkc.edu (<http://conservatory.umkc.edu/>)

Bachelor of Music Education

Programs

Bachelor of Music Education

- Choral (p. 1065)
- Instrumental (p. 1070)

Application and Audition Requirements

Music Education majors are expected to display those personal characteristics and professional qualities possessed by effective teachers. Applicants audition in their applied performance area and are interviewed by the music education faculty to determine their admission to this program.

Applications for admission to the UMKC Conservatory are reviewed by both the Applied and the Music Education faculties. Applicants must demonstrate facility in their applied performance area and a strong academic record in addition to well-defined attitudes and goals toward music in elementary and secondary education (see fitness-to-teach).

1. Applicants must have an ACT score of 21 or higher, or be at the 50 percentile or higher in the high school class rank, or have a high school grade-point average of 2.50 or better.
2. Applicants may be asked to complete an interview or an online questionnaire related to their interest in the music education program.
3. Applicants who do not achieve these standards (listed above) may be considered for provisional admission, but must meet the standards listed below to progress through the degree with approval of the music education faculty.

Expectations for Degree Progression and Retention

1. Academic/Professional Status

Evaluation of student progress occurs each semester through an audit and advising system in the Music Education Division. In addition, the progress of all students is reviewed at the completion of the junior year by the entire Music Education faculty in order to determine admission to the teacher education track. The Music Education faculty expects music education students to exhibit those characteristics appropriate for effective teaching throughout the program and to maintain good standing, free from academic, disciplinary, or music probation.

1. Maintain the following grade point averages:
 - a. Minimum cumulative GPA for all coursework is 2.80.
 - b. Minimum cumulative GPA for all music coursework is 3.00.

- c. Minimum cumulative GPA for all musicianship coursework (CONSVTY 141, 142, 241, 242) is 2.75.
 - d. All required music courses must be completed with a C or better.
2. Applied Study:
- a. Successfully complete the sequence of applied music lessons (Choral emphasis students must progress through the 302 level, Instrumental emphasis students must progress through the 401 level).
 - b. For instrumental (band and orchestra) music education majors: Complete a 30-minute public recital
 - c. For choral music education majors: The degree recital in voice is not required.

Professional Readiness Interview

Upon being admitted to the teacher education track, the Conservatory and the School of Education have a process in place to assure that all teacher candidates will be assessed throughout their program according to "Professional Readiness" criteria (the Professional Readiness Checklist/Referral Form is available from the Music Education Faculty). Additional criteria include:

1. Completed criminal background history review.
2. Meeting academic requirements, including scholastic integrity and good communication skills.
3. Exhibiting personal and professional behaviors, such as appropriate social and interpersonal skills and appropriate dress for professional contexts.
4. Demonstrating appropriate cultural and social attitudes and behavior, including respect for diversity and acceptance of and accommodations for exceptional learners
5. Demonstrating appropriate emotional and cognitive dispositions, such as sound judgment and reflective and analytical thinking.

All teacher candidates will be reviewed routinely according to these established guidelines. Patterns of concern identified in the review may result in a formal review process. Additionally, faculty may choose to refer a teacher education candidate for review at any time. The review process may result in remediation or removal from the Teacher Education program. Candidates referred for review are expected to participate in the process. Refusal to participate will not terminate halt the review process, and refusal and may result in removal from the program.

Any teacher candidate referred for review is afforded due process throughout the review proceedings. Students may submit a formal letter to the dean in response to the proceedings. After all stages of review, a letter of appeal may be submitted to the dean for consideration. The dean's decision is final.

Field Experience and Student Teaching

Undergraduate students participate in a 3-semester sequence of field experiences leading to student teaching. During this sequence, students are assigned to elementary and secondary schools with cooperating teachers who supervise and mentor them. Students continue in the third semester placements for student teaching during their final semester of the degree. Students are placed at one elementary site and one secondary site as required for K-12 certification. One of these sites becomes the primary experience for student teaching (12 weeks) with the other site being an abbreviated experience (5 weeks).

Synthesis and application of all previous coursework and field experiences occurs during student teaching. This emersion experience, under the guidance of a cooperating teacher and a university supervisor, is the culmination of this program. To be eligible for a student teaching assignment, students must are expected to meet the following requirements:

1. Satisfy the retention criteria described above.
2. Successfully complete all required course work except student teaching.
3. Earn passing scores for requisite certification examinations (as specified by the state of Missouri and Kansas).

Students who successfully complete the Bachelor of Music Education degree are eligible for K-12 music certification in Missouri and Kansas.

Double Majors and Extended Certification

Students who have dual aspirations in music education and performance may pursue a double degree with approval from both the performance and music education faculty. Students will work in close consultation with Conservatory faculty and advisors to develop an appropriate curricular map. While much of the foundational coursework in these degrees is the same, an extended time frame for completion of both degrees will be required.

Instrumental Music Education Extended Certification: The Instrumental Music Education extended certification can be added onto the Vocal Music Education major. This is not a major or minor, but an extended certification that meets Missouri teacher certification requirements in instrumental music K-12. Additional course work is required (14 credit hours): Methods/Techniques in strings, brass, woodwinds, and percussion, Applied Major Instrument, Instrumental Ensemble, Advanced Instrumental Conducting, and Instrumentation/Arranging.

Choral Music Education Extended Certification: The Choral Music Education extended certification can be added onto the Instrumental Music Education major. This is not a major or minor, but an extended certification that meets Missouri teacher certification requirements in choral music

K-12. Additional course work is required (14 credit hours): Choral Arranging, Applied Voice, Choral Techniques, Advanced Choral Conducting, Choral Literature, Choral Ensemble.

Certification Procedures

Upon completion of the Bachelor of Music Education degree, student transcripts are submitted to the UMKC School of Education for review. Upon successful review, the student is recommended for certification in Missouri and Kansas.

In addition to UMKC coursework and student teaching, all prospective teachers must take and earn a satisfactory score on requisite certification examinations in both Missouri and Kansas.

Bachelor of Music Education - Choral Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Students will perform on voice in large ensemble, chamber, and solo settings and learn to model, conduct and teach other instruments in laboratory, ensemble and classroom environments.
- Students will plan for and teach in laboratory and classroom settings.
- Students will demonstrate skills of classroom and music program management for k-12 programs.
- Students will assess student learning in classroom and ensemble settings.
- Students will write, speak, and reflect about their teaching and philosophy.

Program Student Learning Goals and Objectives:

1: Knowledge of Teaching: 80% of music education students will demonstrate proficiency or better in completion of the Key Assessments throughout the four semesters of their field experience sequence.

2: Instruction and Affect: 80% of undergraduate music education students will show improvement in their ability to lead and interact with students in instructional settings by creating an engaging environment, utilizing accurate content knowledge, providing clear verbal and nonverbal instruction, exhibiting appropriate affect, and other specific criteria established on the rubrics.

3: Professional Behavior: 80% of music education majors will exhibit appropriate professional behaviors throughout the four semesters of field experience.

4: Field Experience: 80% of undergraduate music education students will successfully complete 4 diverse semesters of field experience.

5: Certification: 100% of final semester music education undergraduate students will complete all certification requirements and acquire teacher certification in both Missouri and Kansas.

The UMKC Conservatory's Music Educator Preparation Program prepares teachers who demonstrate:

- Solid grounding in all music subject areas enhanced by a strong liberal arts education.
- Substantial skill in music pedagogy.
- A professional and caring commitment to students and to the educational process.

Program goals are based on a set of key principles and express knowledge, skills and dispositions. These goals reflect the current knowledge base of teacher education, and a commitment to prepare educators who will be successful in both contemporary schools and be able to shape the schools of the future.

Program Goals

1. **Musicianship & Pedagogy:** Undergraduates will have competent performance skills on their primary applied voice/instrument and a basic pedagogical knowledge of all other vocal, wind, string, and percussion instruments utilized in instrumental, choral, and general music education.
2. **Musicianship & Application:** Students will apply the skills they have garnered through their formative study in musicianship classes, applied study, conducting, and methods classes as they observe, teach, and reflect on their teaching in field experiences and student teaching.
3. **Teaching and Evaluation:** Undergraduate students will instruct and interact with students in urban and rural classrooms in a manner that engages them in the music learning experience by providing clear verbal and nonverbal instruction, and exhibit appropriate affect demonstrated consistently throughout the professional sequence.
4. **Contextual Knowledge:** Students will have the necessary skills to assemble contextual factors for each class of their field experience students, so they can modify and change learning activities to ensure all their students have the opportunity to learn to their utmost capabilities.
5. **Reflection:** Students will use reflective practices to gain a deeper understanding of their own teaching style and, ultimately, greater effectiveness as a teacher.

Program Requirements**UMKC Essentials**

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH; Satisfied in program requirements below)		
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
CONSVTY 151 (MUSE; satisfies GECRT-AH course requirement)		3
Musicianship		
CONSVTY 141	Musicianship I	4
CONSVTY 142	Musicianship II	4
CONSVTY 241	Musicianship III	4
CONSVTY 242	Musicianship IV	4
Keyboard Skills		
CONSVTY 110	Keyboard Skills I	1
CONSVTY 123	Keyboard Skills II	1
CONSVTY 223	Keyboard Skills III	1
CONSVTY 310	Keyboard Skills IV	1
Applied Lessons		
VOICE 101	Freshman Voice I	2
VOICE 102	Freshman Voice II	2
VOICE 201	Sophomore Voice I	2
VOICE 202	Sophomore Voice II	2
VOICE 301	Junior Voice I	2
VOICE 302	Junior Voice II	2
VOICE 300 Studio Class(enroll with applied lesson each semester - 6 semesters)		
Diction Courses		
CONSVTY 185B	Foreign Language For Singing II	2
CONSVTY 185C	Foreign Language For Singing III	2
or CONSVTY 185D	Foreign Language For Singing IV	
Music History		
CONSVTY 351	History of Music in Western Civilization I	3
CONSVTY 352	History of Music in Western Civilization II	3
Conducting and Arranging		
CONSVTY 380	Basic Conducting - Choral	2
CONSVTY 382	Choral Conducting	2
CONSVTY 425A	Arranging for Choral Groups	2
Field Experiences		
CONSVTY 411A	Field Experience in Music	1
CONSVTY 411B	Field Experience in Music	1

CONSVTY 411C	Field Experience in Music	1
Ensemble Courses		
Any combination of the following courses (7 semesters)		7
CONSVTY 307B	University Singers	
CONSVTY 307C	Conservatory Singers	
CONSVTY 308A	Conservatory Concert Choir	
Music Education Courses		
CONSVTY 278	Music Teaching Matters: A Professional Beginning	3
CONSVTY 357	Choral Literature	2
CONSVTY 370	Choral/Vocal Techniques	2
CONSVTY 373N	Survey Of Wind And Percussion Instruments	1
CONSVTY 373P	Survey Of String Instruments	1
CONSVTY 385	Elementary Music Methods	3
CONSVTY 387	Secondary Music Methods - Choral	3
CONSVTY 405	Philosophical and Pragmatic Foundations of Music Education	3
CONSVTY 412A	Student Teaching Music in Elementary School	3
CONSVTY 412B	Student Teaching Music in Secondary School	3
Social Sciences MO Constitution (choose one from the following to satisfy both requirements)		3
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
POL-SCI 210	American Government	
Professional Education Courses		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 419	Student Teaching in Elementary School	3
TCH-ED 420	Adolescent Development	3
TCH-ED 437	Student Teaching in High School	3
Total Credits		106

GPA Minimum: 2.8

Total Credit Hours: 133

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 141 ^{CC}		4 CONSVTY 142 ^{CC}	4
CONSVTY 110 ^{CC}		1 CONSVTY 123 ^{CC}	1
VOICE 101		2 VOICE 102	2
VOICE 300		0 VOICE 300	0
CONSVTY 308A, 307B, or 307C		1 CONSVTY 308A, 307B, or 307C	1
GEFSE 101		3 CONSVTY 151	3
ENGLISH 110		3 MATH 116 or STAT 115	3
		COMM-ST 110, 140, or 277	3
		14	17

Second Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 241 ^{CC}		4 CONSVTY 242	4
CONSVTY 223 ^{CC}		1 CONSVTY 310	1
VOICE 201		2 VOICE 202	2
VOICE 300		0 VOICE 300	0
CONSVTY 308A, 307B, or 307C		1 CONSVTY 308A, 307B, or 307C	1
CONSVTY 278		3 CONSVTY 185C or 185D	2
CONSVTY 373P		1 CONSVTY 373N	1
CONSVTY 185B		2 TCH-ED 403	3
ENGLISH 225		3 GECRT-SS 101	3
		HISTORY 101, 102, or POL-SCI 210	3
		17	20

Third Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 351		3 CONSVTY 352	3
VOICE 301		2 VOICE 302	2
VOICE 300		0 VOICE 300	0
CONSVTY 308A, 307B, or 307C		1 CONSVTY 308A, 307B, or 307C	1
CONSVTY 405		3 EDRD 439	3
CONSVTY 380		2 CONSVTY 357	2
CONSVTY 370		2 CONSVTY 382	2
CONSVTY 411A		1 CONSVTY 387	3
GECDV 201		3 CONSVTY 411B	1
		17	17

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 308A, 307B, or 307C		1 CONSVTY 412A	3
TCH-ED 404		3 CONSVTY 412B	3
TCH-ED 420		3 TCH-ED 419	3
CONSVTY 425A		2 TCH-ED 437	3
CONSVTY 385		3	
CONSVTY 411C		1	
GECRT-SC 101		3	
GECUE 201		3	
		19	12

Total Credits: 133

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

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Bachelor of Music Education - Instrumental Emphasis

University Requirements

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Student Learning Outcomes

Students graduating from this program will:

- Student will perform on major instrument in large ensemble, chamber, and solo settings, and learn to model, conduct, and teach other instruments in laboratory, ensemble, and classroom environments.
- Students will plan for and teach in laboratory and classroom settings.
- Students will demonstrate skills of classroom and music program management for k-12 programs.
- Students will assess student learning in classroom and ensemble settings.
- Students will write, speak, and reflect about their teaching and philosophy.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH; Satisfied in program requirements below)		
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
CONSVTY 151 (MUSE; satisfies GECRT-AH course requirement)		3
Musicianship		
CONSVTY 141	Musicianship I	4
CONSVTY 142	Musicianship II	4
CONSVTY 241	Musicianship III	4
CONSVTY 242	Musicianship IV	4
Keyboard Skills		
CONSVTY 110	Keyboard Skills I	1
CONSVTY 123	Keyboard Skills II	1
CONSVTY 223	Keyboard Skills III	1
CONSVTY 310	Keyboard Skills IV	1
Applied Lessons		
INSTRUMENT 101 Freshman Instrument I		2
INSTRUMENT 102 Freshman Instrument II		2
INSTRUMENT 201 Sophomore Instrument I		2
INSTRUMENT 202 Sophomore Instrument II		2
INSTRUMENT 301 Junior Instrument I		2
INSTRUMENT 302 Junior Instrument II		2
INSTRUMENT 401 Senior Instrument I		2
INSTRUMENT 300 Studio (enroll with applied lesson each semester - 7 semesters)		
Technique Courses (select 4 courses with advisor)		4
CONSVTY 238	Woodwind Techniques and Pedagogy	
CONSVTY 239	Brass Techniques and Pedagogy	
CONSVTY 373E	Instrumental Techniques Percussion	
CONSVTY 373P	Survey Of String Instruments	
Music History		
CONSVTY 351	History of Music in Western Civilization I	3
CONSVTY 352	History of Music in Western Civilization II	3
Conducting and Arranging		
CONSVTY 331	Instrumentation	2
or CONSVTY 425B	Arranging Instrumental	
CONSVTY 381	Basic Conducting - Instrumental	2
CONSVTY 383	Instrumental Conducting	2
Field Experiences		
CONSVTY 411A	Field Experience in Music	1
CONSVTY 411B	Field Experience in Music	1
CONSVTY 411C	Field Experience in Music	1
Ensemble Courses		
Any combination of the following courses (7 semesters)		7
CONSVTY 302	Orchestra	
CONSVTY 306A	Conservatory Wind Ensemble	
CONSVTY 306C	Wind Symphony	

** Additional Required Ensemble		
CONSVTY 307B	University Singers (One semester of University Singers is required; this is in addition to the seven semesters of an above large instrumental ensemble.)	1
Choose one specialty below:		4
Specialization - Winds/Brass/Percussion		
CONSVTY 270	Marching Band & Jazz Ensemble Techniques (Winds/Brass/Percussion Only)	
CONSVTY 358	Wind Band Literature and Lab (Winds/Brass/Percussion Only)	
CONSVTY 378L	Instrumental Ensemble Rehearsal Lab (Winds/Brass/Percussion Only)	
Specialization - Strings		
INSTRUMENT 100B	Secondary Applied Strings Instrument (Strings Only)	
CONSVTY 359	String Literature (Strings Only)	
Music Education Courses		
CONSVTY 278	Music Teaching Matters: A Professional Beginning	3
CONSVTY 385	Elementary Music Methods	3
CONSVTY 386	Secondary Music Methods - Instrumental	3
CONSVTY 405	Philosophical and Pragmatic Foundations of Music Education	3
CONSVTY 412A	Student Teaching Music in Elementary School	3
CONSVTY 412B	Student Teaching Music in Secondary School	3
Social Science MO Constitution (choose from one of the following to satisfy both requirements))		3
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
POL-SCI 210	American Government	
Professional Education Courses		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 419	Student Teaching in Elementary School	3
TCH-ED 420	Adolescent Development	3
TCH-ED 437	Student Teaching in High School	3
Total Credits		107

GPA Minimum: 2.8

Total Credit Hours: 134

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

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Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

Winds/Brass/Percussion specialization

First Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 141 ^{CC}		4 CONSVTY 142 ^{CC}	4
CONSVTY 110 ^{CC}		1 CONSVTY 123 ^{CC}	1
Instrument 101		2 Instrument 102	2
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
CONSVTY 307B		1 CONSVTY 239	1
CONSVTY 373E		1 CONSVTY 151	3
GEFSE 101		3 COMM-ST 110, 140, or 277	3
ENGLISH 110		3 MATH 116 or STAT 115	3
		16	18

Second Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 241 ^{CC}		4 CONSVTY 242	4
CONSVTY 223 ^{CC}		1 CONSVTY 310	1
Instrument 201		2 Instrument 202	2
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
CONSVTY 278		3 CONSVTY 238	1
CONSVTY 373P		1 TCH-ED 403	3
ENGLISH 225		3 GECRT-SS 101	3
GECRT-SC 101		3 HISTORY 101, 102, or POL-SCI 210	3
		18	18

Third Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 351		3 CONSVTY 352	3
Instrument 301		2 Instrument 302	2
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
CONSVTY 405		3 EDRD 439	3
CONSVTY 270		1 CONSVTY 383	2
CONSVTY 358		2 CONSVTY 386	3
CONSVTY 381		2 CONSVTY 378L	1
CONSVTY 411A		1 CONSVTY 411B	1

GECDV 201	3		
	18		16
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
Instrument 401		2 CONSVTY 412A	3
Instrument 300		0 CONSVTY 412B	3
CONSVTY 3XX Ensemble		1 TCH-ED 419	3
TCH-ED 404		3 TCH-ED 437	3
TCH-ED 420		3	
CONSVTY 385		3	
CONSVTY 425B or 331		2	
CONSVTY 411C		1	
GECUE 201		3	
	18		12

Total Credits: 134

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Strings specialization

First Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 141 ^{CC}		4 CONSVTY 142 ^{CC}	4
CONSVTY 110 ^{CC}		1 CONSVTY 123 ^{CC}	1
Instrument 101		2 Instrument 102	2
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
CONSVTY 373E		1 CONSVTY 151	3
Instrument 100B		2 COMM-ST 110, 140, or 277	3
GEFSE 101		3 MATH 116 or STAT 115	3
ENGLISH 110		3	
	17		17

Second Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 241 ^{CC}		4 CONSVTY 242	4
CONSVTY 223 ^{CC}		1 CONSVTY 310	1
Instrument 201		2 Instrument 202	2
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
CONSVTY 278		3 CONSVTY 238	1
CONSVTY 373P		1 CONSVTY 239	1
ENGLISH 225		3 CONSVTY 307B	1
GECRT-SC 101		3 TCH-ED 403	3
		HISTORY 101, 102, or POL-SCI 210	3
	18		17

Third Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 351		3 CONSVTY 352	3
Instrument 301		2 Instrument 302	2
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
CONSVTY 405		3 EDRD 439	3
CONSVTY 381		2 CONSVTY 383	2
CONSVTY 359		2 CONSVTY 386	3
CONSVTY 411A		1 CONSVTY 411B	1
GECRT-SS 101		3 GECDV 201	3
		17	18

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
Instrument 401		2 CONSVTY 412A	3
Instrument 300		0 CONSVTY 412B	3
CONSVTY 3XX Ensemble		1 TCH-ED 419	3
TCH-ED 404		3 TCH-ED 437	3
TCH-ED 420		3	
CONSVTY 385		3	
CONSVTY 425B or 331		2	
CONSVTY 411C		1	
GECUE 201		3	
		18	12

Total Credits: 134

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

Conservatory Phone 816-235-2900

Conservatory Website conservatory.umkc.edu (<http://conservatory.umkc.edu/>)

Bachelor of Music: Jazz Studies

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- 1) Apply skills learned toward all areas of jazz performance, theory, and improvisation.
- 2) Create original arrangements (2 per year) that demonstrate a maturing creative "voice."
- 3) Create original compositions (2 per year) that demonstrate increasing growth and vision.
- 4) Apply learned skills toward entrepreneurship and career development.
- 5) Apply skills applicable to jazz pedagogy
- 6) Analyze jazz in historical, cultural, and stylistic contexts.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH; Satisfied in program requirements below)		
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3

Culture & Diversity Course (GECDV)	3
Civic & Urban Engagement Course (GECUE)	3
Total Credits	27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
CONSVTY 151 (MUSE; satisfies GECRT-AH course requirement)		3
Jazz Theory and Ear Training		
CONSVTY 311	Jazz Theory	2
CONSVTY 318	Jazz Ear Training and Listening	2
Jazz Keyboard		
CONSVTY 440	Jazz Keyboard Techniques I	1
CONSVTY 441	Jazz Keyboard Techniques II	1
Applied Lessons and Studio ¹		
Instrument 101J (Freshman Instrument I-Jazz)		3
Instrument 102J (Freshman Instrument II-Jazz)		3
Instrument 201J (Sophomore Instrument I-Jazz)		3
Instrument 202J (Sophomore Instrument II-Jazz)		3
Instrument 301J (Junior Instrument I-Jazz)		4
Instrument 302J (Junior Instrument II-Jazz)		4
Instrument 401J (Senior Instrument I-Jazz)		4
Instrument 402J (Senior Instrument II-Jazz)		4
Jazz History		
CONSVTY 353A	History And Development Of Jazz I	3
CONSVTY 353WI	History and Development of Jazz II	3
Big Band and Combo ²		
CONSVTY 303E	Jazz Workshop	8
CONSVTY 303B	Jazz Band	8
or CONSVTY 303G	Jazz Orchestra	
or CONSVTY 303J	Large Ensemble Rhythm Section Workshop	

Improv

CONSVTY 104	Jazz Improvisation I	2
CONSVTY 204	Jazz Improvisation II	2
CONSVTY 304	Jazz Improvisation III	2
CONSVTY 404	Jazz Improvisation IV	2

Jazz Arranging, Business, and Pedagogy

CONSVTY 423	Business Jazz And Commercial Music	3
CONSVTY 202	Basic Techniques of Audio Recording I	3
CONSVTY 471	Jazz/Commercial Music Pedagogy	2
CONSVTY 426B	Jazz Arranging for Small Ensembles	2
CONSVTY 426D	Jazz Arranging for Big Bands	2

General Musicianship

CONSVTY 110	Keyboard Skills I	1
CONSVTY 141	Musicianship I	4
CONSVTY 142	Musicianship II	4

Total Credits		88
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¹ Instrument: GUITAR, PERCUSSION, PIANO, SAXOPHONE, STRING BASS, TROMBONE, or TRUMPET

² Students must register for a large jazz ensemble and small jazz combo every semester enrolled for a total of 16 credits.

Code	Title	Credits
General Electives		2

Grade Minimum: C or better in all CONSVTY and instrument specific coursework.

GPA Minimum: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

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Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 141 ^{CC}		4 CONSVTY 142 ^{CC}	4
CONSVTY 110 ^{CC}		1 CONSVTY 440	1
Instrument 101J		3 Instrument 102J	3
CONSVTY 303B, 303G, or 303J		1 CONSVTY 303B, 303G, or 303J	1
CONSVTY 303E		1 CONSVTY 303E	1
GEFSE 101		3 CONSVTY 151	3
COMM-ST 110, 140, or 277		3 MATH 116 or STAT 115	3
		16	16

Second Year

Fall Semester	Credits	Spring Semester	Credits
Instrument 201J		3 Instrument 202J	3
CONSVTY 303B, 303G, or 303J		1 CONSVTY 303B, 303G, or 303J	1
CONSVTY 303E		1 CONSVTY 303E	1
CONSVTY 104		2 CONSVTY 204	2
CONSVTY 441		1 CONSVTY 318	1
CONSVTY 311		2 CONSVTY 202	3
ENGLISH 110		3 ENGLISH 225	3
GECRT-SC 101		3	
		16	14

Third Year

Fall Semester	Credits	Spring Semester	Credits
Instrument 301J		4 Instrument 302J	4
CONSVTY 303B, 303G, or 303J		1 CONSVTY 303B, 303G, or 303J	1
CONSVTY 303E		1 CONSVTY 303E	1
CONSVTY 304		2 CONSVTY 404	2
CONSVTY 353A		3 CONSVTY 353WI	3
GECRT-SS 101		3 GECDV 201	3
HISTORY 101, 102, or POL-SCI 210		3	
		17	14

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
Instrument 401J		4 Instrument 402J	4
CONSVTY 303B, 303G, or 303J		1 CONSVTY 303B, 303G, or 303J	1
CONSVTY 303E		1 CONSVTY 303E	1
CONSVTY 426B		2 CONSVTY 426D	2
CONSVTY 423		3 CONSVTY 471	2
General Elective		3 GECUE 201	3
		General Elective	3
		14	16

Total Credits: 123

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

Conservatory Phone 816-235-2900

Conservatory Website conservatory.umkc.edu (<http://conservatory.umkc.edu/>)

Bachelor of Music: Music Composition

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

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Student Learning Outcomes

Students graduating from this program will:

- Students will demonstrate their musical voice as creative artists.
- Student will master analytical and technical skills in music in a variety of media and genres.
- Students will collaborate with performers and other generative artists in the production of their works.
- Students will think independently in the development of a new work/composition.
- Students will utilize creative strategies to address musical problems

Major Status

Major status for the B.M. Music Composition degree is determined for new students (freshmen and transfer students) by the faculty through the standard Conservatory admissions process. Prospective Composition majors may enroll in up to four semesters of composition (CONSVTY 133, CONSVTY 134, CONSVTY 233 and CONSVTY 234). CONSVTY 234 is the final semester that a student can petition for major status.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH; Satisfied in program requirements below)		
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
CONSVTY 151 (MUSE; satisfies GECRT-AH course requirement)		3
Musicianship		
CONSVTY 141	Musicianship I	4
CONSVTY 142	Musicianship II	4
CONSVTY 241	Musicianship III	4
CONSVTY 242	Musicianship IV	4
Keyboard Skills		
CONSVTY 110	Keyboard Skills I	1
CONSVTY 123	Keyboard Skills II	1
CONSVTY 223	Keyboard Skills III	1
Composition		
CONSVTY 133	Beginning Composition I	3
CONSVTY 134	Beginning Composition II	3
CONSVTY 233	Intermediate Composition I	3
CONSVTY 234	Intermediate Composition II	3
CONSVTY 333	Advanced Composition (Take 2 semesters)	6
or CONSVTY 335	Electronic Music Composition	
CONSVTY 433	Composition Recital	3
CONSVTY 434	Senior Composition II	3
Applied Lessons and Studio Class ¹		
Choose one of the following:		10
Applied Music Interest Area A: Complete level 101 through 301 in any single primary instrument offered by the Conservatory.		
Applied Music Interest Area B: Complete ten hours of primary and/or second instrument applied music courses and/or techniques classes.		
Applied Music Interest Area C: Complete six hours of CONSVTY 335 (Electronic Music Composition) plus four hours of 100B level second instrument applied music courses and/or techniques classes.		
Music History		
CONSVTY 351	History of Music in Western Civilization I	3
CONSVTY 352	History of Music in Western Civilization II	3
Orchestration and Conducting		
CONSVTY 431	Orchestration	3
CONSVTY 381	Basic Conducting - Instrumental	2
or CONSVTY 380	Basic Conducting - Choral	
Electronic Music		
CONSVTY 235	Digital Media for Composing (Change to Digital Media for Composers)	3
CONSVTY 236	Music Performance Systems (Change to Music Performance Systems)	3
Ensemble ²		6
Students must complete a total of 6 ensemble courses and may select from any ensemble offered by the Conservatory.		
Advanced Theory		
CONSVTY 390	Analysis ³	3
Total Credits		82

Code	Title	Credits
General Electives ⁴		8

¹ Instrument: BASSOON, CELLO, CLARINET, EUPHONIUM, FLUTE, GUITAR, HORN, OBOE, PERCUSSION, PIANO, SAXOPHONE, STRING BASS, TROMBONE, TRUMPET, TUBA, VIOLA, VIOLIN, OR VOICE.

² While all BM Composition students must complete 6 ensemble courses, the total number of credit hours completed will depend upon the ensemble courses selected. Ensemble course options include: CONSVTY 301G, CONSVTY 302, CONSVTY 303MP, CONSVTY 306A, CONSVTY 306C, CONSVTY 307B, CONSVTY 307C, CONSVTY 308A

³ Or any advanced, upper-division theory course including, but not limited to: ear-training, counterpoint, or analysis.

4 Students wishing to pursue a career in teaching and/or academia are strongly encouraged to take Analysis (CONSVTY 390), Advanced Counterpoint CONSVTY 427, and Advanced Ear Training (CONSVTY 329).
Students wishing to pursue careers in the music industry are advised to take courses in recording, theater (composing and/or sound design), and/or other media.

GPA Minimum: 2.0
Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year			
Fall Semester	Credits	Spring Semester	Credits
CONSVTY 133		3 CONSVTY 134	3
CONSVTY 141 ^{CC}		4 CONSVTY 142 ^{CC}	4
CONSVTY 110 ^{CC}		1 CONSVTY 123 ^{CC}	1
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
Applied Lessons & Studio		2 Applied Lessons & Studio	2
GEFSE 101		3 ENGLISH 110	3
		MATH 116 or STAT 115	3
		14	17
Second Year			
Fall Semester	Credits	Spring Semester	Credits
CONSVTY 233		3 CONSVTY 234	3
CONSVTY 241 ^{CC}		4 CONSVTY 242	4
CONSVTY 223 ^{CC}		1 CONSVTY 236	3
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
Applied Lessons & Studio		2 Applied Lessons & Studio	2

CONSVTY 235	3	ENGLISH 225	3
COMM-ST 110, 140, or 277	3		
	17		16

Third Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 333 or 335		3 CONSVTY 335 or 333	3
CONSVTY 351		3 CONSVTY 352	3
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
Applied Lessons & Studio		2 CONSVTY 151	3
CONSVTY 390, 329, 427, or 428		3 GECDV 201	3
GECRT-SS 101		3 General Elective	3
	15		16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 433		3 CONSVTY 434	3
CONSVTY 431		3 HISTORY 101, 102, or POL-SCI 210	3
CONSVTY 380 or 381		2 General Elective (3XX/4XX if needed)	3
GECRT-SC 101		3 General Elective	3
GECUE 201		3	
	14		12

Total Credits: 121

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

Conservatory Phone 816-235-2900

Conservatory Website conservatory.umkc.edu (<http://conservatory.umkc.edu/>)

Bachelor of Music: Music Performance - Guitar Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Present a solo recital that is correct technically and artistically convincing
- apply the historical and analytical components of music as context for their study and performance
- perform at a high level of musicianship and artistry enabling them to enter a graduate school at a respected institution or a professional performance/teaching career

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH; Satisfied in program requirements below)		
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
CONSVTY 151 (MUSE; satisfies GECRT-AH course requirement)		3
Musicianship		
CONSVTY 141	Musicianship I	4
CONSVTY 142	Musicianship II	4
CONSVTY 241	Musicianship III	4
CONSVTY 242	Musicianship IV	4
Keyboard Skills		
CONSVTY 110	Keyboard Skills I	1
CONSVTY 123	Keyboard Skills II	1
CONSVTY 223	Keyboard Skills III	1
CONSVTY 310	Keyboard Skills IV	1
Applied Lessons		
GITAR 101	Freshman Guitar I	4
GITAR 102	Freshman Guitar II	4
GITAR 201	Sophomore Guitar I	4
GITAR 202	Sophomore Guitar II	4
GITAR 301	Junior Guitar I	4
GITAR 302	Junior Guitar II	4
GITAR 401	Senior Guitar I	4
GITAR 402	Senior Guitar II	4
Studio Class		
GITAR 300 (enroll with applied lesson each term)		
Music History		
CONSVTY 351	History of Music in Western Civilization I	3
CONSVTY 352	History of Music in Western Civilization II	3
Analysis, Orchestration, Conducting, and Counterpoint		
CONSVTY 331	Instrumentation	2
CONSVTY 380	Basic Conducting - Choral	2
or CONSVTY 381	Basic Conducting - Instrumental	
CONSVTY 390	Analysis	3
CONSVTY 427	18th-Century Counterpoint	2
Ensemble		
Take two semesters from the following:		2

CONSVTY 302	Orchestra	
CONSVTY 306A	Conservatory Wind Ensemble	
CONSVTY 306C	Wind Symphony	
CONSVTY 307B	University Singers	
CONSVTY 308A	Conservatory Concert Choir	
Chamber		
Take 6 semesters of the following:		6
CONSVTY 305J	Chamber Music Guitar	
Major Electives		
Non-music electives		12
Total Credits		90

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 141 ^{CC}		4 CONSVTY 142 ^{CC}	4
CONSVTY 110		1 CONSVTY 123	1
GUITAR 101		4 GUITAR 102	4
GUITAR 300		0 GUITAR 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
GEFSE 101		3 CONSVTY 151	3
MATH 116 or STAT 115		3 COMM-ST 110	3

Second Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 241 ^{CC}		4 CONSVTY 242	4
CONSVTY 223		1 CONSVTY 310	1
GUITAR 201		4 GUITAR 202	4
GUITAR 300		0 GUITAR 300	0
CONSVTY 305J		1 CONSVTY 305J	1
ENGLISH 110		3 ENGLISH 225	3
GECRT-SC 101		3 GECRT-SS 101	3
		16	16

Third Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 351		3 CONSVTY 352	3
GUITAR 301		4 GUITAR 302	4
GUITAR 300		0 GUITAR 300	0
CONSVTY 380 or 381		2 CONSVTY 305J	1
CONSVTY 305J		1 GECDV 201	3
HISTORY 101, 102, or POL-SCI 210		3 Non-Music Elective	3
Non-Music Elective		3	
		16	14

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
GUITAR 401		4 GUITAR 402	4
GUITAR 300		0 GUITAR 300	0
CONSVTY 305J		1 CONSVTY 305J	1
CONSVTY 491D		2 CONSVTY 331	2
CONSVTY 427		2 CONSVTY 492D	1
CONSVTY 390		3 CONSVTY 494	2
GECUE 201		3 Non-Music Elective	3
		Non-Music Elective	3
		15	16

Total Credits: 125

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

Conservatory Phone 816-235-2900

Conservatory Website conservatory.umkc.edu (<http://conservatory.umkc.edu/>)

Bachelor of Music: Music Performance - Piano Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- 1. Technique—Students will execute foundational physical requirements and show knowledge of kinesthetic issues (speed, coordination), keyboard geography, standard patterns of motion in piano music (scales, arpeggios, octaves, thirds, sixths, etc.), and show knowledge of health and wellness issues for the performer.
- 2. Tone production—Students will produce all the sounds required by the music at hand including developing control of articulation (legato, staccato, etc.) and pedaling.
- 3. Expression—Students will show convincing phrasing with a developing range of dynamics, colors, timing, and goal points.
- 4. Intellectual skills—Students will demonstrate foundational control and knowledge of increasingly complex rhythms, phrasing, musical syntax, historical issues and aesthetics, demonstrate emerging score-reading skills, and display emerging interpretation.
- 5. Problem solving—Students will show foundational control of the instrument, emerging independent designation of fingering, voicing and velocity, emerging adaptation to acoustics, and effective practice techniques and memorization skills.
- 6. Performing for the public—Students will possess polished stage presence, deal effectively with nerves, and effectively project music in different spaces.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	

Math Pathway (choose one of the following):	3
MATH 116 Mathematics For Liberal Arts	
STAT 115 Statistical Reasoning	
MATH 110 Precalculus Algebra	
MATH 120 Precalculus	
Any 200-level MATH or STAT course	
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher	
Critical Thinking in Arts & Humanities (GECRT-AH; Satisfied in program requirements below)	
Critical Thinking in Natural & Physical Sciences (GECRT-SC)	3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)	3
Culture & Diversity Course (GECDV)	3
Civic & Urban Engagement Course (GECUE)	3
Total Credits	27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
CONSVTY 151 (MUSE; satisfies GECRT-AH course requirement)		3
Musicianship		
CONSVTY 141	Musicianship I	4
CONSVTY 142	Musicianship II	4
CONSVTY 241	Musicianship III	4
CONSVTY 242	Musicianship IV	4
Keyboard Skills for Piano Majors		
CONSVTY 114	Keyboard Skills I for Piano Majors	1
CONSVTY 115	Keyboard Skills II for Piano Majors	1
Applied Lessons		
PIANO 101	Freshman Piano I	4
PIANO 102	Freshman Piano II	4
PIANO 201	Sophomore Piano I	4
PIANO 202	Sophomore Piano II	4

PIANO 301	Junior Piano I	4
PIANO 302	Junior Piano II	4
PIANO 401	Senior Piano I	4
PIANO 402	Senior Piano II	4
Studio Class		
PIANO 300 (enroll with applied lesson each semester)		
Music History		
CONSVTY 351	History of Music in Western Civilization I	3
CONSVTY 352	History of Music in Western Civilization II	3
Analysis and Counterpoint		
CONSVTY 390	Analysis	3
CONSVTY 427	18th-Century Counterpoint	2
Piano Pedagogy and Literature		
CONSVTY 325	Piano Pedagogy I	2
CONSVTY 325A	Piano Pedagogy - Supervised Teaching I	1
CONSVTY 326	Piano Pedagogy II	2
CONSVTY 326A	Piano Pedagogy - Supervised Teaching II	1
CONSVTY 361	Piano Literature I	3
CONSVTY 362	Piano Literature II	3
Ensemble/Chamber		
Large Ensemble ¹		2
Chamber Music ³		2
Collaborative Piano		
CONSVTY 111	Introduction to Collaboration for Pianists I	1
CONSVTY 112	Introduction to Collaboration for Pianists II	1
CONSVTY 303K	Piano Accompanying ²	4
Total Credits		86

¹ Take two semesters of any combination of CONSVTY 302, CONSVTY 306A, CONSVTY 306C, CONSVTY 307B, CONSVTY 307C, CONSVTY 308A

² Take 4 semesters of CONSVTY 303K Piano Accompanying, after completing CONSVTY 111 and 112.

³ Take two semesters of CONSVTY 305 Chamber Music.

Code	Title	Credits
General Electives		4

GPA Minimum: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office

of Registration and Records) and “what if” exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 141 ^{CC}		4 CONSVTY 142 ^{CC}	4
CONSVTY 111		1 CONSVTY 112	1
PIANO 101		4 PIANO 102	4
PIANO 300		0 PIANO 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
GEFSE 101		3 CONSVTY 151	3
MATH 116 or STAT 115		3 COMM-ST 110, 140, or 277	3
		16	16

Second Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 241 ^{CC}		4 CONSVTY 242	4
CONSVTY 303K		1 CONSVTY 303K	1
PIANO 201		4 PIANO 202	4
PIANO 300		0 PIANO 300	0
CONSVTY 114		1 CONSVTY 115	1
ENGLISH 110		3 ENGLISH 225	3
GECRT-SC 101		3 GECRT-SS 101	3
		16	16

Third Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 351		3 CONSVTY 352	3
PIANO 301		4 PIANO 302	4
PIANO 300		0 PIANO 300	0
CONSVTY 303K		1 CONSVTY 303K	1
CONSVTY 390		3 CONSVTY 326	2
CONSVTY 427		2 CONSVTY 326A	1
CONSVTY 325		2 GECDV 201	3
CONSVTY 325A		1 General Elective	2
		16	16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
PIANO 401		4 PIANO 402	4
PIANO 300		0 PIANO 300	0

CONSVTY 305A	1 CONSVTY 305A	1
CONSVTY 361	3 CONSVTY 362	3
GECUE 201	3 HISTORY 101, 102, or POL-SCI 210	3
General Elective	1 General Elective	1
	12	12

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

Conservatory Phone 816-235-2900

Conservatory Website conservatory.umkc.edu (<http://conservatory.umkc.edu/>)

Bachelor of Music: Music Performance - Voice Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Students will execute the foundational physical requirements of singing.
- Students will demonstrate comprehension of vocal anatomy and function.
- Students will display the kinesthetic awareness necessary for coordinated, healthy, operatic singing.

- Students will develop interpretational skills, demonstrating a range of timbre, phrasing, and a nuanced understanding of text.
- Students will synthesize the technical, interpretive, diction, and musicianship skills necessary to produce a refined, artistically-convincing public recital.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH; Satisfied in program requirements below)		
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
CONSVTY 151 (MUSE; satisfies GECRT-AH course requirement)		3
Musicianship		
CONSVTY 141	Musicianship I	4
CONSVTY 142	Musicianship II	4
CONSVTY 241	Musicianship III	4
CONSVTY 242	Musicianship IV	4
Keyboard Skills		
CONSVTY 110	Keyboard Skills I	1
CONSVTY 123	Keyboard Skills II	1
CONSVTY 223	Keyboard Skills III	1
CONSVTY 310	Keyboard Skills IV	1
Applied Lessons		
VOICE 101	Freshman Voice I	2
VOICE 102	Freshman Voice II	2
VOICE 201	Sophomore Voice I	2
VOICE 202	Sophomore Voice II	3
VOICE 301	Junior Voice I	3
VOICE 302	Junior Voice II	3
VOICE 401	Senior Voice I	3
VOICE 402	Senior Voice II	3
Studio Class		
VOICE 300 (enroll with applied lesson each semester)		
Music History		
CONSVTY 351	History of Music in Western Civilization I	3
CONSVTY 352	History of Music in Western Civilization II	3
Analysis and Conducting		
CONSVTY 380	Basic Conducting - Choral	2
CONSVTY 390	Analysis	3
Vocal Coaching		
VOICE 411	Vocal Coaching: Voice Recital Preparation (2 semesters)	2
Dramatic Coursework		
CONSVTY 301E or CONSVTY 319	Opera Theater Ensemble (any combination of the two courses for two semesters) Opera Role Performance	0-2
CONSVTY 301F	Opera Production (1 semester of participation required during the degree)	0
THEATRE 102	Acting for the Opera	1
CONSVTY 417	Opera Workshop (1 semester req'd - Sophomore year, Fall Semester)	1
CONSVTY 417E	Scene Study (3 semesters)	3
CONSVTY 417F	Opera Role Preparation and Audition Techniques	1
Diction		
CONSVTY 185B	Foreign Language For Singing II (Italian Diction)	2
CONSVTY 185C	Foreign Language For Singing III (German Diction)	2
CONSVTY 185D	Foreign Language For Singing IV (French Diction)	2
Vocal Pedagogy and Literature		
CONSVTY 457	Vocal Literature I	2
CONSVTY 458	Vocal Literature II	2
CONSVTY 491B	Pedagogical Practices I Voice	2
Ensemble		
Any combination of the following courses (8 semesters):		8
CONSVTY 307B	University Singers	
CONSVTY 307C	Conservatory Singers	

CONSVTY 308A	Conservatory Concert Choir
Foreign Language	
Language (4 semesters) ¹	12
Total Credits	95-97

- ¹ May take four semesters of either French or German; alternately, student may take 2 semesters of French and 2 semesters of German; or 3 semesters of French or German and one semester of Italian. If two years of one of the required languages have been completed at the high-school level, then the language selected will be one of the other two languages.

Minimum GPA: 2.0

Total Credit Hours: 125-127

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 141 ^{CC}	4	CONSVTY 142 ^{CC}	4
CONSVTY 110 ^{CC}	1	CONSVTY 123 ^{CC}	1
VOICE 101	2	VOICE 102	2
VOICE 300	0	VOICE 300	0
CONSVTY 308A, 307B, or 307C	1	CONSVTY 308A, 307B, or 307C	1
CONSVTY 185B	2	CONSVTY 185C	2
THEATRE 102	1	CONSVTY 417E	1
GEFSE 101	3	CONSVTY 151	3
		MATH 116 or STAT 115	3

Second Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 241 ^{CC}		4 CONSVTY 242	4
CONSVTY 223 ^{CC}		1 CONSVTY 310	1
VOICE 201		2 VOICE 202	3
VOICE 300		0 VOICE 300	0
CONSVTY 308A, 307B, or 307C		1 CONSVTY 308A, 307B, or 307C	1
CONSVTY 417		1 CONSVTY 185D	2
ENGLISH 110		3 CONSVTY 417E	1
COMM-ST 110, 277, or 140		3 ENGLISH 225	3
GECRT-SS 101		3	
		18	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 351		3 CONSVTY 352	3
VOICE 301		3 VOICE 302	3
VOICE 300		0 VOICE 300	0
CONSVTY 308A, 307B, or 307C		1 CONSVTY 308A, 307B, or 307C	1
CONSVTY 380		2 CONSVTY 417E	1
CONSVTY 390		3 FRENCH 120, GERMAN 120, or ITALIAN 120	3
CONSVTY 491B		2 GECRT-SC 101	3
FRENCH 110, GERMAN 110, or ITALIAN 110		3	
		17	14

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
VOICE 401		3 VOICE 402	3
VOICE 300		0 VOICE 300	0
CONSVTY 308A, 307B, or 307C		1 CONSVTY 308A, 307B, or 307C	1
VOICE 411		1 VOICE 411	1
CONSVTY 457		2 CONSVTY 458	2
CONSVTY 301E or 319		0 CONSVTY 301E or 319	0
CONSVTY 417F		1 CONSVTY 301F	0
FRENCH 211, GERMAN 211, or ITALIAN 211		3 FRENCH 221, GERMAN 221, or ITALIAN 221	3
GECDV 201		3 GECUE 201	3
		HISTORY 101, 102, or POL-SCI 210	3
		14	16

Total Credits: 125

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.

- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

Conservatory Phone 816-235-2900

Conservatory Website conservatory.umkc.edu (<http://conservatory.umkc.edu/>)

Bachelor of Music: Music Performance - Wind, Strings, Percussion

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- 1. Technique—Students will execute foundational physical requirements and show knowledge of kinesthetic issues (speed, coordination), instrument geography, standard patterns of motion in instrument's technical exercises (scales, arpeggios, intervals, etc.), and show knowledge of health and wellness issues for the performer.
- 2. Tone production—Students will produce all the sounds required by the music at hand including developing control of articulation (legato, staccato, etc.).
- 3. Expression—Students will show convincing phrasing with a developing range of dynamics, timbre, phrasing and legato, and goal points.
- 4. Intellectual skills—Students will demonstrate foundational control and knowledge of increasingly complex rhythms, phrasing, musical syntax, historical issues and aesthetics, demonstrate progressing score-reading skills, and display emerging and progressing interpretational acumen.
- 5. Problem solving—Students will show foundational control of the instrument, emerging independent designation of fingering, voicing and velocity, emerging adaptation to acoustics, and effective practice techniques and memorization skills.
- 6. Performing for the public—Students will possess polished stage presence, deal effectively with nerves, and effectively project music in different spaces.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH; Satisfied in program requirements below)		
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
CONSVTY 151 (MUSE; satisfies GECRT-AH course requirement)		3
Musicianship		
CONSVTY 141	Musicianship I	4
CONSVTY 142	Musicianship II	4
CONSVTY 241	Musicianship III	4
CONSVTY 242	Musicianship IV	4
Keyboard Skills		
CONSVTY 110	Keyboard Skills I	1
CONSVTY 123	Keyboard Skills II	1
Applied Lessons ¹		
Instrument 101 (Freshman Instrument I)		4
Instrument 102 (Freshman Instrument II)		4
Instrument 201 (Sophomore Instrument I)		4
Instrument 202 (Sophomore Instrument II)		4
Instrument 301 (Junior Instrument I)		4
Instrument 302 (Junior Instrument II)		4
Instrument 401 (Senior Instrument I)		4
Instrument 402 (Senior Instrument + Recital)		4
Studio Class & Pedagogy ¹		
CONSVTY 491N	Pedagogy of Instrumental Music	1
Instrument 300 (enroll with applied lesson each term))		
Music History		
CONSVTY 351	History of Music in Western Civilization I	3
CONSVTY 352	History of Music in Western Civilization II	3
Analysis, Orchestration, and Conducting		
CONSVTY 331	Instrumentation	2
CONSVTY 381	Basic Conducting - Instrumental	2
CONSVTY 390	Analysis	3
Chamber Music (6 semesters)		6
CONSVTY 305A	Principles Of Chamber Music	
Ensemble		
Any combination of the following courses (8 semesters):		8
CONSVTY 302	Orchestra	
CONSVTY 306A	Conservatory Wind Ensemble	
CONSVTY 306C	Wind Symphony	
Total Credits		81

¹ BASSOON, CELLO, CLARINET, Euphonium (EUPHNM), FLUTE, HORN, OBOE, Percussion (PERCSN), Saxophone (SAXOPH), String Bass (STR-BASS), Trombone (TROMB), TRUMPET, TUBA, VIOLA, VIOLIN

Code	Title	Credits
General Electives		9

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 141 ^{CC}		4 CONSVTY 142 ^{CC}	4
CONSVTY 110 ^{CC}		1 CONSVTY 123 ^{CC}	1
Instrument 101		4 Instrument 102	4
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
GEFSE 101		3 CONSVTY 151	3
		MATH 116 or STAT 115	3
		13	16

Second Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 241 ^{CC}		4 CONSVTY 242	4
Instrument 201		4 Instrument 202	4
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
CONSVTY 305A		1 CONSVTY 305A	1
ENGLISH 110		3 ENGLISH 225	3
GECRT-SC 101		3 COMM-ST 110, 140, or 277	3
		16	16

Third Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 351		3 CONSVTY 352	3
Instrument 301		4 Instrument 302	4
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY XXX Ensemble	1
CONSVTY 305A		1 CONSVTY 305A	1
CONSVTY 381		2 CONSVTY 491N	1

GECRT-SS 101	3	GECDV 201	3
		General Elective	3
		14	16
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
Instrument 401		4 Instrument 402	4
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
CONSVTY 305A		1 CONSVTY 305A	1
CONSVTY 390		3 CONSVTY 331	2
GECUE 201		3 HISTORY 101, 102, or POL-SCI 210	3
General Elective		3 General Elective	3
		15	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

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Conservatory Website conservatory.umkc.edu (<http://conservatory.umkc.edu/>)

Bachelor of Music: Music Theory

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

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principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate music-theoretical knowledge in writing about music
- Use music-theoretical knowledge in academic and public communication about music.
- Use music-theoretical knowledge and ideas to create self-driven original research and analytical works.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH; Satisfied in program requirements below)		
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
CONSVTY 151 (MUSE; satisfies GECRT-AH course requirement)		3
Musicianship		
CONSVTY 141	Musicianship I	4
CONSVTY 142	Musicianship II	4
CONSVTY 241	Musicianship III	4
CONSVTY 242	Musicianship IV	4
Keyboard Skills		
CONSVTY 110	Keyboard Skills I	1
CONSVTY 123	Keyboard Skills II	1
CONSVTY 223	Keyboard Skills III	1
CONSVTY 310	Keyboard Skills IV	1
Applied Lessons and Studio Class ¹		
Instrument 300 (6 semesters, Studio)		
Instrument 101 (Freshman Instrument I)		2
Instrument 102 (Freshman Instrument II)		2
Instrument 201 (Sophomore Instrument I)		2
Instrument 202 (Sophomore Instrument II)		2
Instrument 301 (Junior Instrument I)		2
Instrument 302 (Junior Instrument II)		2
Music History		
CONSVTY 351	History of Music in Western Civilization I	3
CONSVTY 352	History of Music in Western Civilization II	3
Ensemble		6
6 semesters from the following		
CONSVTY 302	Orchestra	
CONSVTY 303MP	Improvisational Music/Media Performance Ensemble	
CONSVTY 306A	Conservatory Wind Ensemble	
CONSVTY 306C	Wind Symphony	
CONSVTY 307B	University Singers	
CONSVTY 307C	Conservatory Singers	
CONSVTY 308A	Conservatory Concert Choir	
Analysis, Orchestration and Conducting		
CONSVTY 329	Advanced Ear Training	2
CONSVTY 380	Basic Conducting - Choral	2
or CONSVTY 381	Basic Conducting - Instrumental	
CONSVTY 331	Instrumentation	2
CONSVTY 390	Analysis	3
CONSVTY 427	18th-Century Counterpoint	2
CONSVTY 428	Introduction to Post-Tonal Theory	3
Advanced Theory		
CONSVTY 454	Advanced Seminar in Music Theory	3
CONSVTY 491K	Pedagogy of Music Theory	3
CONSVTY 498	Research Problems	2
Electives and Languages		

General or Music Electives		15
FRENCH 110 & FRENCH 120 or GERMAN 110 & GERMAN 120 or ITALIAN 110 & ITALIAN 120	Elementary French I and Elementary French II Elementary German I and Elementary German II Elementary Italian I and Elementary Italian II	6
Total Credits		90

¹ Instrument: BASSOON, CELLO, CLARINET, EUPHONIUM, FLUTE, GUITAR, HORN, OBOE, PERCUSSION, PIANO, SAXOPHONE, STRING BASS, TROMBONE, TRUMPET, TUBA, VIOLA, VIOLIN, OR VOICE.

Students must demonstrate functional piano facility, aural skills and satisfactory part-writing and analysis proficiency.

GPA Minimum: 2.0 (Students not maintaining this minimum average may not graduate until an appropriate class or classes are retaken and the minimum average achieved.)

Total Credit Hours 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

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UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 141 ^{CC}		4 CONSVTY 142 ^{CC}	4
CONSVTY 110 ^{CC}		1 CONSVTY 123 ^{CC}	1
Instrument 101		2 Instrument 102	2
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
GEFSE 101		3 CONSVTY 151	3

MATH 116 or STAT 115		3 COMM-ST 110, 140, or 277	3
		14	14
Second Year			
Fall Semester	Credits	Spring Semester	Credits
CONSVTY 241 ^{CC}		4 CONSVTY 242	4
CONSVTY 223 ^{CC}		1 CONSVTY 310	1
Instrument 201		2 Instrument 202	2
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
ENGLISH 110		3 ENGLISH 225	3
GECRT-SS 101		3 GECRT-SC 101	3
		General Elective	3
		14	17
Third Year			
Fall Semester	Credits	Spring Semester	Credits
CONSVTY 351		3 CONSVTY 352	3
Instrument 301		2 Instrument 302	2
Instrument 300		0 Instrument 300	0
CONSVTY 3XX Ensemble		1 CONSVTY 3XX Ensemble	1
CONSVTY 390		3 CONSVTY 331	2
CONSVTY 380 or 381		2 FRENCH 120, GERMAN 120, or ITALIAN 120	3
CONSVTY 427		2 GECDV 201	3
FRENCH 110, GERMAN 110, or ITALIAN 110		3 General Elective	3
		16	17
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
CONSVTY 428		3 CONSVTY 329	2
GECUE 201		3 CONSVTY 491K	3
HISTORY 101, 102, or POL-SCI 210		3 CONSVTY 454	3
General Elective		3 CONSVTY 498	2
General Elective		3 General Elective	3
		15	13

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.

- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. (*The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.*)
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

Conservatory Phone 816-235-2900

Conservatory Website conservatory.umkc.edu (<http://conservatory.umkc.edu/>)

Theatre

Undergraduate Programs

Bachelor of Arts in Theatre (p. 1117)

Minor in Theatre (p. 1123)

Graduate Programs

Graduate assistantships are available in the following areas: acting, costume, lighting, stage management, scene shop carpentry, scene painting, sound, property construction, house management, technical direction, publicity and departmental assistance with THEATRE 130.

Master of Fine Arts

- Acting and Directing (p. 1122)
- Design and Technology (p. 1122)

Courses

THEATRE 101 Introduction To Acting Credits: 3

An introductory course to acquaint the freshman theatre major and non-major student with the process of acting through relaxation and improvisational exercise.

THEATRE 101 - MOTR PERF 100: Acting I



THEATRE 102 Acting for the Opera Credit: 1

Students receive basic foundation of acting technique. Students will demonstrate the ability to apply their tools in practice and articulate their process throughout the semester. The course is designed for the coordination of music and acting with particular emphasis on training the singing actor.

Prerequisites: Bachelor of Music: Music Performance-Voice Option major.

THEATRE 110 Acting I Credits: 3

Basic principles of dramatic performance: training in voice, movement and language as an organic developmental whole.

THEATRE 113 Introduction To Technical Production Credits: 3

An introduction to the technical production process with emphasis on production organization, planning and scenic construction techniques. Required laboratory work.

THEATRE 113C Introduction to Technical Production: Light/Sound Credits: 3

An introduction to the basic principles and techniques of lighting design and technology and sound design and technology.

Co-requisites: THEATRE 180.

THEATRE 121 Oral Interpretation Of Literature Credits: 3

Principles of interpretation, analysis and oral reading of prose and poetry. Emphasis upon platform performance: body language, vocal control and performance techniques.

THEATRE 130 Foundations Of Fine Arts Theatre Credits: 3

An introduction to theatre arts and a general orientation to the creative and technical aspects of live performance. Includes historical overview, analysis of the components of a play, and observation of and critical reaction to theatrical productions. Frequent guest speakers.

THEATRE 180 Theatre Practicum Credit: 1

The course requires involvement with productions in the Conservatory. Students will learn the responsibilities and processes of preparing and executing a live theatrical production. Depending on specialty, students will work backstage, in one of the studios, or in some other capacity as defined and agreed upon by the area coordinator.

THEATRE 200 Script Analysis Credits: 3

The class focuses on reading a script theatrically with a view to mounting a coherent production. Through careful, intensive reading of a variety of plays students study form, structure, genre, character, language, theme, and action as components of a text that provide the theatre artist with the tools for the creation a theatrical production.

THEATRE 210 Introduction To Design For The Theater Credits: 3

An introduction to aesthetics and design for the theater in the areas of scenery, costume, lighting and sound. The emphasis is upon the theory, vocabulary, form, style, historical influences and process in each area. Attendance at theater productions is required. Course is taught by design faculty from each area.

THEATRE 295 Speech For The Theatre I Credits: 3

Training in voice and articulation and the techniques of adaptation to the needs of the artist-performer in the theatre: exercises to free the voice, develop effective breathing, tone production, articulation, flexibility of vocal production, and projection.

THEATRE 295A Speech For The Theater I Credits: 3**THEATRE 295B Speech For The Theater I Credits: 3****THEATRE 298 Movement For Actors Credits: 3**

Basic movement training including relaxation and alignment techniques, exercises to increase physical facility and skills to enhance rhythmic coordination and physical characterization.

THEATRE 298A Movement For Actors Credits: 3**THEATRE 298B Movement For Actors Credits: 3****THEATRE 315 Acting II Credits: 3**

Textual analysis, characterization and building a role.

Prerequisites: THEATRE 300.

THEATRE 317 Scene Design Credits: 3

Introduces the mechanics of layout: perspective, basic drafting techniques, front elevation and floorplan execution. Second half of the semester emphasizes scenic design as an art form. Recommended Preparation: THEATRE 113 and THEATRE 311.

THEATRE 325 Acting III Credits: 3

Study and practice of period and contemporary styles of acting.

Prerequisites: THEATRE 315.

THEATRE 329 Master Class In Acting Credits: 2

(A,B,C,D) Class in advanced studies in acting. May be repeated for credit up to eight hours and guest artist change.

THEATRE 329A Master Class In Acting Credits: 2**THEATRE 329B Master Class In Acting Credits: 2****THEATRE 329C Master Class In Acting Credits: 2****THEATRE 329D Master Class In Acting Credits: 2****THEATRE 333 History of Costuming I Credits: 3**

The study of the history of European costume, with emphasis on the social and economic ramifications of costuming through the ages.

THEATRE 340 Stage Makeup Credit: 1

Lecture and laboratory work in the fundamentals of makeup for the stage.

THEATRE 350 Theatre History I Credits: 3

Development of theatre art, including the physical stage, technical production elements, dramatic literature, and audience behavior from primitive origins to the 18th century.

THEATRE 351WI Theatre History II Credits: 3

Development of Theatre art, including the physical stage, technical production elements, dramatic literature, and audience behavior from the 18th century to the present.

THEATRE 352 History of Costuming II Credits: 3

The study of the history of Non-European costume, with emphasis on the social and economic ramifications of costuming through the ages.

THEATRE 371 Stage Lighting Credits: 3

Stage Lighting is the study of light as a design element. Students will learn the foundation of lighting design theory, technical methods, and general theatrical procedure through lectures, laboratory and crew work. Theatrical genres will vary by semester.

THEATRE 372 Stage Lighting Technology Credits: 2

This course is a comprehensive study of contemporary technical equipment and its usage to actualize lighting design. Areas of emphasis include photometric, color and color theory, lighting control systems, lighting control operations, cueing techniques, data control of intelligent lighting equipment, lighting fixtures, dimming system, hand drafted light plot standards, CAD light plot drafting, lighting specific software programs, video and image projections, and optical special effects. Theatrical genres will vary by semester.

THEATRE 374 Professional Projection Design Credits: 3

This course in projection design for the performing arts will give students an overview of the discipline and introduce students to ideas and technologies used in this field. Through the three weekend sessions, students will learn the practical applications of projection design and the techniques of projection controls. Recommended preparation: basic, fundamental knowledge of computers and basic, fundamental knowledge of theatre designs.

Prerequisites: THEATRE 210.

THEATRE 378 Stage Management I Credits: 3

A functional analysis of the duties and responsibilities of the stage manager, with particular reference to the organization and conducting of rehearsals and performances, professional practices and union requirements. Requires student to be an assistant to a stage manager on a University or an KC Rep production. The first of a two-semester requirement in stage management for theater majors.

THEATRE 400 Special Problems In Theatre Credits: 1-6

(A-M) Research and/or production projects for advanced upperclass students. No more than three hours with any one instructor. (A) Acting; (B) Children's Theatre; (C) Costumes; (D) Scenic Design; (E) Directing; (F) History; (G) Lighting; (H) Playwriting; (I) Sound; (J) Stage Management; (K) Technical Production (L) Theatre Management; (M) Theory and Criticism.

THEATRE 400A Special Problems In Theatre: Acting Credits: 1-6**THEATRE 400B Special Problems In Theatre: Design Credits: 1-6****THEATRE 400C Special Problems In Theatre: Costumes Credits: 1-6****THEATRE 400D Special Problems In Theatre: Scenic Design Credits: 1-6****THEATRE 400E Special Problems In Theatre: Directing Credits: 1-6****THEATRE 400F Special Problems In Theatre: History Credits: 1-6****THEATRE 400G Special Problems In Theatre: Lighting Credits: 1-6****THEATRE 400H Special Problems In Theatre: Playwriting Credits: 1-6****THEATRE 400I Special Problems In Theater: Sound Credits: 1-6****THEATRE 400J Special Problems In Theatre: Stage Management Credits: 1-6****THEATRE 400L Special Problems In Theatre: Theatre Management Credits: 1-6****THEATRE 400M Special Problems In Theatre: Theory And Criticism Credits: 1-6****THEATRE 400N Special Problems In Theatre: Dramaturgy Credits: 1-6****THEATRE 400R Special Problems In Theatre Credits: 1-6****THEATRE 400S Special Topics In Theatre Credits: 1-6****THEATRE 400T Special Problems In Theatre Credits: 1-6****THEATRE 400V Special Problems in Theater Credits: 1-6****THEATRE 400X Special Problems In Theatre Credits: 1-6****THEATRE 403 Theatre Company & Production Credit: 1**

This course serves (1) as a weekly company meeting for Theatre majors, (2) an organizing point for production assignments and duties for the semester, and (3) a study of a special topic which will change each semester. Course is repeatable. Required of Majors for every semester they are enrolled.

Prerequisites: Theatre Majors and Minors.

THEATRE 415 Beginning Directing Credits: 3

Theory and process of play production, including interpretation, composition, picturization, movement, rhythm, and character interpretation.

THEATRE 431 Rendering Techniques For The Theatre Designer I Credits: 3

Introduces the mechanics of handling black and white media to develop three-dimensional technique with an emphasis on observational training and object drawing.

THEATRE 432 Costume Design Credits: 3

The practice of the theatrical costume design, leading to the preparation of designs for production, and the execution of designs in actual costuming for the stage.

THEATRE 432A Costume Design Credits: 3

THEATRE 432B Costume Design Credits: 3

THEATRE 432C Costume Design Credits: 3

THEATRE 432D Costume Design Credits: 3

THEATRE 437 Playwriting I Credits: 3

Theory and practice of writing for the theatre with emphasis on the basic techniques.

THEATRE 438 Playwriting II Credits: 3

Theory and practice of writing for the theatre with emphasis on advanced techniques.

THEATRE 451 World Theatre Credits: 3

A study of non-Western theatre, its origins, styles and continuing influences on society and western theatre.

Prerequisites: THEATRE 110.

THEATRE 476 Theatre Sound And Electronics Credits: 3

Study of electronic principles used in audio and control devices. Concentrates on applying knowledge to using the equipment employed in the theatre such as sound-effect systems, inter-communication equipment, and includes a special section on the creation of sound and music for theatre productions.

THEATRE 478 Stage Management II Credits: 2

Practicum course in stage management. Requires stage management of a University production and/or assistant stage management of an KC Rep production and/or assistant stage management of a main stage University production.

Prerequisites: THEATRE 378.

THEATRE 497 Repertory Theatre Credits: 3-6

Apprentice-level responsibilities for Theatre 497 are as follows: apprentices will be used in as many production areas as possible: (1) as actors in small roles and/or extras or supers; (2) as understudies if possible; (3) as needed in the following departments: (a) properties; (b) carpentry and the shop; (c) lighting; (d) costumes; (e) house management; (f) stage management; (g) running crews.

Prerequisites: Departmental consent.

THEATRE 499 Theatre Capstone Credit: 1

Each student plans and executes one significant project in the area of interest which demonstrates significant proficiency in one or more theatrical elements. Supervised by a member of the theatre faculty, the project incorporates research, documentation and a public exhibition.

Prerequisites: Senior Standing.

THEATRE 5500RA Theatre Collaboration Credits: 1-2

A course for M.F.A. students exploring the collaboration/ communication process in preparing a production. Must be elected by all students assigned to design, direct, technical direct or stage manage within the current or the following semester. Maximum of 8 hours applicable towards degree.

THEATRE 5501R Voice Training Credits: 2

(A,B,C,D) Training for the speaking and singing voice, development of skills in vocal dynamics, physical control, and relaxation for the actor, dialects and verse structure. Four semesters required for acting emphasis.

THEATRE 5506RR French Drama And Theatre Credits: 3

Study of significant plays and production methods in France from medieval times to the present. Particular emphasis will be given to the plays of Moliere, Racine, and Corneille, and to internationally renowned contemporary directors.

THEATRE 5507 19Th-Century Continental Theatre Credits: 3

Production of significant French, German, Russian, Spanish, and Scandinavian plays and playwriting of the 19th century. Particular emphasis will be given to plays representative of romanticism, realism, naturalism, fin-de-siecle decadence, and intensive study of production history.

THEATRE 5508 20Th-Century Continental Theatre Credits: 3

Study of the production of significant plays of Continental Europe from Strindberg to the present. Dramatic literature will be related to artistic currents such as expressionism, surrealism, the absurd, and where applicable, to political currents.

THEATRE 5509 Russian Drama And Theatre Credits: 3

Study of the production of Russian and Soviet plays with reference to the development of theatre art from the Christianization of Russia to contemporary post-Soviet drama.

THEATRE 5510 History Of The American Theatre I Credits: 3

An exploration of the trends in and the development of the American theatre from Colonial times to 1900.

THEATRE 5511 History Of The American Theatre II Credits: 3

An exploration of the trends in and the development of the American theatre for 1900 to the present.

THEATRE 5512R History Of The English Stage I Credits: 3

The English stage and its arts, crafts and literature from the medieval cycles through the Restoration.

THEATRE 5513 History Of The English Stage II Credits: 3

Development of English and Irish theatre art and dramatic literature from the 18th century to the present.

THEATRE 5514 History of Design And Technology I Credits: 3

The study of period style and scenic, costume, lighting, and technical production practices from the ancient world through the 17th century. The course will emphasize the application of research toward the presentation of period plays and contemporary production.

THEATRE 5515R History of Design And Technology II Credits: 3

The study of period style and scenic, costume, lighting, and technical production practices from the 18th century to the present. The course will emphasize the application of research toward the presentation of period plays and contemporary production.

THEATRE 5516A Technical Production for The Practitioner Credits: 3

The course is an in-depth review of technologies in scenery, lighting and stage operations, expansion of that knowledge, and application of it to the individual class member's particular theatre. Classroom material is augmented by hands-on experience in a controlled laboratory situation. Students should have a prerequisite of a basic technical theatre course or considerable practical experience. This course can be repeated for credit.

THEATRE 5516B Technical Production for The Practitioner Credits: 3

See course description for THEATRE 5516A.

THEATRE 5517A Professional Stage Management I Credits: 3

A functional analysis of the responsibilities of the professional stage manager. Requires the student to be an assistant stage manager on a University or KC Rep production.

THEATRE 5517B Professional Stage Management II Credits: 2

Practical course in stage management. Requires student to stage-manage or assistant stage-manage a production.

Prerequisites: THEATRE 5517A.

THEATRE 5517C Equity Assistant Stage Management Credits: 2

This course develops a skill set for professional assistant stage managers. Class will discuss duties and paperwork and how to supplement the work of the stage manager.

THEATRE 5517D Opera Stage Management Credits: 3

Class covers duties of the opera stage manager, including how to follow an opera score.

THEATRE 5517E Union Contracts for Actors and Stage Managers Credits: 2

Students study and discuss all the rules in the Equity Rule Book.

THEATRE 5517F Professional Production Management in Theatre Credits: 2

This course is a seminar on the duties, planning, negotiations, and problem solving techniques of the professional theatre production manager.

Prerequisites: THEATRE 5517A.

THEATRE 5520 Individual Performance Studies Credits: 1-2

(A,B,C) Private instruction for the advanced student.

THEATRE 5520L Individual Performance Studies Credits: 1-2**THEATRE 5521A Professional Sound Design Credits: 3**

Professional Sound Design is a series of four courses constructed to develop the designer's skills from research and initial sound collection, into interpretation, collaboration and idea development, concluding with the production of finished designs for the MFA productions. Each section deals with problems of increasing complexity beginning with "found" design material for early production and leading to indigenous designs created and layered for complex production support. The course may be taken once or twice for non-sound designers with the full cycle being required for the sound design emphasis.

THEATRE 5521B Professional Sound Design Credits: 3**THEATRE 5521C Professional Sound Design Credits: 3**

Professional Sound Design is a series of four courses constructed to develop the designer's skills from research and initial sound collection, into interpretation, collaboration and idea development, concluding with the production of finished designs for the MFA productions. Each section deals with problems of increasing complexity beginning with "found" design material for early production and leading to indigenous designs created and layered for complex production support. The course may be taken once or twice for non-sound designers with the full cycle being required for the sound design emphasis.

THEATRE 5521D Professional Sound Design Credits: 3

Professional Sound Design is a series of four courses constructed to develop the designer's skills from research and initial sound collection, into interpretation, collaboration and idea development, concluding with the production of finished designs for the MFA productions. Each section deals with problems of increasing complexity beginning with "found" design material for early production and leading to indigenous designs created and layered for complex production support. The course may be taken once or twice for non-sound designers with the full cycle being required for the sound design emphasis.

THEATRE 5522 History of Costuming I Credits: 3

The study of the history of European costume, with emphasis on the social and economic ramifications of costuming through the ages.

THEATRE 5523 History of Costuming II Credits: 3

The study of the history of Non-Western costume, with emphasis on the social and economic ramifications of costuming through the ages.

THEATRE 5524 Rendering Techniques for the Theatre Designer I Credits: 3

Introduces the mechanics of handling black and white media to develop two and three-dimensional techniques with an emphasis on observational training and object drawing, as well as white model and/or maquette construction, materials and techniques.

THEATRE 5530 Drafting for The Theatre Credits: 3

Practical laboratory course in drafting for the theatre encompassing floor plans, sections, designer's evaluations, front and rear elevations, working drawings, and problems in communicating design ideas.

THEATRE 5531R Rendering Techniques for the Theatre Designer II Credits: 3

Continuation of Rendering Techniques with the introduction of color, pastels, watercolor and gouache. Skills are applied in developing projects for design in the theatre.

THEATRE 5532 Professional Costume Design Credits: 3

(A, B, C, D) The courses in Professional Costume Design are intended to develop the costume designer's skills in research, rendering and drawing. Each section will deal with specific problems of design, such as period, line, silhouette, color and texture. Specific problems in design from realistic to stylized productions will be worked on by the students. The course may be taken once or twice by non-costume designers with the full cycle being required for costume emphasis.

THEATRE 5534 Costume Construction I Credits: 3

(A,B,C) Research and methodology into one or more of the following areas of costume construction for the stage: period pattern and tailoring adaptation, work with non-woven materials, and the cutting and finishing of costumes for the stage. May be repeated up to six hours with content change and permission of instructor.

THEATRE 5535 Technical Studies In Costuming And Makeup Credits: 3

(A,B,C) Concentration in one or more of the arts and crafts necessary to costume design. Areas to be chosen from include: fabric dyeing and painting, millinery, wig design and construction, latex prosthetic, and decorative accessories for the stage. May be repeated up to six hours with content change and permission of instructor.

THEATRE 5536 Professional Scene Design Credits: 3

(A,B,C,D) Professional Scene Design is a series of courses constructed to develop the designer's skills from research and initial sketches to finished renderings, models and working drawings. Each successive section deals with problems of increasing complexity beginning with one-set realistic productions through unit-settings, stylization and multiple setting problems. The course may be taken once or twice for non-set designers with the full cycle being required for the scene design emphasis.

THEATRE 5538 Scene Painting Credits: 3

A practicum course in scene painting techniques and execution. Introduction to painting equipment and supplies, priming and preparation of surfaces and materials, standard techniques for painting ornament.

THEATRE 5539 Scene Painting II Credits: 3

A practicum course in scene painting techniques with emphasis on painting interior drops, exterior landscapes and three-dimensional pieces.

THEATRE 5540 Pattern Drafting And Cutting Credits: 3

Theory and laboratory study of the techniques and methods employed in drafting patterns for the professional stage.

THEATRE 5545 Professional Acting Techniques I Credits: 3

Theatre games, exercises, mask work, and some scene study to develop the first year acting/directing class into a training ensemble, instill a clear and uniform vocabulary, heighten awareness, and begin concentrated skill work. The semester will culminate in a class project.

THEATRE 5546 Professional Acting Techniques II Credits: 3

Continuation of THEATRE 5545 with emphasis on the application of the first semester's work through scene study of contemporary plays and monologues.

THEATRE 5547 Professional Acting Techniques III Credits: 3

Concentration on non-naturalistic styles. Work on scenes from Shakespeare and other classical playwrights.

THEATRE 5548 Professional Acting Techniques IV Credits: 3

Work on audition material and further scene work dealing with specific individual acting problems.

THEATRE 5549 Master Class In Acting Credits: 2

(A,B,C,D) Class in advanced studies in acting. May be repeated for credit up to eight hours as content and guest artist change. Permission of instructor or head of area required. Required for third year graduate acting students in the fall semester and may be repeated subsequently as elective.

THEATRE 5551 Rendering Techniques for the Theatre Designer III Credits: 3

Developing techniques for rendering in realistic settings: interiors, landscapes, fabric and furnishings.

THEATRE 5552R Rendering Techniques for the Theatre Designer IV Credits: 3

Developing techniques for rendering in non-realistic styles with the emphasis on imaginative designs, light and air, created textures, etc.

THEATRE 5557 Theatre History I Credits: 3

Development of theatre art-including dramatic literature, staging, and performance styles-from the beginning through the 17th century. This course also looks at Asian theatre forms. Students read approximately 20 plays.

Prerequisites: Graduate Status.

THEATRE 5560 Theatre History II Credits: 3

Development of western theatre art-including dramatic literature, staging, and performance styles-from the 18th century to the present. Students will read approximately 24 plays.

Prerequisites: Graduate status.

THEATRE 5562 Actor Practicum Credits: 3

A contemporary scene study class for actors. Actors test their acquired process skills with major emphasis placed on characterization.

THEATRE 5563 Text Analysis I Credits: 3

Linear analysis of selected prose dramas with concentration on character delineation, images and motivation for actors and directors.

THEATRE 5564 Text Analysis II Credits: 3

Continuation of THEATRE 5563 with emphasis on verse plays. Selected playwrights from the Greek and Elizabethan periods will be included along with modern verse dramatists.

THEATRE 5565 Introduction To Professional Directing Credits: 3

The first part of the class is devoted to an intensive study of various and diverse concepts related to the dramatic experience by dramatists, critics, and directors. The class also examines current production methods and practices for today's functioning professional director. Systems related to stage management and actors are investigated.

THEATRE 5567 Professional Directing Practicum Credits: 3

This class will move from concept to production. Work will revolve around the presentation of production concept statements in which the director will select, organize and articulate the theatrical substance in support of his or her chosen concept. Intensive analysis will lead to the development of an image/metaphor for production. Term will include presentation of a full book justifying concept choices for scenic, costume, music and dance, and, finally, full production.

THEATRE 5568 Seminar In Dramaturgy Credits: 3

Critical analysis of dramatic structure and techniques, with special reference to modern and contemporary drama.

THEATRE 5569 Master Class in Directing Credits: 2

(A,B,C,D) Class in advanced studies in directing. May be repeated for credit up to eight hours as new material and guest artist change. Graduate students elect THEATRE 5569.

THEATRE 5570 Professional Lighting Design Credits: 3

(A, B, C, D) Professional Lighting Design is a series of courses concerned with the study of light as a design element. Projects to implement design theory are primarily selected from the areas of dramatic, musical and opera theatre, and dance. Emphasis is on the design process with each successive section dealing with problems of increasing complexity. Areas of study and projects are chosen on the basis of individual levels of development. When elected by non-lighting designers the course may be elected for a maximum of two semesters.

THEATRE 5571A Professional Projections Design I Credits: 3

This course examines the techniques of theatrical projection design. Focus will be on the manipulation of projected images, and the fundamental use and control of automated projectors. This hands-on laboratory class will instruct students in the use of state of the art projection equipment and control consoles.

THEATRE 5571B Professional Projections Design II Credits: 3

This class will teach students how to design projections. Students will learn the practical applications of projection design as well as the theoretical and critical thinking necessary to successfully complete a projection design assignment. This class will culminate with the presentation of an assigned projection design or a realized projection design.

Prerequisites: THEATRE 5571A

THEATRE 5572 Stage Lighting Technology Credits: 2

This course is a comprehensive study of contemporary technical equipment and its usage to actualize lighting design. Areas of emphasis include photometric, color and color theory, lighting control systems, lighting control operations, cueing techniques, data control of intelligent lighting equipment, lighting fixtures, dimming system, hand drafted light plot standards, CAD light plot drafting, lighting specific software programs, video and image projections, and optical special effects. Theatrical genres will vary by semester.

THEATRE 5573 Professional Technical Production Credits: 3

Detailed study and experimentation with recent scenic materials, scenery construction, rigging systems, use of metal and special effects.

THEATRE 5574 Theatre Regulations, Laws and Safety Credit: 1

Survey of fire, city and Equity codes, and insurance, liability, health rules and regulations related to theater operation. Union and legal contracts, philosophy and relations with theatre facilities and operations.

THEATRE 5575R Property Construction Credits: 3

Construction techniques and materials used to make and modify set and hand properties and set dressing.

THEATRE 5577 Advanced Materials Credits: 3

(A,B,C,D) The theatre technician and designer are dependent on a wide range of materials in the creation of their art. Each semester the student will pursue detailed study of a material area (i.e., wood, metal, plastics, textiles), the processes of its usage and its related process-products (i.e., adhesives, paints, dyes, etc.). Field trips and hands-on laboratory work are integral to the course.

THEATRE 5578 Professional Theatre Administration Credits: 3

Theories, problems and techniques preparing the student for effective interaction with professional theater administration, offering a foundation for potential theatre administrators as well as enrichment for students of directing, design, technical and stage management.

THEATRE 5579R Master Class In Design Credits: 2

(A,B,C,D) Class in advanced studies in design. May be repeated for credit up to eight hours as content and guest artist change.

THEATRE 5580R Graduate Technical Student Seminar Credits: 2

(A,B,C,D,E,F) Required in every semester for Design/Tech M.F.A. candidates choosing a technology emphasis. This continuing seminar course serves as a forum for all graduate technical students to analyze and discuss problems and solutions on current academic and KCRP productions. The course develops collaborative skills through the sharing of ideas and experiences. In addition, topics of general interest to the technician will be studied through guest lecturers and/or individual projects prepared by the faculty and students and presented to the class.

THEATRE 5583 Seminar on Technical Production Management Credits: 2

Seminar involving shop organization, scheduling, purchasing, lending and borrowing, rentals, personnel, job description, organizing structure, etc. Emphasis upon organization and techniques for repertory theatre operation.

THEATRE 5584 Master Class In Technology Credits: 2

(A,B,C,D) Class in advanced studies in technology. May be repeated for credit up to eight hours as content and guest artist change.

THEATRE 5585 Advanced Technical Drafting Credits: 3

An intensive drafting course required for Design/Tech M.F.A. candidates with emphasis in technology. The course aims to equip the student to prepare clear shop working drawings from designer elevations. Topics include both conceptual planning techniques and developing mechanical drawing skills. One hour lecture, four lab hours, and extensive outside preparation.

THEATRE 5586 Structural Design for the Stage Credits: 3

A course in the structural design of scenic elements. The student learns to work within the visual restrictions imposed by the designer to build structures that will bear given load requirements with a minimum of deflection. Basic engineering and load analysis principles are studied and applied in the design procedure to find the best possible solutions in terms of strength, weight, safety and cost.

THEATRE 5587 Structural Design for the Stage II Credits: 3

This course is designed to give an introduction to the physics behind structural design and to guide the student through the process of designing safe, effective structural scenery for the theatre.

Prerequisites: THEATRE 5586.

THEATRE 5590 Directed Graduate Studies Credits: 3-6

Individual projects on the graduate level. No more than three hours with any one instructor. Only one 590 each semester.

THEATRE 5590A Directed Graduate Studies Credits: 3-6

THEATRE 5590B Directed Graduate Studies: Design Credits: 3-6

THEATRE 5590C Directed Graduate Studies: Costumes Credits: 3-6

THEATRE 5590D Directed Graduate Studies: Scenic Design Credits: 3-6

THEATRE 5590E Directed Graduate Studies: Directing Credits: 3-6

THEATRE 5590F Directed Graduate Studies Credits: 3-6

THEATRE 5590G Directed Graduate Studies: Lighting Credits: 3-6

THEATRE 5590H Directed Graduate Studies: Playwriting Credits: 3-6

THEATRE 5590I Directed Graduate Studies Credits: 3-6

THEATRE 5590J Directed Graduate Studies: Stage Management Credits: 3-6

THEATRE 5590K Directed Graduate Studies: Technical Production Credits: 3-6

THEATRE 5590L Directed Graduate Studies: Theatre Management Credits: 3-6

THEATRE 5590M Directed Graduate Studies: Theory And Criticism Credits: 3-6

THEATRE 5590N Directed Graduate Studies: Dramaturgy Credits: 3-6

THEATRE 5590R Directed Graduate Studies Credits: 3-6

THEATRE 5590S Directed Graduate Studies Credits: 3-6

THEATRE 5590T Directed Graduate Studies Credits: 3-6

THEATRE 5592A Seminar on Stage Management Practice Credit: 1

MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training), to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.

Prerequisites: Graduate Stage Management Student.

THEATRE 5592B Seminar on Stage Management Practice Credit: 1

MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training) to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.

Prerequisites: Graduate Stage Management Student.

THEATRE 5592C Seminar on Stage Management Practice Credit: 1

MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training) to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.

Prerequisites: Graduate Stage Management Student.

THEATRE 5592D Seminar on Stage Management Practice Credit: 1

MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training) to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.

Prerequisites: Graduate Stage Management Student.

THEATRE 5592E Seminar on Stage Management Practice Credit: 1

MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training) to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.

Prerequisites: Graduate Stage Management Student.

THEATRE 5597 Repertory Theatre: Internship Credits: 3-6

Assignments available in the following areas: directing, design, carpentry, lighting, costume, props, acting, stage management. Technical interns will be assigned by the appropriate heads of those areas. Acting interns may understudy and/or play roles with the Kansas City Repertory Theatre on the Spencer stage or in showcase productions. Also, interns will have some responsibility in technical areas such as change-over, props, costume, running crew, and stage management. Directing interns may assist director or assistant stage manager.

Prerequisites: Selection by chairman of department.

THEATRE 5598R Research And Performance Credits: 1-6

Primarily for the M.F.A. student. Permission of the graduate faculty.

THEATRE 5599 Research And Thesis Credits: 1-6**THEATRE 5697 Repertory Theatre: Residency Credits: 6**

The residency consists of authorized participation with the Kansas City Repertory Theatre, the Department of Theatre, or an approved outside professional company, and is arranged under departmental advisement, with the chairman of the department, and in consultation with the artistic director of KCRep. The assignment will be determined by matching interest and degree emphasis with available production assignments.

THEATRE 5899 Required Graduate Enrollment Credit: 1**THEATRE H101 Introduction To Acting Credits: 3**

An introductory course to acquaint the freshman theater major and non-major student with the process of acting through relaxation and improvisational exercise.

THEATRE H113 Introduction To Technical Production Credits: 3

An introduction to the technical production process with emphasis on production organization, planning and scenic construction techniques. Required laboratory work.

THEATRE H210 Introduction To Design For The Theater Credits: 3

An introduction to aesthetics and design for the theater in the areas of scenery, costume, lighting and sound. The emphasis is upon the theory, vocabulary, form, style, historical influences and process in each area. Attendance at theater productions is required. Course is taught by design faculty from each area.

THEATRE H315 Acting II Credits: 3

Textual analysis, characterization and building a role.

Prerequisites: THEATRE 300.

THEATRE H350 Theater History I-Honors Credits: 3**THEATRE H351WI Theater History II Credits: 3**

Development of Theater art, including the physical stage, technical production elements, dramatic literature, and audience behavior from the 18th century to the present.

Bachelor of Arts: Theatre

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Identify and categorize the historical context surrounding the development of playwriting, scenery, acting conventions, and theatrical architecture.
- Analyze text in terms of form, structure, content, and stagecraft.
- Engage in the collaborative communication and processes necessary to the creation of live performance.
- Develop and defend informed judgments about theatre practice and performance.
- Apply skills and demonstrate a comprehension of theories and methodologies as they relate to live performance practice.

Program Requirements

Mission Statement

The division seeks to train a community of students who explore the human condition, stimulate and engage audiences, and connect to a global, diverse community using the evolving, collaborative art of live performance. We develop artists and scholars who have a lifelong passion for the arts. Dedicated to a teaching approach that empower students in the development of their own personal strengths and provide them with tools and opportunities to realize their potential.

Vision

The UMKC Theatre program will be a nationally recognized theatre program known for graduating artist-citizens ready to create in today's changing world. We are committed to a comprehensive, student-focused philosophy that integrates performance, theory and practice in order for students to become artists and leaders.

Values

- *Intellectual Curiosity*

We foster creative and intellectual discovery inspired by desire for knowledge, comprehension, and mastery.

- *Creativity*

We provide opportunities and an environment to explore and create meaningful, innovative ideas that engage the interdependence of process and product.

- *Tradition and Innovation*

We are committed to studying history, theories and practices, while remaining committed to innovation and vision.

- *Community*

We champion a community of diverse peoples, practices, and ideas. We strive for open and powerful communication and unprejudiced understanding recognizing that this will strengthen and enrich the world.

- *Collaboration*

We strive for a shared vision encouraging interdisciplinary and transdisciplinary collaboration.

All Theatre Majors

Production experiences give undergraduate theatre majors the chance to apply classroom theory to practical situations. Taking part as a crew member, designer or performer in one of the departmental productions is an integral part of the theatre experience at UMKC. In a typical year there are two undergraduate productions in addition to as many other conservatory productions, providing ample opportunity.

Students must earn a grade of C- or above in all courses required by the major.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	

COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

Code	Title	Credits
THEATRE 101	Introduction To Acting	3
THEATRE 113	Introduction To Technical Production	3
THEATRE 113B	Introduction to Technical Production - Costuming	3
THEATRE 113C	Introduction to Technical Production: Light/Sound	3
THEATRE 180 & 180A & 180B & 180C	Theatre Practicum and Practicum - Costume Studio and Practicum - Lighting Studio and Practicum - Production Assistant	4
THEATRE 200	Script Analysis	3
THEATRE 350	Theatre History I	3

THEATRE 351WI	Theatre History II	3
THEATRE 378	Stage Management I	3
THEATRE 415	Beginning Directing	3
THEATRE 451	World Theatre	3
THEATRE 499	Theatre Capstone	1
Theatre Electives (12 hours at the 300 level or above)		15
Total Credits		50

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		37

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
THEATRE 200		3 THEATRE 101	3
THEATRE 113 (A/B/C)		3 THEATRE 113 (A/B/C)	3
THEATRE 180		1 THEATRE 180	1
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110		3 MATH 116 or STAT 115	3

GECRT-AH 101	3	GECRT-SS 101	3
	16		16
Second Year			
Fall Semester	Credits	Spring Semester	Credits
THEATRE 113 (A/B/C)		3 THEATRE 180	1
THEATRE 180		1 THEATRE 350	3
THEATRE Major Elective		3 THEATRE 3XX/4XX Major Elective	3
COMM-ST 110, 140, or 277		3 HISTORY 101, 102, or POL-SCI 210	3
GECDV 201		3 GECRT-SC 101	3
General Elective		3 GECUE 201	3
	16		16
Third Year			
Fall Semester	Credits	Spring Semester	Credits
THEATRE 351WI		3 THEATRE 3XX/4XX Major Elective	3
THEATRE 378		3 3XX/4XX General Elective	3
THEATRE 3XX/4XX Major Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
	15		15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
THEATRE 451		3 THEATRE 499	1
THEATRE 415		3 THEATRE 3XX/4XX Major Elective	3
General Elective		3 General Elective (3XX/4XX if needed)	3
General Elective		3 General Elective	3
General Elective		1 General Elective	3
	13		13

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

Conservatory Phone 816-235-2900

Conservatory Website conservatory.umkc.edu (<http://conservatory.umkc.edu/>)

Master of Fine Arts: Acting and Directing

Student Learning Outcomes

Students graduating from this program will:

- A detailed understanding of their individual processes as actors through which they find the physical, vocal, emotional and intellectual availability to meet the requirements of a given role.
- A working knowledge of the human voice as a primary means of communication.
- A working knowledge of the human body as a primary means of communication.
- A working knowledge of the human psyche as a primary means of motivation.
- A working knowledge of research methods through which to gain an understanding of the circumstantial life of a character.
- An experiential knowledge of theatrical performance genres from classical roots through contemporary theatre.
- A strong familiarity with a wide range of dramatic literature.
- The ability to work with directors of varying working processes and communication styles.
- The ability to work in collaboration with an ensemble of artists.

Program Requirements

The acting program is a three-year, minimum 60-credit-hour professional actor-training program interacting with the Kansas City Repertory Theatre, a professional Equity LORT B Theatre. M.F.A. students are subject to the General Graduate Academic Requirements (p. 454) of the University for graduate study.

First Year

The first year of training is a highly disciplined, process-oriented period of study including: a morning group warm-up; collaboration class which integrates students and faculty from each area of study; intensive breath and vocal production; basic speech work; introductory dialect work; text analysis; applicable fitness and nutritional programs, alignment and self-use process; physical approaches to characterization including physical isolations and effort shape; neutral, emotional and character mask work; ballroom dance. We pursue intensive exploration of creative technique, based on Constantin Stanislavski, Stella Adler and Morris Carnovsky's principles of theatrical truth; building a character; and ensemble play. Performance work includes the first-year "Discovery Project", that usually is inspired by classical material. Other projects may center around social issues of the day or character searches.

Second Year

In the second year of training the student actor continues with a morning warm-up; collaboration class; voice production along with continued speech and dialect work and a focus on heightened text and extended voice; private and ensemble singing tutorials; stage combat (unarmed, rapier, dagger; subtle energy work; period-style movement including social convention and dance; Commedia dell' arte characterization, mask work and personal clown; continued work on acting Shakespeare; intensive work on Moliere verse text integrated with the period-style movement and comic technique; restoration or other heightened language text; and application of the actor's process to audition technique and contemporary text. Essential Meisner work is folded into exploration of creative technique. Second-year actors begin public performance work with guest and faculty directors on new, contemporary and period plays chosen specifically for the training. Occasionally, roles at the Kansas City Repertory Theatre, and other professional theatres in town, are available for second-year actors.

Third Year

Third year actors continue to apply their craft to challenging studies in many styles of plays; they deepen their understanding and application of Meisner technique; singing; tutorials in speech and movement as well as voice over workshops and acting for the camera. Public performance work intensifies with specific productions chosen to challenge the actor's art within the training program. Actors also, when applicable, audition for Kansas City Repertory productions and are cast, when appropriate, in roles or as understudies. Actors also audition and perform, when appropriate, in other Kansas City professional Equity theatres. In May, the actors are showcased in New York. All students who are considered "in good standing" participate in showcase.

Master of Fine Arts: Design and Technology

Student Learning Outcomes

Students graduating from this program will:

- Design - mastering interpretation, collaboration and idea development; developing the graphic tools needed to superlatively communicate design ideas visually.
- Technical Skills - mastering the tools of production, and the processes associated within each design/technology discipline.
- History - mastering research, text analysis and dramatic history.

- Production - mastering the artistic merging of design, history and technical skills through the experiences of numerous and varied productions.
- Entrepreneurship - mastering the business of the profession and career growth.

Program Requirements

This is a three-year program requiring a minimum of 60 credit hours.

Students majoring in design and technology may choose to specialize in:

- Design (scenic design, costume design and technology, lighting design, sound design).
- Technical direction.
- Stage management.

Design Emphasis

Those choosing a design emphasis will be prepared to compete for United Scenic Artist Local 829 membership as scenic designers, lighting designers, costume designers or sound designers. They also will be prepared to design in professional theatre centers and in major universities and colleges.

Technology Emphasis

Technical Direction

Candidates specializing in technology will be trained to compete for jobs as technical directors or assistant technical directors and other supervisory technical positions, or other entertainment-business-related positions.

Stage Management

Stage management candidates serve as assistant stage managers the first semester or first year, as stage managers the second year, and serve a residency in the last semester. They also work as production assistants for the Kansas City Repertory Theatre shows. Candidates in stage management are trained to compete for jobs as Actors' Equity stage managers and take classes on the Actors' Equity LORT rule book.

General Requirements

The portfolio to be presented for admission should include:

1. Artistic renderings.
2. Drafted materials.
3. Photographs and slides.
4. Resume and references.

MFA candidates are expected to maintain at least a 3.0 grade point average.

Only students who have demonstrated satisfactory progress in required skills and professional discipline during the first year (or sooner at faculty discretion) will be invited by the faculty to continue the program. During the second year, the design and technology students will concentrate on areas of interest, choosing advanced courses and working in the appropriate production areas. Third-year residency allows students to continue to emphasize design or technology coursework while undertaking major design or technology projects with productions in the Department of Theatre, the Kansas City Repertory Theatre or other professional environments. The concluding requirements of the M.F.A. degree for the design and technology candidate will be classroom projects, produced work and final presentations of portfolios. M.F.A. students are subject to the General Graduate Academic Requirements (p. 454) of the University for graduate study.

Minor: Theatre

Program Requirements

A minor in theatre consists of a minimum of 18 credit hours. A minimum of 6 hours must be completed at the 300-400 level.

Students must earn a grade of C- or above in all courses required by the minor.

Code	Title	Credits
THEATRE 101	Introduction To Acting	3
THEATRE 200	Script Analysis	3
THEATRE 210	Introduction To Design For The Theater	3
Elective Coursework		9
Total Credits		18

Elective Course Options

Code	Title	Credits
THEATRE 113	Introduction To Technical Production	3
THEATRE 113B	Introduction to Technical Production - Costuming	3
THEATRE 113C	Introduction to Technical Production: Light/Sound	3
THEATRE 180	Theatre Practicum	1
THEATRE 298	Movement For Actors	3
THEATRE 317	Scene Design	3
THEATRE 350	Theatre History I	3
THEATRE 351	Theater History II	3
THEATRE 371	Stage Lighting	3
THEATRE 374	Professional Projection Design	3
THEATRE 378	Stage Management I	3
THEATRE 415	Beginning Directing	3
THEATRE 432	Costume Design	3
THEATRE 437	Playwriting I	3
THEATRE 451	World Theatre	3
THEATRE 476	Theatre Sound And Electronics	3

Honors College

424 Cherry Hall
 5030 Cherry Street
 Kansas City, MO 64110
 (816) 235-5569
 Fax: (816) 235-5509
honors@umkc.edu
<http://honors.umkc.edu>

Dean:

James McKusick, Ph.D.
 Professor of English
Contact Information

Director:

Gayle Levy, Ph.D.
 Associate Professor of French
Contact Information

Associate Director:

John Herron, Ph.D.
 Professor and Interim Dean of the College of Arts and Sciences
Contact Information

Director of Student Services:

Margo Gamache
Contact Information

Honors College Description

The UMKC Honors College seeks to attract exceptionally motivated and academically talented undergraduates from every school and college at the University to participate in an environment that encourages excellence and challenges students to realize their greatest potential.

The UMKC Honors College is designed to enrich the college experience of the most outstanding students through the integration of traditional and novel approaches to learning from the humanities, the behavioral and social sciences, the natural and physical sciences and other divisions of the University.

Honors Credit

In order to accomplish these goals, all honors students have the opportunity to enroll in a wide variety of honors courses offered each semester. Honors credit may also be earned through:

- Honors Contracts
- Honors Discussion Groups
- Study Abroad
- Beyond the Classroom Experiences
- Graduate Courses
- Senior Honors Thesis

Honors students are encouraged and supported in the conduct of research and the publication and presentation of their work regionally and nationally. As seniors, honors students have the option to complete a six-credit-hour project, the Senior Honors Thesis/Project. Upon graduation, those who complete an honors thesis in addition to the basic honors requirements are designated as Honors Scholars.

Honors College Initiatives

UMKC offers a supportive atmosphere to encourage integrative thinking through an exciting Living-Learning Community and specialized advising with the Honors College Advisor and Honors Faculty Fellows. Leadership skills are honed through unique seminars where students reflect on and analyze their community service experiences. Finally, with an eye toward giving students a leg up on their graduate school and career goals, honors students are strongly encouraged to conduct innovative individual and collaborative research or artistic activity in the form of the Senior Honors Thesis/Project.

Some of the other advantages that the UMKC Honors College offers students include:

- Priority enrollment during advance registration
- Specially designated general education courses for honors students
- Graduate-level borrowing privileges at Miller Nichols Library
- Individual advising to prepare honors students to compete for prestigious national scholarships (such as the Rhodes, Marshall, Truman and Goldwater Scholarships).

Admission to the Honors College

To be considered for admission, a first-year student should:

- minimum ACT composite score of 28 or a combined verbal and math SAT score of 1260, and
- have a minimum cumulative high school GPA of 3.5 in the core (17-unit) curriculum, consisting of English (4 years), math (4 years), science (3 years), social studies (3 years), foreign language (2 years of the same language) and fine arts (1 year).

Students who do not meet these criteria may apply for admission to the Honors College and will be considered on an individual basis. For incoming first-year students, a total of 27 hours of honors credit is required to receive a bachelor's degree with University Honors.

Transfer students must meet at least one of the following criteria:

- All of the admission criteria for first-year students as stated above; or
- college-level GPA of 3.7 or above; or
- participation in the Honors program at their previous college or university.

Continuing UMKC students are encouraged to apply to the Honors College. Students currently enrolled at UMKC must have a UMKC cumulative GPA of 3.5 or above.

For transfer and continuing students, a total of 21 hours of honors credit is required if the student enters the Honors College with 50 or more credits. Transfer students may count up to 9 credits of honors coursework completed at their previous college or university in fulfillment of University Honors requirements.

The above-mentioned admission requirements are "target criteria." While priority consideration will be given to students who meet or exceed the requirements, the Honors College Admissions Committee takes into consideration the totality of each student's application, with emphasis on academics and civic engagement. UMKC wants Honors College students who will be leaders in the classroom and in all aspects of campus and community life. Accordingly, even if you do not meet these criteria, please feel free to apply for admission to the Honors College. Applications are especially encouraged from students who have a strong record of community engagement and are highly motivated to succeed academically.

The Honors College application may be found at the Honors website: <http://honors.umkc.edu/>. The application deadline is **August 1** for fall semester and **November 30** for spring semester.

Continued Participation in the Honors College

Honors students are required to maintain a minimum cumulative grade-point average of 3.2. Students whose cumulative grade-point average drops below a 3.2 have a one-semester grace period during which time they can remain in the Honors College while they work on bringing their cumulative grade-point average above the 3.2 minimum. If, at the end of the grace period, the student's grade-point average is still below a 3.2, the student will be dropped from the Honors College.

Honors Living-Learning Community

The UMKC Honors College, in collaboration with Residential Life, sponsors the Honors Living-Learning Community. Located in UMKC's Oak Street Hall, this community of honors students has the opportunity to live and learn together through cohort classes, special programs and events, informal interaction with UMKC faculty, social activities and community service. The Honors Living-Learning Community is designed to build cohesive community among the honors students, promote student and faculty engagement, and provide continuity of the intellectual learning experience beyond the classroom.

Lucerna, the Honors College Undergraduate Research Journal

The Honors College produces *Lucerna*, UMKC's only research journal open to papers written by UMKC undergraduates. The honors student editors oversee all aspects of production of the journal, from soliciting submissions to editing the chosen papers. *Lucerna* is published annually.

Kauffman School Partnership

Beginning in Fall 2011, the UMKC Honors College joined in partnership with a local charter school, the Ewing Marion Kauffman School, to create and develop an opportunity for students from both institutions to engage in intellectual growth and creative collaboration. Students in the Honors College look forward each semester to working with the Kauffman School, promoting the educational and social opportunities available to Kauffman students. The Honors College provides UMKC students with two options: work-study positions for students who are eligible and wish to work extensively (15 to 20 hours per week) at the Kauffman School, and volunteer positions for students who wish to help lead after-school clubs.

Study Abroad

Students in the UMKC Honors College are strongly encouraged to spend a summer, a semester or a year studying in a foreign country. Taking classes and living abroad is one of the most personally and intellectually fulfilling experiences a student can have while an undergraduate. Every summer, the Honors College organizes a summer study abroad program in Ireland, Scotland, or Sweden; however, in consultation with the administration of the Honors College, students can earn honors credit by participating in any study abroad program. Visit Study Abroad and Global Engagement (<https://info.umkc.edu/international/study-abroad/>) for complete information on all study abroad opportunities at UMKC.

SEARCH: Students Engaged in Artistic and Academic Research

Honors students completing the senior honors thesis or undergraduate research project are encouraged to present their findings at the annual SEARCH Symposium for Research and Creative Achievements. The purpose of this symposium is to display and celebrate undergraduate participation in outstanding research and other creative endeavors. Presentations may be in the form of poster presentations or other performance media displaying creative works. For more information, see the SEARCH (<http://www.umkc.edu/searchsite/>) website.

Faculty

James McKusick^{2,3}

Professor of English
Honors College Dean

B.A. (Dartmouth College); M.A., M.Phil., Ph.D. (Yale University)

[Contact Information](#)

Gayle A. Levy

Associate Professor of French
Honors College Director

A.B. (University of California-Berkeley); M.A. (Johns Hopkins University); Ph.D. (Duke University)

[Contact Information](#)

John Herron^{2,3}

Professor and Interim Dean of the College of Arts and Sciences
Honors College Associate Director

B.A., M.A. (Montana State University), Ph.D. (University of New Mexico).

[Contact Information](#)

Henrietta Rix Wood

Teaching Professor in the Honors College

B.A. (Southern Methodist University); M.A., Ph.D. (University of Missouri-Kansas City)

Contact Information

Stephen Christ

Assistant Teaching Professor in the Honors College
B.A., M.A. (University of Central Missouri); Ph.D. (University of Missouri)

Contact Information

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

Undergraduate University Honors Requirements

Students must complete 27 hours of honors coursework to earn the University Honors distinction. Students must earn a grade of "B" or better in an honors course in order for it to count in fulfillment of University Honors requirements. A minimum cumulative grade-point average of 3.2 is required to graduate with **University Honors**.

Transfer students, and currently enrolled UMKC students who enter the Honors College with more than 50 hours, will need 21 hours of honors credit to earn the University Honors distinction. Transfer students may count up to 9 credits of honors coursework completed at their previous college or university in fulfillment of University Honors requirements.

How to Earn Honors Credits

The Honors College offers many opportunities for students to earn honors course credits.

- Take **honors courses** and receive a course grade of B or higher.
- Complete an individual **honors contract** in any course to receive honors credit for that course.
- Participate in an **honors discussion group** – a weekly discussion session offered in connection with certain specific courses at UMKC. Honors credit may be assigned retroactively in a course for which a student has successfully participated in a related discussion group.
- Complete a **Study Abroad Program**. Up to 15 credits earned in any UMKC-approved Study Abroad program may be counted as regular honors credits in fulfillment of the coursework needed to earn the University Honors distinction.
- Enroll in a **Beyond the Classroom Experience**, which could be an internship, a clinical experience, practice teaching, undergraduate research, or a community engagement project. Up to six credits earned in Beyond the Classroom Experiences may be counted toward the University Honors distinction.
- Enroll in **Graduate Courses**. Up to six credits of graduate-level coursework may be counted toward the University Honors distinction. Students must earn a B or better in a graduate course to receive honors credit.
- Complete a **Senior Honors Thesis**. See "Honors Scholar Requirements" below.

Honors Scholar Requirements

All Honors College students are encouraged to undertake a six-credit **Senior Honors Thesis** in their senior year. The Senior Honors Thesis should be a research paper or project in the student's major discipline that is completed under the supervision of a faculty mentor. Upon graduation, those students who complete an honors thesis in addition to the University Honors requirements are designated as **Honors Scholars**.

The **Senior Honors Thesis** is normally completed over three semesters, starting with a preparatory seminar in spring semester of the junior year. Students are invited to select their own thesis topic, which will involve in-depth research with a faculty mentor. All senior honors thesis coursework must be completed with a course grade of B or better. See the senior honors thesis guidelines (<http://honors.umkc.edu/academics/senior-honors-thesis/>) for additional information.

The **Honors Scholar** distinction requires a minimum of six credits of honors thesis or independent research project coursework in addition to the 27 credits required for the University Honors distinction. The following course sequence is recommended for Honors College Thesis projects.

Junior and Senior Years (6 hours)

- **Honors Thesis or Project**
 - **Junior Year:** (Spring) Honors 330 *Senior Honors Thesis/Project Practicum* (1 credit)
 - **Senior Year:** (Fall) Honors 495 *Senior Thesis* independent study (2 credits)
 - **Senior Year:** (Spring) Honors 499 *Senior Thesis/Project Writing Group* (1 credit)
 - **Senior Year:** (Spring) Honors 495 *Senior Thesis* independent study (2 credits)

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Courses

HONORS 215 Researching Kansas City Credits: 3

Researching Kansas City is an interdisciplinary undergraduate research course open to honors and other high-achieving students. It will introduce students to scholarly research and analysis through the exploration of important issues of the past and present in Kansas City.

Prerequisites: Honors College Student, or a 3.5 GPA or higher, or a 28 ACT score or higher.

HONORS 230 Honors American Government Credits: 3

This course will analyze the structure and operation of American government. Major topic areas include the historical development of American democracy, mass political behavior, political institutions, public policy, and their connections. The US and Missouri Constitutions provide a framework for the class and are examined in-depth throughout the class.

Prerequisites: Honors student, or a 3.5 GPA or higher, or a 28 ACT score or higher.

HONORS 330 Senior Honors Thesis/Project Practicum Credit: 1

The Senior Honors Practicum is a graded one-credit-hour course that will prepare honors students to undertake a Senior Honors Thesis or Project. In this class, students will explore different options for theses or projects; identify a topic and faculty advisor; plan the production of the thesis or project; produce a component of the thesis or project; and collaborate effectively with other honors students to develop their plans.

Prerequisites: Admission to the Honors College.

HONORS 350 Honors Tutorial Credits: 1-3

Independent Study.

Prerequisites: Admission to the Honors College.

HONORS 490 Special Topics Credits: 3

An advanced undergraduate course designed to deal with a topic that is not available in the regular course offerings. May be repeated for credit when the subject changes.

Prerequisites: Admission into Honors College.

HONORS 495A Senior Thesis-Criminal Justice and Criminology Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495AA Senior Thesis Anthropology Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495B Senior Thesis-Art History Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495C Senior Thesis Biology Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495D Senior Thesis-Chemistry Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495E Senior Thesis-Communication Studies Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisite: Departmental consent.

HONORS 495EE Senior Thesis-Electrical and Computer Engineering Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495F Senior Thesis-Economics Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495G Senior Thesis-English Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495H Senior Thesis-Foreign Languages Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495I Senior Thesis-Geosciences Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495J Senior Thesis-History Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495L Senior Thesis-Mathematics Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495M Senior Thesis - Business Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495ME Senior Thesis-Medicine Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495N Senior Thesis-Philosophy Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495NH Senior Thesis-Health Sciences Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495NN Senior Thesis-Nursing Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495O Senior Thesis-Political Science Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495P Senior Thesis-Psychology Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495PA Senior Thesis-Public Administration Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar. Pre-requisites: Departmental consent.

HONORS 495Q Senior Thesis-Sociology Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495R Senior Thesis-Theatre Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495S Senior Thesis-Education Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495U Senior Thesis-Classics/Ancient Studies Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495V Senior Thesis-Physics Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 495X Senior Thesis-Music Credits: 1-6

Students who have completed the requirements for the Honors College may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis, the student will then graduate as an Honors Scholar.

Prerequisites: Departmental consent.

HONORS 496 Honors Internship Credits: 1-6

This course is an academic internship that requires written assignments in addition to the work performed in a professional workplace. Internships are individually arranged with the sponsoring organization, which may be a business, school, nonprofit agency or government office. Academic credit may range from 1 to 6 credit hours (for 0 credit hours see HONORS 496A). There will be a Learning Agreement established in the first week of the semester that states the contractual responsibilities of the student, the workplace supervisor and the internship coordinator.

HONORS 496A Honors Internship Credits: 0

This course is an academic internship that requires written assignments in addition to the work performed in a professional workplace. Internships are individually arranged with the sponsoring organization, which may be a business, school, nonprofit agency or government office. Academic credit for this course is 0 credit hours (for variable 1-6 credit hours see Honors 496). There will be a Learning Agreement established in the first week of the semester that states the contractual responsibilities of the student, the workplace supervisor and the internship coordinator. This Learning Agreement will outline the job responsibilities, workload expectations, assignments and anticipated learning outcomes of the internship experience.

HONORS 499 Senior Thesis/Project Writing Group Credit: 1

This course is open to honors students and high-achieving students who are working on senior theses, projects, or capstone papers. The group meets twice a month to offer peer response to the work of members, who set goals and deadlines for producing their theses or projects. A faculty member of the Honors College advises the group. Non-honors students who meet the Honors College admission criteria may receive permission to enroll.

School of Biological and Chemical Sciences

Biological Sciences Building, Room 013
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<http://sbc.umkc.edu/>

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Dean

Theodore White

Division of Biological Sciences

Department of Cell Biology and Biophysics

Samuel Bouyain, Department Chair

Division of Biological Sciences

Department of Molecular Biology and Biochemistry

Anthony Persechini, Department Chair

Department of Chemistry

Kathleen Kilway, Department Chair

History

The School of Biological and Chemical Sciences was established in 2019. In the fall of 2019 the School of Biological Sciences (established in 1985 as an eminence program by the curators of the University of Missouri) merged with the Department of Chemistry (formerly in the College of Arts and Sciences) to form the School of Biological and Chemical Sciences. The combined research facilities and state-of-the-art laboratories offer outstanding research and academic programs in modern biological and chemical sciences.

Organizational Structure

Division of Biological Sciences

Research by faculty, as well as graduate and undergraduate students, is focused on cellular and molecular aspects of modern biology, with emphasis in molecular genetics, cell biology and structural biology. Advances in these areas will provide fundamental knowledge for biotechnology, molecular medicine, environmental remediation and computational biology. Students are encouraged to gain hands-on research experience, involving them in the process of creating knowledge and equipping them to shape the future. The Division of Biological Sciences is organized in two departments, the Department of Cell Biology and Biophysics and the Department of Molecular Biology and Biochemistry.

Department of Chemistry

The Department of Chemistry faculty carry out research in the traditional disciplines of chemistry such as inorganic, organic, analytical and physical chemistry and are actively involved in research and continually building strengths in interdisciplinary scientific areas, including medicinal and bioorganic chemistry, polymer science, material science and engineering, chemical physics, biomaterials and nanoscience. Graduate and undergraduate students are encouraged to participate in cutting-edge research opportunities with expert faculty, exposing them to theory, experiment/observation and simulation; and numerous connections to career opportunities within Kansas City, the country and abroad.

Career Readiness

Students come to SBC to complete a degree but leave prepared with the skills, experiences, and knowledge to successfully move into the workplace or graduate and professional programs. Career seminars assist students to learn about and explore a wide variety of career options, build professional networks, gain knowledge through shadowing and informational interviews, and prepare themselves as competitive applicants. In addition, undergraduate students participating in employment, internships, shadowing and service opportunities can earn credit toward their degree through our Experience Based Education course.

Organizations and Activities

Students who are actively engaged with their education significantly increase their likelihood to graduate. The School offers students a variety of undergraduate and graduate student organizations that meet for scientific discussions, community service, and social events. A full list of student organizations may be found in Roo Groups (<https://roogroups.campuslabs.com/engage/>) on the UMKC website. Some student organizations helpful to students in biology, chemistry, or pre-health professional fields include:

Alpha Phi Omega (Service)

SBC Student Government Association

Biological Students Society

Pre-Dental Society

Pre-Dental Hygiene Society

Pre-Medical Society

Pre-Optometry Society

Pre-Physician Assistant Society

Lavoisier Society (Graduate)

Graduate Chemistry Society

Seminar Program

The School offers a biological and chemical sciences seminar program throughout the year with weekly advanced research seminars featuring presentations by national recognized visiting scientists and campus faculty. All students and faculty are welcome to attend.

SBC Boot Camp

A one-week program designed to help incoming students have a smooth transition to the expectations of college prior to the start of the fall semester. The program is open to UMKC students enrolled in BIOLOGY 108 General Biology I, BIOLOGY 109 General Biology II, or CHEM 211 General Chemistry I in the fall semester.

SBC Living Learning Community

A collaborative program with Residential Life. Students in the residence halls interact with faculty, advisors and alumni through special programs and events. The community fosters students with like-minded interests and majors to form study group and support networks.

Biological Sciences Catalog (p. 1133)

Department of Chemistry Catalog (p. 1200)

Biological Sciences

Division of Biological Sciences

Biological Sciences Building

5007 Rockhill Road

<http://sbc.umkc.edu/>

Department of Cell Biology and Biophysics

This department houses the laboratories of anatomy, biophysics, developmental biology, cell biology, microbiology, neurobiology, structural biology and virology.

Department of Molecular Biology and Biochemistry

This department houses the laboratories of biochemistry, genetics, genetic engineering, membrane biochemistry, molecular biology, macromolecular structure, neurophysiology and cellular and molecular physiology.

Research facilities and laboratories

Equipment and Core Facilities

Microscope core facility on the ground floor in our building and overseen by the PI houses:

1. Olympus Fluoview 300 confocal laser scanning microscope (CLSM) with DIC optics and four PMT detectors, three for epi-confocal imaging, and one for transmitted-light imaging. Argon 488 nm and He/Ne lasers are installed on the microscope.
2. Nikon upright fluorescence microscope with a GRID confocal imaging device and Metamorph Image acquisition software for real time fluorescence imaging.
3. Nikon inverted fluorescent DIC microscope with APO quality optics, four filter sets, and attached ColorView CCD camera with computer and Analysis software to analyze images.
4. Olympus microscope with a range of objectives and filters attached to a CCD camera linked to a Silicon Graphics O2 loaded with Deltavision software for image acquisition and analysis (deconvolution).

Genomics core facility located on the second floor of the building overseen by a dedicated technician and directed by the PI includes:

- (1) Allegra 25 centrifuge and two tetrad PCR machines for 96-well based applications
- (3) Amersham Storm 860 Imaging System
- (4) Amersham Typhoon 9400 phosphorimager with ImageQuant software

Protein core facility capable of mass spectrometry sample preparation and analysis is directed by Dr. Andrew Keightley and is located on the 4th floor of our building includes:

1. Thermo Finnigan LTQ linear ion trap, equipped with Proxeon nanospray source
2. Voyager DE Pro MALDI MS
3. Eksigent binary nano-LC pump system (1D nanoLC)
4. Eksigent quaternary nano-LC pump system (2D nanoLC)

X-ray crystallographic data are collected at beamlines 22ID and 22BM at the Advanced Photon Source of Argonne National Laboratory. Access to these beamlines is guaranteed for 24 hours on each beamline (three times a year) through our membership to the Southeast Regional Collaborative Access Team (SER-CAT).

Faculty

Rachael Allen; teaching assistant professor of biological sciences; B.S. University of Bristol, M.Sc. University of Bristol, Ph.D. Northern Illinois University.

Tara Allen; teaching professor of biological sciences; B.S. (University of Evansville); Ph.D. (University of Missouri-Columbia).

Marshall Anderson, adjunct professor of biological sciences.

Karen J. Bame² graduate programs officer and associate professor of biological sciences; B.A. (University of California-Santa Barbara); Ph.D. (University of California-Los Angeles).

James M. Benevides; teaching professor of biological sciences; B.S. (University of Massachusetts); M.S., Ph.D. (University of Rhode Island).

Grant Bledsoe; teaching assistant professor of biological sciences; B.S. (University of South Carolina-Aiken); Ph.D. (Medical University of South Carolina).

Samuel Bouyain^{2,3}; chair, cell biology and biophysics; associate professor of biological sciences; Diploma of Engineer (École Nationale Supérieure de Chimie de Paris); D.Phil. (University of Oxford).

Stephane Dissel^{2,3}; assistant professor of biological sciences; B.S., M.S. (Université Louis Pasteur); Ph.D. (University of Leicester).

Leonard L. Dobens, Jr.^{2,3}; director of research and professor of biological sciences; B.S. (Boston College), Ph.D. (Dartmouth College).

Lawrence A. Dreyfus² adjunct professor of biological sciences; B.A. (University of Kansas); M.S. (Michigan State University); Ph.D. (University of Kansas).

Brooke Esquivel, instructor of biological sciences.

Brian Geisbrecht; adjunct professor of biological sciences

Erica Geisbrecht; adjunct professor of biological sciences

Carl Gelhaus; adjunct professor of biological sciences

R. Scott Hawley; adjunct professor of biological sciences; Ph.D. (University of Washington).

Robert Holmes; adjunct professor of biological sciences

Saul M. Honigberg^{2,3}; professor of biological sciences; B.S. (University of Georgia), Ph.D. (Yale University).

Chi-Ming Huang^{2,3}; associate professor of biological sciences; B.S. (National Taiwan University, Taiwan); M.S., Ph.D. (University of California-Los Angeles).

Marisa James; adjunct professor of biological sciences

Tamas Kapros; teaching professor of biological sciences; B.S., Doctor Universitatis in Genetics, Ph.D. (Jozsef Attila University of Sciences, Szeged, Hungary).

J. Andrew Keightley; research associate professor of biological sciences; B.S., Ph.D. (University of New Mexico-Albuquerque).

Margaret Kincaid; teaching associate professor of biological sciences; B.A. (University of Missouri – Columbia); M.S., Ph.D. (University of Missouri – Kansas City).

Loretta Klamm; instructor of biological sciences; B.S. Creighton University, M.S. Creighton University.

Peter Koulen; professor of biological sciences; M.S., Ph.D. (Johannes Gutenberg University, Germany).

Lee Likins; assistant teaching professor in biological sciences; B.S. (University of West Florida-Pensacola); M.A. (University of Kansas); Ph.D. (University of Missouri – Kansas City).

Lara Mabry; adjunct professor of biological sciences

Jessica Magana, assistant teaching professor of biological sciences.

Hillary McGraw^{2,3}; assistant professor of biological sciences; B.A. (University of Oregon); Ph.D. (University of Washington).

Thomas M. Menees² associate professor of biological sciences; B.S., M.S. (University of California Irvine); Ph.D. (Yale University).

Ryan Mohan^{2,3}; assistant professor of biological sciences; Ph.D. University of Western Ontario.

Michael O'Connor^{2,3}; associate professor of biological sciences; B.A. (Trinity College Dublin); Ph.D. (National University of Ireland).

Anthony Persechini^{2,3}; chair, molecular biology and biophysics; professor of biological sciences; B.A. (University of New Hampshire), Ph.D. (Carnegie-Mellon University).

Jeffrey L. Price^{2,3}; professor of biological sciences; B.S. (College of William and Mary), Ph.D. (Johns Hopkins University).

Jane Rachel; adjunct professor of biological sciences

Aaron Reed; director of course development and assessment and associate teaching professor of biological sciences; B.S. (Kansas State University); M.S. (University of Memphis); Ph.D. (Kansas State University).

Jon Robertus; adjunct instructor of biological sciences.

Julia Snyder, adjunct professor of biological sciences.

Nicole Stanton-Wilson; Instructor of biological sciences

Karyn Turla; teaching professor of biological sciences; B.S. (Pennsylvania State University); Ph.D. (University of Michigan).

Shizhen Wang^{2,3}; assistant professor of biological sciences; B.S. (InnerMongolia University for Nationalities); M.S. (Nanjing Agricultural University); Ph.D. (Tsinghua University).

Tammy S. Welchert²; director of student affairs and academic advising and associate teaching professor of biological sciences; B.S., M.S. (Southwest Missouri State University); IPh.D. (University of Missouri-Kansas City).

Theodore C. White^{2,3}; dean, Marion Merrell Dow professor in biological sciences; B.S. (Cornell University); Ph.D. (University of Michigan).

Gerald J. Wyckoff^{2,3}; professor of biological sciences; B.S. (Cornell University); Ph.D. (University of Chicago).

Xiaolan Yao^{2,3}; associate professor of biological sciences; B.S., M.S. (Zhengzhou University, China); Ph.D. (Iowa State University).

Yu, Xiao-Qiang(Sean)^{2,3}; professor of biological sciences; Ph.D. (Kansas State University).

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

EMERITUS

Raymond L. Burich, Gerald M. Carlson, Bibie Chronwall, Alfred F. Esser, Edward P. Gogol, Ana J. Iriarte, Ronald A. MacQuarrie, Marino Martinez-Carrion, Denis Medeiros, Henry M. Miziorko, William T. Morgan, Lynda Plamann, Michael Plamann, G. Sullivan Reed, Garth E. Resch, Ann Smith, George J. Thomas, Jr., Jakob H. Waterborg, Marilyn D. Yoder

Undergraduate Undergraduate Programs

- Minor in Biology (p. 1199)
- Bachelor of Arts in Biology (p. 1152)
- Bachelor of Science in Biology (p. 1158)
- Bachelor of Science in Biology, Biomedical Sciences Emphasis (p. 1169)
- Bachelor of Science in Biology, Bioinformatics Emphasis (p. 1163)
- Bachelor of Science in Biology, Biotechnology Emphasis (p. 1174)
- Bachelor of Science in Biology, Cellular and Molecular Basis of Health and Disease Emphasis (p. 1179)
- Bachelor of Science in Biology, Clinical Laboratory Science Emphasis (p. 1184)
- Bachelor of Science in Biology, Pre-Dentistry Concentration (p. 1189)
- Dual Degree: Bachelor of Arts in Biology, combined BA/MD

Courses taught by the School of Biological and Chemical Sciences support academic programs within the schools of Nursing, Dentistry, Medicine, Pharmacy and Education, and departments within the College of Arts and Sciences. An undergraduate minor in biology and a variety of courses that may interest non-biology majors are available to complement other fields of study, or to satisfy general education requirements of other academic units. A background in biology combined with non-science skills creates many career possibilities.

General Information About Undergraduate Programs

Admission Requirements

Other than University of Missouri admission requirements, there are no special prerequisites for beginning either the bachelor of arts or the bachelor of science program. High school biology and a good working knowledge of algebra and arithmetic are desirable for entering the bachelor of science program. It should be noted that much of the bachelor of science program, and the bachelor of arts program, are highly structured in the order which biology and chemistry courses must be taken. It is assumed that transfer students, Associates degree students, and junior college students should

have begun the appropriate course sequence in their previous schools. All students are required to consult with a Biological Sciences Undergraduate Advisor before their registration at UMKC.

Advising

The School of Biological and Chemical Sciences' team of well-trained academic advisors assists undergraduate students in developing individual plans of study. As teaching faculty, the advisors are uniquely qualified to help students understand and address course selection and professional development issues. Students will find the School of Biological and Chemical Sciences website contains the latest information about degree requirements, academic rules, and related matters. To facilitate progress toward the student's degree, and to ensure that courses selected provide an appropriate academic program, students are required to participate in advising each semester before registering for classes.

Students enrolled in double majors or dual degree programs are advised by both academic units. The primary academic unit generally has the major advising responsibility. However, for issues pertaining specifically to a biology degree, an advisor at the School of Biological and Chemical Sciences must be consulted.

Students are responsible for becoming familiar with all academic regulations of the campus as outlined in the catalog and in other University documents.

Career Implications of a Bachelor's Degree in Biology

Our programs prepare students for a variety of career opportunities. Some students choose careers in the pharmaceutical or biotech industries, while others opt for graduate study in areas such as bioinformatics, forensics, or cell biology. In addition, a biology major is an excellent choice for students planning careers in medicine, veterinary medicine, dentistry, optometry, physical therapy, and other health professions. The bachelor of science in biology curriculum fulfills the admissions requirements for most medical and dental schools and incorporates intermediate and upper-level biology courses specifically recommended by medical/dental school admissions officers.

Pre-Medicine, Pre-Dentistry and Pre-Health Professions Academic Advising

The School of Biological and Chemical Sciences' experienced team of advisors is knowledgeable about admission requirements and application processes for health profession programs. It is important for students considering eventual application to medical, dental, or veterinary school or other professional programs to consult early and often with a School of Biological and Chemical Sciences advisor about appropriate course selection and additional preparation.

Advisors assist the student in investigating programs throughout the country and in planning an individualized undergraduate course of study.

In addition the School offers Careers in Healthcare I and II to assist student preparation through the exploration of healthcare options and the professional school application including decisions on where to apply, developing a personal statement, interview skills and letters of recommendation. Each student receives support and encouragement during all phases of the application process. Students are strongly encouraged to take advantage of advisor expertise by discussing their career plans beginning with their first semester at UMKC. Please see the additional catalog section on Pre-Medicine/Pre-Health (<https://catalog.umkc.edu/pre-medicine-pre-health-home-page/>) for other information.

Teacher Certification in Biology

Certification as a middle school (grades 5-9) science or secondary (grades 9-12) biology teacher in Missouri requires that a student complete a teacher preparation program. Once you complete a bachelor's degree in biology, you can apply to the School of Education for the Master of Arts in Teaching program, which prepares you for the teaching profession and teacher certification. A separate application for the Master of Arts in Teaching program is required. For further information about the program, consult the School of Education section of this catalog or contact the Division of Teacher Education and Curriculum Studies at (816) 235-2245.

Honors Program

The School of Biological and Chemical Sciences offers an Honors Program for qualified undergraduate students seeking either the bachelor of arts or the bachelor of science in biology interested in pursuing rigorous preparation for advanced professional training and careers. The program requires high levels of academic achievement as well as an undergraduate research experience and other enrichment activities. The SBC Honors Program is separate and distinct from the UMKC Honors College (<http://honors.umkc.edu/>). For further information about this program, consult the School website or Dr. Aaron Reed, Director for Undergraduate Curriculum at (816) 235-2329.

Prerequisites and Co-requisites

A minimum grade of C- or higher is expected for all prerequisite and co-requisite courses for all students taking courses within the Division of Biology. Additionally, students must be concurrently enrolled in or have previously completed all co-requisite courses. Course prerequisites are set by the Curriculum Committee of the School based on the level at which a course is taught and the assumed background knowledge necessary for successful completion of the course. Lack of prerequisites, therefore, indicates lack of background knowledge necessary for success in the course. Prerequisites for SBC courses are strictly enforced. In exceptional cases, students may receive written consent to waive one or both of these requirements from the Undergraduate Academic Standards Committee by completing and submitting a detailed petition form to the Undergraduate Programs Office and only if approval of the petition is granted.

Elective Courses for the Non-Biology Major

Students in other academic units are encouraged to select courses in the School of Biological and Chemical Sciences to meet their general education requirements and to complement their major area of study. Suggested courses include:

Code	Title	Credits
BIOLOGY 102	Biology and Living	3
BIOLOGY 102L	Biology and Living Laboratory	1
BIOLOGY 108	General Biology I	3
BIOLOGY 109	General Biology II	3
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
LS-PHYS 217	Human Physiology	3
Upper-level Courses ¹		

¹ Upper-level courses for which prerequisites have been satisfied are recommended for those students who wish to gain a strong foundation in biological sciences.

Students enrolling in these biology majors' courses should have a solid background in high school biology and chemistry.

Academic Standing

Academic standing is determined at the end of each semester, fall, spring and summer for each student. Good standing at the university is attained with a University of Missouri (UM) cumulative GPA of 2.0 or higher and with the School of Biological and Chemical Sciences with a UM biology GPA (major's applicable courses) of 2.0 or higher.

Grade Point Average

In general, the UM GPA is calculated by dividing the total grade points earned in courses on any UM campus by the total number of graded semester hours attempted. If a course attempted within UM is repeated, the previous hours and grade point remain in the student's GPA. Courses taken credit/no credit, courses earning grades of S, P, I or AT, and courses transferred from non-University of Missouri institutions are not included in the UM GPA calculations. See appropriate sections below.

In general, the UM biology GPA is calculated by dividing the total grade points earned in majors courses on any UM campus by the total number of graded semester hours attempted. If a course attempted within UM is repeated, the previous hours and grade point remain in the student's GPA. Courses taken credit/no credit, courses earning grades of S, P, I or AT, and courses transferred from non-University of Missouri institutions are not included in the UM GPA calculations. See appropriate sections below.

Request for GPA Adjustments for repeated courses may be initiated by students and submitted by an SBC Academic Adviser after completion of the repeating attempt. A student's academic standing may be revised after the GPA adjustment is made in Pathway. GPA adjustments may be used for a maximum of 15 semester hours. See the UMKC Repeated Courses policy and GPA Readjustment form for more information.

If a student's UM cumulative GPA and/or UM biology GPA falls below the 2.0 minimum the student will no longer be in good standing. Students who fail to maintain good standing will be placed on Academic Warning, Probation, or will be declared Academically Ineligible to continue.

ACADEMIC WARNING

First Time College (FTC) students with a declared major in the SBC will be placed on Academic Warning when their UM cumulative GPA and/or UM biology GPA is between 1.5 and 2.0 at the end of their first semester at UMKC.

A student on Academic Warning will have the same requirements as students on Academic Probation as described below. Students may return to good academic standing by raising their UM cumulative GPA and/or UM biology GPA to the minimum 2.0 required. If the student cannot raise their UM cumulative GPA and/or UM biology GPA to 2.0 or higher after the warning semester, they may be placed on Academic Probation for a maximum of 2 (two) additional semesters. After 1 (one) warning semester and 2 (two) probation semesters, the student must return to good standing or be declared academically ineligible to continue as a student in SBC and/or UMKC.

First Time College (FTC) students with a declared major in the SBC will be placed on Academic Probation when their UM cumulative GPA and/or UM biology GPA is below 1.5 at the end of their first semester at UMKC. See Academic Probation below.

Transfer students and continuing students are not eligible to be placed on Academic Warning.

ACADEMIC PROBATION

Students with a declared major in the SBC will be placed on Academic Probation if their UM cumulative GPA and/or UM biology GPA falls below 2.0. When an SBC student is placed on academic probation as a result of the previous semester grades, the students will be notified prior to the beginning of the next semester through their UMKC email. The student will be required to enter into an Academic Success Contract designed to provide the student with assistance to support a return to good standing. The contract will specify enrollment requirements and keep the advisor and student

in close contact throughout the semester to provide additional support. The contract will outline the student's responsibilities while on probation including, but not limited to the following:

1. Return to good standing by raising UM CUM and/or UM BIO GPA above the minimum 2.0. **OR**
2. If the student cannot return to good standing after the contract semester, they may be continued on probation for one additional semester if they earn a grade of **C- or higher in all contracted courses** **AND** earn a 2.5 (**B- average**) or higher semester/biology GPA during the contracted semester.
3. Participate in additional activities as listed in the contract.

The contract's requirements may be altered **ONLY** in consultation with the student's assigned academic advisor. The requirements of the contract are binding with or without the student signature.

If a student fails to meet the terms of the contract, they may be declared academically ineligible to enroll in future semesters as a student with a declared major in the SBC.

If a student cannot raise their UM cumulative GPA and/or UM biology GPA above 2.0, they may remain on probation one additional semester provided they meet the requirements in #2 above. If a student's UM cumulative and/or UM biology GPA is still below 2.0 after a second semester on probation, they will be declared academically ineligible to continue as a student in SBC. A student may, if eligible (UM cumulative GPA above 2.0), transfer to another academic unit at UMKC.

Students who have been placed on academic probation and have returned to good standing may be placed on academic probation again if their UM cumulative and/or UM biology GPA fall below the minimum 2.0 required.

ACADEMIC INELIGIBILITY

Students on academic probation or warning that do not meet the terms of their Academic Success contract with SBC become academically ineligible to enroll for future semesters as a student with a declared major in the SBC. Students declared academically ineligible will be notified through their UMKC email prior to the start of the next semester. If the student's UM cumulative GPA is above 2.0 the student may continue at UMKC, but will need to meet with an advisor in a different academic unit to discuss options and declare a major other than biology to do so. Students will have until the date given in the email notification to change their major; failure to make these changes by the date indicated will result in cancellation of their registration with any fees paid refunded. Students who have become academically ineligible may re-declare biology as their major after raising their UM cumulative GPA and UM biology GPA above the minimum 2.0 required.

Graduate Graduate Programs

- Master of Science in Cellular and Molecular Biology (p. 1196)
 - Emphasis in Bioinformatics (p. 1196)
- Master of Arts in Biology (p. 1196)
- Doctor of Philosophy Study (p. 1193)

The School of Biological and Chemical Sciences offers programs of study leading to a master of science degree in cellular and molecular biology. In addition, a master of arts degree in biology is offered. The school participates in UMKC's Interdisciplinary Ph.D. program in Cell Biology/Biophysics and Molecular Biology/Biochemistry.

Graduates with research experience in cell biology and biophysics or molecular biology and biochemistry may enter careers in many areas, including biotechnology, pharmaceuticals, academia or governmental research involving the environment, agriculture, energy, defense or health.

General Information About Graduate Programs

Admission

Admission to the school's graduate programs is competitive and students are encouraged to apply early. Applications are reviewed by an admissions committee that evaluates students on the basis of past performance and evidence of ability to pursue graduate studies successfully. The school admits students to its doctoral and master's degree programs throughout the year; however, early application (by Feb. 15) is advised to receive consideration for assistantships and other financial support.

Information on admission to master's or Ph.D. degree programs may be found at the Graduate Programs Web site at <http://www.umkc.edu/sbs/graduate/>, in the Graduate Academic Regulations and Information (<https://catalog.umkc.edu/general-graduate-academic-regulations-information/>) section of this catalog, by e-mail to sbs-grad@umkc.edu, or by writing to our graduate programs office at the mailing address at the beginning of this section.

Graduate teaching assistantships, graduate research assistantships and fellowships are available through the school and are awarded on a competitive basis. Currently, all fully admitted, full-time doctoral students receive financial support.

To be eligible for admission to the School of Biological Sciences' graduate programs, the applicant must:

- Possess a bachelor's degree in biological sciences or a related field with a minimum of 120 credit hours, or possess an advanced degree in a health sciences field.
- Have an undergraduate GPA of at least 3.0.
- Have sufficient background coursework to undertake graduate studies in biological sciences.
- Have acceptable scores in the Graduate Record Examination aptitude tests. Applicants to the MA Biology program (only) may submit MCAT or DAT scores in place of a GRE score.
- Submit three letters of recommendation from individuals familiar with the student's academic performance and scientific abilities.

Students may be admitted with certain deficiencies, with the stipulation that these can be removed early in the course of study.

Advising

New students will be advised by the principal graduate advisor until they have selected their permanent research advisor. The graduate programs office will contact students in advance of their first semester for information about advising and registration.

Students are responsible for becoming familiar with all academic regulations of the campus as outlined in the catalog and in other University documents.

Requirements for Retention

General requirements for retention of graduate students are described in the Graduate Academic Regulations and Information (<https://catalog.umkc.edu/general-graduate-academic-regulations-information/>) section of this catalog. For all graduate students, a 3.0 (B) GPA is required for satisfactory progress. No F grades are permitted.

Any doctoral student who receives more than one C grade in a basic course will be dropped from the doctoral program.

Any master's student who receives more than two C grades or more than one C and one D grade in graduate courses will be dropped from the program.

Biology Courses

BIOLOGY 102 Biology and Living Credits: 3

Introduction to structural organization and functional processes of living systems. For non-biology majors only. Does not count toward biology degree.

BIOLOGY 102 - MOTR BIOL 100L: Essentials in Biology with Lab



BIOLOGY 102L Biology and Living Laboratory Credit: 1

Exploration of basic biological concepts through laboratory activities requiring data collection and analysis. For non-majors only; does not count toward Biology degree requirements.

Corequisite: BIOLOGY 102 (or prerequisite).

BIOLOGY 102L - MOTR BIOL 100L: Essentials in Biology with Lab



BIOLOGY 108 General Biology I Credits: 3

Fundamental studies in biology emphasizing the unity and diversity of life. Topics include the basic chemistry of biological processes, cell types and organelles, energy harvesting and energy producing pathways, cell and life cycles, genetics, DNA structure, genes, transcription, translation, natural selection, population genetics, speciation, and phylogenetic analysis.

BIOLOGY 108 - MOTR BIOL 150: Biology



BIOLOGY 108L General Biology I Laboratory Credit: 1

Basic laboratory studies in Biology emphasizing the unity and diversity of life. Structure, function, heredity, development, ecology and evolution will be explored.

Co-requisites: BIOLOGY 108.

BIOLOGY 108L - MOTR BIOL 150L: Biology with Lab



BIOLOGY 109 General Biology II Credits: 3

Fundamental studies in biology emphasizing the unity and diversity of life. Topics include prokaryotes, fungi, invertebrate-vertebrate zoology and phylogeny, human evolution, plant structure and development, animal development and physiology, ecology (population and ecosystems).

BIOLOGY 109L General Biology II Laboratory Credit: 1

Basic laboratory studies in Biology emphasizing the unity and diversity of life. Structure, function, heredity, development, regulation of growth and evolution will be explored.

Co-requisites: BIOLOGY 109.

BIOLOGY 112 Microbiology and Living Credits: 3

Lectures and demonstrations concerning the cell structure, genetics and physiology of microorganisms and the role microorganisms play in the world around man with an emphasis on medical and clinical aspects of the significance of various groups of bacteria, viruses fungi and other microorganisms. This course is intended for nursing and other allied health students and for non-biology majors interested in life sciences and does not count toward Biology major requirements.

BIOLOGY 115 First Year Seminar Credit: 1

This course is designed to provide students with the skills necessary to achieve success at the university. The curriculum includes time management, study, reading, note-taking and test-taking strategies, health and wellness, and student support services. Additional emphasis will include career exploration, including professionalism, writing a resume, and developing plan of study for degree completion.

BIOLOGY 122 Human Genetics Credits: 3

This is a non-majors biology course in human genetics designed for those with little classroom training in the sciences. The focus will be on the nature of human genetic variation and how variation shapes and affects our lives. This includes the structure and function of genes and how genes create traits. The discussion will focus on how genes function in human development through sex determination. The inclusion of human genomic sequencing technology and personal genomics will emphasize several issues related to knowledge and privacy.

BIOLOGY 122 - MOTR LIFS 100G: Essentials in Human Biology - Gene

**BIOLOGY 125L Guided Research in Biology Credits: 2**

An introduction to basic principles and methods of scientific research in the biological sciences. Students will engage in experimental design, use of bioinformatic tools, molecular graphics, and specialized tools related to different biology disciplines to characterize a specific gene or cell system under the guidance of a faculty member. Recommended preparation: BIOLOGY 108.

BIOLOGY 199L Methods in Biological Research Credits: 2

The course will provide an introduction to laboratory safety and common research methods used in modern biological research. It is intended for students that wish to gain research experience in the School or a career in research.

Prerequisites: BIOLOGY 108 or BIOLOGY 109.

BIOLOGY 201 Preparing for Careers in Biology Credit: 1

This course will help students prepare for their post-undergraduate future. Topics will include communication, skills identification and marketing, how to find employment or internship opportunities, a review of the application process for graduate education and the role of undergraduate research.

Prerequisites: Sophomore standing (or higher).

BIOLOGY 202 Cell Biology Credits: 3

Basic concepts of cellular and subcellular structure and function, including supramolecular and organelle structure and organization, bioenergetics, cell growth and cellular communication.

Prerequisites: BIOLOGY 108 (or MOTRBIOL 150L), BIOLOGY 109 (or MOTRBIOL 150LZ), and CHEM 212R, (or CHEM 212R, LS-ANATO 219, LS-ANATO 219L, and LS-MCRB 121).

BIOLOGY 206 Genetics Credits: 3

A modern approach integrating molecular and organismal studies of the general genetics of lower and higher organisms. Chromosomal structure and function, gene transmission, heredity, plasticity and population genetics will be discussed.

Prerequisites: BIOLOGY 108 (or MOTRBIOL 150L), BIOLOGY 109 (or MOTRBIOL 150LZ or MOTRBIOL 100LZ), and CHEM 212R or LS-ANATO 219.

BIOLOGY 217L Human Physiology Laboratory Credit: 1

This course is designed to illustrate the important principles of human physiology in a laboratory setting. Using an organ systems approach, the course will feature microscopic work, audio-visual presentations, and student experiments when possible. For non-majors only; does not count toward biology degree requirements.

Prerequisites: LS-PHYS 117.

BIOLOGY 218 Introductory Anatomy Credits: 3

Description and discussion of the cells, organs, organ systems and basic tissues of vertebrates with special emphasis on their interrelationships in functional anatomy.

Prerequisites: BIOLOGY 102 or BIOLOGY 108 or BIOLOGY 109.

Co-requisites: BIOLOGY 218L.

BIOLOGY 218L Introductory Anatomy Laboratory Credits: 2

Laboratory investigation of cells, tissues, and organs with special emphasis on their interrelationship in vertebrates.

Co-requisites: BIOLOGY 218.

BIOLOGY 250 Careers in Biological & Chemical Sciences I Credit: 1

This course will introduce students to a variety of careers in the biological and chemical sciences. Guest speakers will share information including day-to-day activities on the job, educational requirements, career advancement, and necessary interests and abilities.

BIOLOGY 251 Careers in Biological & Chemical Sciences II Credit: 1

This course will help students prepare for their post-undergraduate future. Topics will include communication, skills identification and marketing, how to find employment or internship opportunities, a review of the application process for graduate education and the role of undergraduate research.

BIOLOGY 285 Special Topics Credits: 1-3

In depth exploration of a topic in biology

BIOLOGY 302 General Ecology Credits: 3

Introduction to the study of populations, communities, and ecosystems by examining the interrelationships between living organisms and their environments. The role of natural selection and evolution will also be considered. Prerequisites: BIOLOGY 108 (MOTR 150L), BIOLOGY 109 (MOTR 150LZ), or BIOLOGY 102 (MOTR 100L).

Prerequisites:

BIOLOGY 302L Ecology Laboratory Credits: 2

This course provides laboratory and field experience in ecology. The course will cover topics including statistical analysis and data presentation, terrestrial and aquatic sampling, experimental design and scientific writing.

Co-requisites: BIOLOGY 302.

BIOLOGY 303 Invertebrate Zoology Credits: 3

Taxonomy, evolutionary relationships, behavior, reproduction, morphology and ecology of the invertebrates. Recommended preparation: BIOLOGY 108, BIOLOGY 109, and CHEM 212R.

BIOLOGY 304 Biostatistics 1 Credits: 3

Introduction to the concepts of probability, statistical reasoning, and experimental design in the biological sciences. The course emphasizes the application of inferential statistics to biological experiments including the use of relevant statistical computer packages.

Prerequisites: MATH 110 or STAT 235; or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

BIOLOGY 305 Marine and Freshwater Biology Credits: 3

Introduction to the study of marine ecology, deep-sea biology, oceanic nekton, inter-tidal ecology, estuaries, mangroves and salt marshes, as well as ecology of rivers, lakes, streams, wetlands and human impact on aquatic habitats.

Prerequisites: BIOLOGY 108, BIOLOGY 109, CHEM 211.

BIOLOGY 308 Vertebrate Zoology Credits: 3

Taxonomy, evolutionary relationships, behavior, reproduction, morphology and ecology of the vertebrates.

Prerequisites: BIOLOGY 108, BIOLOGY 109, CHEM 212R.

BIOLOGY 312WL Laboratory in Developmental Biology, Genetics and Cell Biology Credits: 3

Experimental studies of genetics and development in selected eukaryotic model organisms with an emphasis on the molecular and cellular mechanism of inheritance.

Prerequisites: BIOLOGY 441.

Co-requisites: BIOLOGY 409.

BIOLOGY 313 Microbiology Credits: 3

Fundamental and applied aspects of microbial structure, metabolism, genetics and diversity. Experimental approaches to studying the microbial world will be emphasized.

Prerequisites: BIOLOGY 202, BIOLOGY 206.

Co-requisites: BIOLOGY 441.

BIOLOGY 313L Laboratory in Microbiology Credits: 3

General microbiological procedures plus advanced work in the areas of microbial physiology and genetics, pathogenic microbiology, virology, applied microbiology and biotechnology.

Co-requisites: BIOLOGY 313, BIOLOGY 441.

BIOLOGY 313WL Laboratory in Microbiology Credits: 3

General microbiological procedures plus advanced work in the areas of microbial physiology and genetics, pathogenic microbiology, virology, applied microbiology, and biotechnology.

Co-requisites: BIOLOGY 313, BIOLOGY 441.

BIOLOGY 314 Entomology Credits: 3

Anatomy, physiology and identification of insects with emphasis on their environmental adaptations.

Prerequisites: BIOLOGY 109 (or LS-ANATO 219).

BIOLOGY 316 Principles of Physiology Credits: 3

Physiological functions and processes of animals at the organ and organ systems levels, including concepts of integrated and homeostatic mechanisms. The relationship between organ function and underlying cellular mechanisms in vertebrates will be emphasized.

Prerequisites: BIOLOGY 202, BIOLOGY 206, BIOLOGY 441.

BIOLOGY 319 Global Health: New and Emerging Infectious Diseases Credits: 3

This course will discuss infectious diseases that are newly identified, or increasing in prevalence throughout the world. Several aspects of each disease will be discussed, including transmission, symptoms, treatment, prevention, and diagnosis. The course is meant for students interested in a health-related career (medicine, dental, pharmacy, public health), but other students with a basic biology background are welcome.

Prerequisites: BIOLOGY 108, BIOLOGY 109 (or BIOLOGY 102).

BIOLOGY 322 General Parasitology Credits: 3

Parasitic protists, worms and arthropods and the disease states they may induce, will be examined in relationship to human, animal and plants hosts.

Prerequisites: BIOLOGY 109 (or LS-ANATO 219).

BIOLOGY 326 Biological Conservation Credits: 3

Applications of ecology and genetics to the conservation of communities and individual species, including discussion of the Endangered Species Act, extinction processes, and the effects of habitat fragmentation.

Prerequisites: BIOLOGY 108, BIOLOGY 109.

BIOLOGY 327 Biogeography and Biodiversity Credits: 2

Evolutionary and climatological effects on the geographic distribution of organisms, including areas of endemism as well as preservation of biodiversity.

Prerequisites: BIOLOGY 108, BIOLOGY 109.

BIOLOGY 328 Histology Credits: 2

Animal tissues and their specialization in the organism, with major emphasis on higher organisms.

Prerequisites: BIOLOGY 202.

BIOLOGY 328L Laboratory in Histology and Cellular Ultrastructure Credits: 3

Examination of structure/function relationships at the subcellular, cellular and organ levels. Both plants and animals will be examined with emphasis on vertebrates.

Co-requisites: BIOLOGY 328.

BIOLOGY 328WL Laboratory in Histology and Cellular Ultrastructure Credits: 3

Examination of structure/function relationships at the subcellular, cellular and organ levels. Both plants and animals will be examined with emphasis on vertebrates.

Co-requisites: BIOLOGY 328.

BIOLOGY 329 Endocrinology Credits: 3

Study of the physiological functions and controls in human and related mammalian systems, with emphasis on endocrine-directed processes that underlie normal and abnormal metabolic and clinical conditions. The course will be presented in traditional lecture format, and focus on the molecular, chemical, membrane and cellular basis of metabolic homeostatic processes in cells, cytoplasmic compartments and primary organ systems.

Prerequisites: BIOLOGY 202.

Co-requisites: BIOLOGY 316.

BIOLOGY 331 Reproductive Biology Credits: 2

Comprehensive overview of current concepts and knowledge regarding male and female reproductive processes, from gametogenesis through early placentation. Includes structural, developmental, physiological and pathophysiological aspects of reproduction.

BIOLOGY 338L Comparative Vertebrate Anatomy Laboratory Credits: 3

This class explores anatomical similarities and differences that exist between the major vertebrate groups and relates aspects of anatomy to evolutionary history and function. Students will gain hands-on experience of anatomy through dissection and examination of several model vertebrates. Recommended preparation: BIOLOGY 108, BIOLOGY 109, and BIOLOGY 109L.

BIOLOGY 346 Plant Biology Credits: 3

An integrative study of growth, development, and reproduction of plants, including structure and function of plant tissues and organs, as well as a survey of the recent advances in genetic engineering, plant defense mechanisms, and medical botany and the usefulness of plants to humans.

Co-requisites: BIOLOGY 202.

BIOLOGY 350 Assisting Undergraduate Learning in Biology Credits: 1-3

This course addresses current issues and pedagogy of teaching biology and providing instructional support for designated undergraduate courses in the School of Biological Sciences. Students meet weekly with the course instructor and assist in the classroom, studio, or laboratory.

Prerequisites: BIOLOGY 108, BIOLOGY 109, BIOLOGY 202, BIOLOGY 206.

BIOLOGY 360L Laboratory in Biochemistry and Molecular Biology Credits: 3

Laboratory studies in biochemistry and molecular biology with an emphasis on modern techniques and quantitative relationships.

Prerequisites: BIOLOGY 441.

BIOLOGY 360WL Laboratory in Biochemistry and Molecular Biology Credits: 3

Laboratory studies in biochemistry and molecular Biology with an emphasis on modern techniques and quantitative relationships.

Prerequisites: BIOLOGY 441.

BIOLOGY 385 Special Topics Credits: 3

In depth exploration of a topic in biology. Repeatable toward the major only when the topic changes.

BIOLOGY 397 Experience Based Education Credits: 1-3

This course will allow students to earn credit for experience gained through educational experiences such as service, shadowing, leadership, employment and study abroad.

BIOLOGY 405 Introduction to Evolution Credits: 3

Discussion of the biological processes that produce organic diversity through phyletic change, including variation, mutation, adaptation, population genetics, natural selection, genetic drift, gene flow, and macroevolution.

Prerequisites: BIOLOGY 206.

BIOLOGY 409 Developmental Biology Credits: 3

Principles of development and differentiation of structure during embryology in animals. Molecular, cellular and organismal level concepts and mechanisms will be considered.

Prerequisites: BIOLOGY 202, BIOLOGY 206.

BIOLOGY 415 Pathophysiology Credits: 3

Pathophysiology will focus on the physiological basis of cellular and tissue function, and the consequences of dysregulated metabolic/cellular expression on essential homeostatic processes in cells, cytoplasmic compartments and primary organ systems. Recommended preparation: BIOLOGY 316.

BIOLOGY 430 Molecular Biology and Genetic Engineering Credits: 3

Molecular aspects of gene structure and function, including macromolecular synthesis, gene regulation, genetic transfer and biotechnology will be discussed in prokaryotes and eukaryotes.

Prerequisites: BIOLOGY 202, BIOLOGY 206.

Co-requisites: BIOLOGY 441.

BIOLOGY 435 Immunology Credits: 3

A study of the cellular and humoral aspects of the immune response, with emphasis upon the mechanisms involved and the relationship of this response to disease processes.

Prerequisites: BIOLOGY 441 and LS-MCRB 121 (or BIOLOGY 313).

BIOLOGY 441 Biochemistry Credits: 3

One semester course covering the properties of organic compounds important to biological systems. Structures, characterization and reactions of common compounds and their relationship to the building blocks of biological systems will be discussed.

Prerequisites: BIOLOGY 202, CHEM 320 (or CHEM 321).

BIOLOGY 442 Neurobiology Credits: 3

Neurobiology will consist of the presentation of theory and data concerning cellular and molecular fundamentals of the nervous system, synaptic mechanisms, sensory-motor systems, and higher-order functions of the nervous system.

Prerequisites: BIOLOGY 316, BIOLOGY 441.

BIOLOGY 445 Evolutionary Ecology Credits: 3

This class explores the scientific concepts and methods underpinning modern understanding of evolutionary ecology as it relates to organisms. Students will gain hands-on experience using techniques that are central to quantitative and qualitative studies of organismal evolutionary ecology.

Prerequisites: BIOLOGY 302, BIOLOGY 405.

BIOLOGY 452 Bioinformatics Credits: 3

Study of the acquisition, storage, retrieval, analysis, modeling, and distribution of information in biomolecular databases. Recent developments in genomics and proteomics and how these databases are used in modern biological research will be emphasized.

Co-requisites: BIOLOGY 441.

BIOLOGY 485 Special Topics Credits: 1-3

In depth exploration of a topic in biology. Repeatable toward the major only when the topic changes.

BIOLOGY 498WI Critical Analysis of Biological Issues Credits: 3

Reading and analysis of scientific literature, including original papers, on a topic of broad biological interest. Critical discussion of experimental methods and results. Writing of scientific reviews and a term paper. Taking the MFAT test is a requirement of this course, and the course satisfies the general education synthesis requirement.

Co-requisites: BIOLOGY 441.

BIOLOGY 5501 Proposal Writing Credit: 1

This course addresses how to develop a testable hypothesis, and write a NIH-style proposal to convince the reader of the significance of the proposed studies. Students will write a proposal that will form the basis of their oral comprehensive exam in the Cell Biology and Biophysics (CBB) and Molecular Biology and Biochemistry (MBB) disciplines. The is limited to doctoral students with CBB and MBB coordinating disciplines that have a plan of study filed with the School of Graduate Studies.

BIOLOGY 5510 Gross Anatomy for Nurse Anesthetists Credits: 3

This course will present and examine the anatomic concepts and conditions essential for critical thinking and decision making by the nurse anesthetist. Specifically, the course will provide the foundation upon which patient interventions may be based during the perioperative period.

Prerequisites: Graduate status.

Co-requisites: BIOLOGY 5510L.

BIOLOGY 5510L Gross Anatomy for Nurse Anesthetists Credit: 1

This laboratory course will present and examine the anatomic concepts and conditions essential for critical thinking and decision making by the nurse anesthetist. Specifically, the course will provide the foundation upon which patient intervention may be based during the perioperative period.

Prerequisites: Graduate status.

Co-requisites: BIOLOGY 5510.

BIOLOGY 5511 Professional Development Credit: 1

The purpose of this course is to facilitate a competitive application to professional health programs for student seeking the M.A. in Biology. Students will gain an understanding of the application process, including decisions for where to apply, assessing fit, developing a personal statement, strategies for letters of evaluation, and an execution of a successful interview.

Prerequisites: Admission to the M.A. Biology program, or by instructor consent.

BIOLOGY 5515 Biochemistry Credits: 4

The chemistry and mechanisms involved in biosynthesis, degradation and utilization of the major constituents of living systems and the biochemistry of specialized tissues, hormones, nutrition and regulation.

Prerequisites: Admission to the UMKC MA Biology program.

BIOLOGY 5516 Global Health: New and Emerging Infections Diseases Credits: 3

This course will discuss infectious diseases that are newly identified, or increasing in prevalence throughout the world. Several aspects of each disease will be discussed, including transmission, symptoms, treatment, prevention, and diagnosis. The course is meant for students interested in a health-related career (medicine, dental, pharmacy, public health), but other students with a basic biology background are welcome.

Prerequisites: BA or BS in Biology or related field

BIOLOGY 5517 From Bench to Bedside: Translational Research Credits: 3

This course explores the interplay between basic biological research and bedside clinical practice, delving into the topic "what is translational research?" By engaging with people from the community involved at all levels of translational research, students will gain an appreciation for the civic issues behind medical research, the interdisciplinary nature of research, and the part that Kansas City institutions play in regional life and health sciences. As part of the course, students will produce a "public service announcement" style video that explains a particular aspect of translational research for consumption by people within the broader Kansas City community.

Prerequisites: Must be in a graduate program in the School of Biological Sciences or instructor consent.

BIOLOGY 5518 Graduate Histology Credits: 2

Animal tissues and their specialization in the organism, with major emphasis on higher organisms.

Prerequisites: BA or BS in Biology or Chemistry, or permission of the instructor.

BIOLOGY 5519 Principles of Evolution Credits: 3

Synthesis of the modern concepts of evolution. Discussion of the biological processes that produce organic diversity through phyletic change. Discussed are variation, mutation, population genetics, natural selection and adaptation.

Prerequisites: BIOLOGY 206.

BIOLOGY 5525 Bioinformatics and Data Analysis Credits: 3

Methods and procedures for the storage, retrieval and analysis of information in biomolecular and biological databases. Emphasis will be given to the use of database information in biological research and to recent developments in genomics and proteomics.

Prerequisites: BIOLOGY 441, LS-BIOC 360.

BIOLOGY 5528 Human Genomic Epidemiology Credits: 3

This course is designed for biological researchers and clinicians interested in studying common human diseases using state-of-the-art genomics/genetics epidemiological approaches. The course provides a basic yet comprehensive introduction to key topics in human genome epidemiological research, including basic concepts and methodologies of quantitative/statistical genetics, an introduction to emerging technologies and analytical methods for genomic science, basic study for various types of genomic research approaches, utilization of widely-used software packages for analyses of genomic data, and examples of human genome epidemiology information improving health, and ethical, legal and social issues in the design and conduct of human genome epidemiology studies.

BIOLOGY 5534 Cardiovascular Pulmonary Physiology Credits: 3

Function of the cardiovascular and pulmonary systems at the cellular, tissue, and system levels with particular emphasis on regulation, maintenance of homeostasis and integration with other systems.

Prerequisites: BIOLOGY 316.

BIOLOGY 5539 Mammalian Physiology Credits: 4

Study of the physiological functions and controls in human and related mammalian systems, with emphasis on fundamental processes that underlie normal and abnormal clinical conditions.

Prerequisites: BIOLOGY 316.

BIOLOGY 5540 Pathophysiology Credits: 4

Pathophysiology will focus on the physiological basis of cellular and tissue function, and the consequences of dysregulated metabolic/cellular expression on essential homeostatic processes in cells, cytoplasmic compartments and primary organ systems.

Prerequisites: BIOLOGY 5539.

BIOLOGY 5542 Neurobiology Credits: 3

Neurobiology will consist of the presentation of theory and data concerning cellular and molecular fundamentals of the nervous system, synaptic mechanisms, sensor-motor systems, and higher-order functions of the nervous system.

Prerequisites: LS-BIOC 304.

BIOLOGY 5591 Directed Individual Studies Credits: 1-6

Intensive readings and/or research in an area selected by the graduate student in consultation with the instructor. Not to be identified with thesis research.

BIOLOGY 5592 Master of Arts Topics in Biology Credits: 1-6

Special problems and topics in biology specifically intended to satisfy the project or report requirement for the master of arts degree in biology.

Prerequisites: Nine hours of graduate work in Biology.

BIOLOGY 5593 Master of Science Topics Credits: 1-4

Investigation of problems and topics to satisfy the M.S. topics requirement for the master of science degree in Cellular and Molecular Biology.

Prerequisites: LS-MBB 5561, LS-MBB 5562.

BIOLOGY 5899 Required Graduate Enrollment Credit: 1

Life Sciences Courses

LIFE-SCI 201 Careers in Health I Credit: 1

This course will introduce students to various healthcare professions. Guest speakers will cover topics including day-to-day activities on the job, educational requirements, career advancement, and necessary interests and abilities.

LIFE-SCI 202 Careers in Health II Credit: 1

Students will gain an understanding of the role and scope of practice of health professionals, patient privacy, professionalism, professional school applications and a deeper appreciation of what it means to be a patient through facilitated shadowing experiences.

LIFE-SCI 310 Fundamentals of Medicine I Credits: 2

This course introduces students to various aspects of women's health care. In addition, students will consider the cultural diversity of caring for patients with various medical conditions, and will integrate information from the basic sciences, the, and the social sciences as they learn about health care. Recommended preparation: BIOLOGY 202 and BIOLOGY 206.

Prerequisites: Bachelor of Science, Biomedical Sciences Emphasis Student.

LIFE-SCI 320 Fundamentals of Medicine II Credits: 2

This course introduces students to the aging process and various medical conditions in the elderly. Cultural diversity within aging patient populations will be discussed. Students will experience personal growth and reflection. Recommended preparation: LIFE-SCI 310.

Prerequisites: Bachelor of Science, Biomedical Sciences Emphasis Student.

LIFE-SCI 330 Fundamentals of Medicine III Credits: 2

This course introduces students to various aspects of pediatric health care. Students will become familiar with medical symptoms and clinical findings while integrating knowledge in anatomy, physiology, and pathophysiology of infants, children, and adolescents. Recommended preparation: LIFE-SCI 320.

Prerequisites: Bachelor of Science, Biomedical Sciences Emphasis Student.

LIFE-SCI 340 Fundamentals of Medicine IV Credits: 2

This course introduces students to aspects of adult health care, including bioethics, conflict resolution, informed consent, and human subject research. Presentations on various medical symptoms and clinical findings will be provided to integrate anatomy, physiology, and pathophysiology for learning about acute and chronic medical conditions. Recommended preparation: LIFE-SCI 330.

Prerequisites: Bachelor of Science, Biomedical Sciences Emphasis Student.

LIFE-SCI 399 Introduction to Research Credits: 1-3

Introduction to the theory and practice of research in modern biological sciences. Requires minimum of 3-4 hours per week in the laboratory for each credit hour.

Prerequisites: Departmental consent.

LIFE-SCI 497 Directed Studies—Biological Sciences Credits: 3

Individual or small group study of topics in an area of the biological sciences including class room work, presentation, library work, and writing of term papers or other reports.

Prerequisites: CHEM 320 (or CHEM 322R).

LIFE-SCI 497A Directed Studies-Bioinformatics Credits: 1-3

Individual or small group study of topics in the area of bioinformatics including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497B Directed Studies-Genetics Credits: 1-3

Individual or small group study of topics in the area of genetics including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497BB Directed Studies: Behavioral Biology Credits: 1-3

Individual or small group study of topics in the area of behavioral biology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: BIOLOGY 206 and LS-BIOC 441.

LIFE-SCI 497C Directed Studies-Microbiology Credits: 1-3

Individual or small group study of topics in the area of microbiology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497D Directed Studies-Physiology Credits: 1-3

Individual or small group study of topics in the area of physiology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497E Directed Studies - Biochemistry Credits: 1-3

Individual or small group study of topics in the area of biochemistry including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497F Directed Studies - Biophysics Credits: 1-3

Individual or small group study of topics in the area of biophysics including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497G Directed Studies-Cell Biology Credits: 1-3

Individual or small group study of topics in the area of cell biology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497H Directed Studies - Neuroscience Credits: 1-3

Individual or small group study of topics in the area of neuroscience including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497I Directed Studies-Botany Credits: 1-3

Individual or small group study of topics in the area of botany including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497J Directed Studies-Zoology Credits: 1-3

Individual or small group study of topics in the area of zoology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497K Directed Studies - Ecology Credits: 1-3

Individual or small group study of topics in the area of ecology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497L Directed Studies - Biological Sciences Credits: 1-3

Individual or small group study of topics in the area of biological sciences including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497P Directed Studies - Biotechnology Credits: 1-3

Individual or small group study of topics in the area of biotechnology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 497WI Directed Studies—Biological Sciences Credits: 3

Individual or small group study of topics in an area of the biological sciences including class room work, presentation, library work, and writing of term papers or other reports.

Prerequisites: CHEM 320 (or CHEM 322R).

LIFE-SCI 499 Undergraduate Research-Biological Sciences Credits: 3

Independent research, including the writing of research reports in the area of biological sciences.

Prerequisites: CHEM 320 (or CHEM 322R).

LIFE-SCI 499A Undergraduate Research-Bioinformatics Credits: 1-3

Independent research, including the writing of research reports in the area of bioinformatics. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499B Undergraduate Research-Genetics Credits: 1-3

Independent research, including the writing of research reports in the area of genetics. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499C Undergraduate Research-Microbiology Credits: 1-3

Independent research, including the writing of research reports in the area of microbiology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499D Undergraduate Research-Physiology Credits: 1-3

Independent research, including the writing of research reports in the area of physiology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499E Undergraduate Research-Biochemistry Credits: 1-3

Independent research, including the writing of research reports in the area of biochemistry. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499F Undergraduate Research- Biophysics Credits: 1-3

Independent research, including the writing of research reports in the area of biophysics. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499G Undergraduate Research-Cell Biology Credits: 1-3

Independent research, including the writing of research reports in the area of cell biology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements. Recommended preparation: BIOLOGY 206 and LS-BIOC 441.

Prerequisites: Departmental consent.

LIFE-SCI 499H Undergraduate Research-Neuroscience Credits: 1-3

Independent research, including writing of research reports in the area of neuroscience. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499I Undergraduate Research-Botany Credits: 1-3

Independent research, including the writing of research reports in the area of botany. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499J Undergraduate Research-Zoology Credits: 1-3

Independent research, including the writing of research reports in the area of zoology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499K Undergraduate Research-Ecology Credits: 1-3

Independent research, including the writing of research reports in the area of ecology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499L Undergraduate Research-Biological Sciences Credits: 1-3

Independent research, including the writing of research reports in the area of biological sciences. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499M Undergraduate Research-Biological Sciences Honors Credits: 1-3

Independent research, including the writing of research reports in the area of biological sciences.

Prerequisites: Departmental consent.

LIFE-SCI 499P Undergraduate Research-Biotechnology Credits: 1-3

Independent research, including the writing of research reports in the area of biotechnology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.

Prerequisites: Departmental consent.

LIFE-SCI 499WI Undergraduate Research-Biological Sciences Credits: 3

Independent research, including the writing of research reports in the area of biological sciences.

Prerequisites: CHEM 320 (or CHEM 322R).

LIFE-SCI 5899 Required Graduate Enrollment Credit: 1**LIFE-SCI H490WI Honors Senior Seminar Credits: 3**

Discussion, writing and specific readings to coordinate with and amplify topics covered in School of Biological Sciences seminars; must include a term paper on a specific topic. Writing Intensive.

Life Sciences - Anatomy Courses

LS-ANATO 219 Functional Anatomy I Credits: 3

An introduction to the functional anatomy of vertebrates with emphasis on organs, organ systems and tissues.

Prerequisites: Pharmacy or Medicine Student.

LS-ANATO 219L Functional Anatomy I Laboratory Credit: 1

An introduction to the functional anatomy of vertebrates with emphasis on organs, organ systems and tissues.

Prerequisites: Pharmacy or Medicine Student.

Life Sciences - Biochemistry Courses

LS-BIOC 341 Basic Biochemistry Credits: 3

One semester course covering the properties of organic compounds important to biological systems. Structures, characterization and reactions of common compounds and their relationship to the building blocks of biological systems will be discussed. Recommended preparation: BIOLOGY 202, CHEM 320 (or CHEM 322R).

LS-BIOC 360 Biochemistry Credits: 3

Introduction to modern biochemistry. Structure and function of biologically important compounds, major biochemical pathways and their regulation in animals, plants and microorganisms, and the molecular and biochemical basis of gene function will be studied. Recommended preparation: BIOLOGY 202, BIOLOGY 206, BIOLOGY 441, CHEM 320 (or CHEM 322R).

LS-BIOC 370 Pharmacy Biochemistry Credits: 4

The chemistry and mechanisms involved in biosynthesis, degradation and utilization of the major constituents of living systems, and the biochemistry of specialized tissues, hormones, nutrition and regulation with a focus on application to clinical pharmacy practice.

Life Sciences - Cell Biology A Courses

LS-CBB 5501 Graduate Biophysical Principles Credits: 3

The focus of this course is on the theoretical principles underlying the biophysical methods used by a wide range of biological chemists. The approaches covered include thermodynamics, chemical kinetics, molecular interactions, transport properties, quantum mechanics, optical spectroscopy, and molecular structural approaches involving nuclear magnetic resonance spectroscopy, X-ray diffraction, and Mass spectrometry.

LS-CBB 5504 Graduate Virology Credits: 3

Survey of the molecular biology of animal, plant, and bacterial viruses. The course will emphasize the molecular mechanisms of virus replication, viral pathogenesis, and the use of virus as model systems to study mammalian cells.

LS-CBB 5505 Molecular and Cellular Neurobiology Credits: 3

The molecular basis of chemical and electrical communication between nerve cells. Topics will include: neurotransmitters, neuropeptides, receptors, channels, second messengers, cytoskeleton, cell adhesion, development, neuronal plasticity and psychopharmacology.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5520 Cell and Molecular Biology II Credits: 3

A presentation of the cellular and subcellular organization and function of eukaryotic cells. Discussions will emphasize basic concepts by which structure and functions are integrated.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5530 Cell and Molecular Biology I Credits: 3

Molecular aspects of gene structure and function in prokaryotic and eukaryotic organisms and their viruses. Emphasis in genome structure and organization and regulation of gene expression.

Co-requisites: LS-MBB 5561.

LS-CBB 5538 Molecular Recognition in Cellular Biology Credits: 2

Graduate Research Seminar. Studies of the latest development leading to an increased understanding of cellular biology processes when the experimental tools for structure biology analysis and molecular genetics are applied.

Co-requisites: LS-MBB 5561.

LS-CBB 5566 Membrane Biochemistry and Biophysics Credits: 3

Structure and function of biological membranes including architecture, dynamics, models, biochemical compartmentation, energy transduction, transport mechanisms, membrane protein structures, and cell surface receptors.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5569 Structural Biology, Methods and Strategies Credits: 3

Analysis of strategies and methodologies such as X-ray crystallography, nuclear magnetic resonance and advanced microscopy procedures including imaging analysis for the study of relationships of higher order macromolecular structures to biological functions.

Prerequisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5583 Current Topics in Cell Biology and Biophysics Credits: 1-3

Current topics and recent developments in cell biology and biophysics with emphasis on rapidly developing research areas.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5591 Directed Individual Studies in Cell Biology and Biophysics Credits: 1-6

Intensive reading and/or research in an area selected by the graduate student in consultation with the instructor.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5596 Advanced Experimental Cell Biology I Credits: 2

Structured laboratory work with individual tutorial sessions designed to familiarize first year Interdisciplinary Ph.D. students with concepts and techniques of modern cell biology research. 1-2 hr/wk tutorial and 15-20 hr/wk of laboratory work.

Co-requisites: LS-MBB 5561.

LS-CBB 5597 Advanced Experimental Cell Biology II Credits: 2

Continuation of LS-CBB 5596.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5599 Thesis Research in Cell Biology and Biophysics Credits: 1-12

Research and thesis preparation for M.S. degree candidates.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5612 Seminar in Cell Biology and Biophysics Credit: 1

Presentation and discussion of selected areas in cell biology and biophysics. This course may be repeated by doctoral students for a maximum of 3 credit hours.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5690 Analytical Methods in Cell Biology and Biophysics Credits: 1-4

A course that emphasizes the development of skills in experimental design, analytical methods and instrumentation as applied to problems of interest to modern cell biology and biophysics, and analysis of results. Can be repeated up to a maximum of eight hours total.

Prerequisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5696 Dissertation Development Credits: 1-6

This course is individually directed research leading to the fulfillment of the Comprehensive Exam requirements for the Cell Biology and Biophysics primary discipline. This includes submission of the final, revised version of the NIH-style research proposal to committee members and (ii) successful oral defense of the proposal before the student's research advisory committee. **Prerequisites:** BIOLOGY 5501.

LS-CBB 5699 Dissertation Research in Cell Biology and Biophysics Credits: 1-12

Research and dissertation preparation for interdisciplinary Ph.D. degree students who have Cell Biology and Biophysics as a discipline.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

Life Sciences - Molecular Biol Courses

LS-MBB 5503 Eukaryotic Molecular Biology Credits: 3

Molecular aspects of gene structure and function in eukaryotic organisms and their viruses. Emphasis on genome structure and organization, gene expression and regulation and the molecular basis of growth and development.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5509 Graduate Developmental Biology Credits: 3

Principles of development and differentiation of structure during embryology in animals. Molecular, cellular and organismal level concepts and mechanism will be considered.

LS-MBB 5510 Graduate Biochemistry for Nurse Anesthetists Credit: 1

This course will present the fundamentals of biochemistry necessary for the practice of nurse anesthesia, specifically, the structure and characteristics of biomolecules found in the cell, how molecules are metabolized to generate biochemical energy, and the basic mechanisms to regulate metabolic processes with regard to the nutritional state of the organism. The course is limited to graduate students in the nurse anesthetist program or in other disciplines where a fundamental understanding of biochemistry would be useful.

LS-MBB 5538 Molecular Recognition in Molecular Biology Credits: 2

Graduate Research Seminar. Analysis of the impact of most recent developments in molecular genetics and structural biology as related to fundamental molecular recognition events.

Co-requisites: LS-MBB 5561.

LS-MBB 5561 General Biochemistry I Credits: 4

The first semester of a two-semester sequence in general biochemistry. This course will emphasize the structure of biological molecules, thermodynamics and kinetics of biological reactions, and selected aspects of energy metabolism and metabolic pathways.

Prerequisites: CHEM 322R.

LS-MBB 5562 General Biochemistry II Credits: 3

The second semester of a two-semester sequence in general biochemistry. This course will emphasize selected aspects of the biochemistry of metabolism and macromolecular assemblies. The molecular basis of genetic and metabolic regulation will be discussed.

Prerequisites: LS-MBB 5561.

LS-MBB 5565 Structure And Function Of Proteins Credits: 3

This course will discuss structure-function relationships of proteins. Topics will include: methods of structure-function analysis, catalytic mechanisms, and regulation of enzyme activity.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5567 Physical Biochemistry Credits: 3

Application of physical and chemical principles to elucidate structure and function of biochemical systems. The various modes of interactions between biologically important molecules and the specificity of their interaction will be examined through selected literature examples.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5569 Current Topics in Molecular Biology and Biochemistry Credits: 1-3

Current topics and recent developments in biochemistry and molecular biology with emphasis on rapidly developing research areas.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5591 Directed Individual Studies In Molecular Biology And Biochemistry Credits: 1-6

Intensive readings and/or research in an area selected by the graduate student in consultation with the instructor.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5596 Advanced Experimental Molecular Biology I Credits: 2

Structured laboratory work with individual tutorial sessions designed to familiarize first year Interdisciplinary Ph.D. students with concepts and techniques of modern molecular biology research. 1-2 hr/wk tutorial and 15-20 hr/wk of laboratory work.

Co-requisites: LS-MBB 5561.

LS-MBB 5597 Advanced Experimental Molecular Biology II Credits: 2

Continuation of LS-MBB 5596.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5599 Thesis Research in Molecular Biology and Biochemistry Credits: 1-12

Research and thesis preparation for M.S. degree candidates.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5611 Seminar in Molecular Biology and Biochemistry Credit: 1

Presentation and discussion of selected areas in biochemistry and molecular biology. This course may be repeated by doctoral students for a maximum of 3 credit hours.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5690 Analytical Methods in Molecular Biology and Biochemistry Credits: 1-4

A course that emphasizes the development of skills in experimental design, analytical methods and instrumentation as applied to problems of interest to modern molecular biology and biochemistry, and analysis of results. Can be repeated up to a maximum of eight hours total.

Prerequisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5696 Dissertation Development Credits: 1-6

This course is individually directed research leading to the fulfillment of the Comprehensive Exam requirements for the Molecular Biology Biochemistry primary discipline. This includes submission of the final, revised version of the NIH-style research proposal to committee members and (ii) successful oral defense of the proposal before the student's research advisory committee.

Prerequisites: BIOLOGY 5501.

LS-MBB 5699 Dissertation Research in Molecular Biology and Biochemistry Credits: 1-12

Research and dissertation preparation for interdisciplinary Ph.D. program students who have Molecular Biology and Biochemistry as a discipline.

Co-requisites: LS-MBB 5561, LS-MBB 5562.

Life Sciences - Microbiology Courses

LS-MCRB 114L Introductory Microbiology Laboratory Credits: 2

Introductory laboratory studies in microbiology and infection to correlate with LS-MCRB 113. For non-majors only; does not count toward biology degree requirements. Recommended preparation: BIOLOGY 112 or LS-MCRB 113.

LS-MCRB 121 Human Biology III (Microbiology) Credits: 3

Basic concepts of microbiology with emphasis on infectious diseases and host defenses. Recommended preparation: CHEM 211.

Prerequisites: LS-ANATO 219 or BIOLOGY 108.

LS-MCRB 121L Human Biology III (Microbiology) Lab Credit: 1

Laboratory exercises demonstrating basic concepts of microbiology with emphasis on infectious diseases and host defenses.

Co-requisites: LS-MCRB 121.

LS-MCRB 4180 Microbiology Credits: 4

Study of infectious diseases, their etiology, symptoms, prevention and treatment. Special emphasis is placed on plaque formation, caries development, periodontal and other oral diseases that relate to dentistry.

Prerequisites: School of Dentistry Student.

LS-MCRB 431 Virology Credits: 3

Survey of the molecular biology of animal, plant, and bacterial viruses. The course will emphasize the molecular mechanisms of virus replication, viral pathogenesis, and the use of virus as model systems to study mammalian cells.

Prerequisites: BIOLOGY 202, BIOLOGY 206.

Co-requisites: BIOLOGY 441.

Life Sciences - Physiology Courses

LS-PHYS 217 Human Physiology Credits: 3

Introduction to body functions presented from an organ systems approach. For non-majors only.

Prerequisites: BIOLOGY 102 (or BIOLOGY 108 or BIOLOGY 109).

LS-PHYS 217 - MOTR LIFS 100P Essentials in Human Biology - Phys



LS-PHYS 3070 Oral Physiology Credits: 3

Concepts of general physiology will be discussed as they relate to the clinical practice of dental hygiene. Emphasis will be placed on the normal and abnormal physiology of oral structures, including such topics as neurophysiology, muscle function, salivation, and endocrinology.

Prerequisites: Dental Hygiene Student.

LS-PHYS 399 Pharmacy Physiology I Credits: 3

LSPHYS 399 is an introduction to integrated physiology of the human body, beginning with an emphasis on understanding the foundations of physiologic principles followed by an in depth study of the physiology of the nervous, endocrine, and muscle systems. Recommended preparation: BIOLOGY 202 and CHEM 320.

Prerequisites: School of Pharmacy Student.

LS-PHYS 400 Pharmacy Physiology II Credits: 3

LS-PHYS 400 is a continuation into the study of integrated human physiology. Topics covered include the cardiovascular, respiratory, renal, digestive and reproductive systems. Recommended preparation: LS-PHYS 399.

Prerequisites: School of Pharmacy Student.

LS-PHYS 401 Physiology Lecture Credits: 5

An integrated study of normal functions of various organ systems of the human body with special consideration of the physiology of the oral cavity and its related structures.

Prerequisites: School of Dentistry Student.

Medical Technology Courses

MED-TECH 999 Medical Technology Internship Credits: 15

Bachelor of Arts: Biology

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation.

Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Identify fundamental concepts in the biological sciences, including the relationship between structure and function at all levels of biological organization, evolution and the role of natural selection in the process, ecological relationships between organisms and their environment.
- Describe cellular structure and explain the major biochemical processes that occur in cells.
- Describe and explain the mechanisms of heredity and the flow of genetic information.
- Apply knowledge from other fields to biological problems.
- Evaluate scientific data.
- Write clearly about topics in the biological sciences for a peer or professional audience.

Students interested in pursuing undergraduate degree programs offered by the School of Biological and Chemical Sciences are admitted through the UMKC Office of Admissions (<http://www.umkc.edu/admissions/>). Transfer or Readmitted students should contact the University admissions office and the School of Biological and Chemical Sciences for information about transfer admissions and evaluation of transfer coursework. Transfer admission eligibility includes an overall grade-point average of at least 2.0 for all college-level coursework attempted at previous institutions, an overall GPA of at least 2.0 in courses used to fulfill Biological Sciences major requirements, and a University of Missouri Biology GPA of at least 2.0.

The B.A. degree program in biology is designed to accommodate students who want a solid background in the biological sciences, but who need less rigorous studies in the supporting sciences of chemistry, mathematics and physics. It is also recommended for students who plan to pursue double majors.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
Biology Course Requirements		
BIOLOGY 108L & BIOLOGY 108 or MOTRBIOL 100LB or MOTRBIOL 150LB	General Biology I Laboratory and General Biology I MOTR Essentials in Biology w/ Lab - Botany MOTR Biology with Lab	4
BIOLOGY 109L & BIOLOGY 109 or MOTRBIOL 100LZ or MOTRBIOL 150LZ	General Biology II Laboratory and General Biology II MOTR Essentials in Biology with Lab MOTR Biology w/Lab	4
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
BIOLOGY 441	Biochemistry	3
Biology Laboratory Courses		
Select one of the following:		2
BIOLOGY 218L or MOTRLIFS 100LA or MOTRLIFS 150LA	Introductory Anatomy Laboratory MOTR Anatomy focused Essentials in Human Biology with Lab MOTR Anatomy focused Human Biology w/Lab	
BIOLOGY 302L	Ecology Laboratory	
BIOLOGY 312WL	Laboratory in Developmental Biology, Genetics and Cell Biology	
BIOLOGY 313L or BIOLOGY 313WL	Laboratory in Microbiology Laboratory in Microbiology	
BIOLOGY 328L or BIOLOGY 328WL	Laboratory in Histology and Cellular Ultrastructure Laboratory in Histology and Cellular Ultrastructure	
BIOLOGY 338L	Comparative Vertebrate Anatomy Laboratory	
BIOLOGY 360L or BIOLOGY 360WL	Laboratory in Biochemistry and Molecular Biology Laboratory in Biochemistry and Molecular Biology	
Biology Synthesis Requirement		
Select from the following for a total of three credit hours (maximum of 4 hours of LIFE-SCI 497 and 499 can be used toward the rest of the sub-requirements):		3
BIOLOGY 498WI	Critical Analysis of Biological Issues (WI)	
LIFE-SCI 497 or LIFE-SCI 497WI	Directed Studies—Biological Sciences Directed Studies—Biological Sciences	

LIFE-SCI 499	Undergraduate Research-Biological Sciences
or LIFE-SCI 499WI	Undergraduate Research-Biological Sciences

Writing Intensive Lecture or Lab Course (may be fulfilled with lab or elective coursework above.)

Total Credits	22
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Code	Title	Credits
Additional Majors Coursework Options ¹		17
BIOLOGY 115	First Year Seminar	
BIOLOGY 199L	Methods in Biological Research	
BIOLOGY 201	Preparing for Careers in Biology	
or LIFE-SCI 202	Careers in Health II	
BIOLOGY 250	Careers in Biological & Chemical Sciences I	
or LIFE-SCI 201	Careers in Health I	
BIOLOGY 302	General Ecology	
BIOLOGY 303	Invertebrate Zoology	
BIOLOGY 305	Marine and Freshwater Biology	
BIOLOGY 308	Vertebrate Zoology	
BIOLOGY 314	Entomology	
BIOLOGY 319	Global Health: New and Emerging Infectious Diseases	
BIOLOGY 322	General Parasitology	
BIOLOGY 326	Biological Conservation	
BIOLOGY 327	Biogeography and Biodiversity	
BIOLOGY 328	Histology	
BIOLOGY 329	Endocrinology	
BIOLOGY 346	Plant Biology	
BIOLOGY 350	Assisting Undergraduate Learning in Biology	
BIOLOGY 385	Special Topics	
BIOLOGY 397	Experience Based Education	
BIOLOGY 405	Introduction to Evolution	
BIOLOGY 409	Developmental Biology	
BIOLOGY 442	Neurobiology	
BIOLOGY 445	Evolutionary Ecology	
Total Credits		17

¹ Students must complete additional biology majors coursework to total at least 38 credit hours of biology courses with grades of C- or better. At least 24 of these must be at the 300- or 400-level. One of these courses must be writing intensive. A minimum of 21 credit hours of biology courses must be taken from BIOLOGY or LIFE-SCI coursework at UMKC. The UM Biology GPA must be at least 2.0.

Science and Mathematics Course Requirements

The following courses must be completed with grades of C- or better:

Code	Title	Credits
CHEM 211	General Chemistry I	4
or MOTRCHEM 150	MOTR Chemistry I	
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 320	Elementary Organic Chemistry	4
CHEM 320L	Experimental Organic Chemistry	1
MATH 120	Precalculus (satisfies Math Pathway)	5
MATH 210	Calculus I	4
or STAT 115	Statistical Reasoning	
or STAT 235	Elementary Statistics	
or MOTRMATH 110	MOTR Statistical Reasoning	

PHYSICS 210 or PHYSICS 240	General Physics I Physics For Scientists and Engineers I	4
Total Credits		28

Code	Title	Credits
General Electives		23-24

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 108 & 108L (or BIOLOGY 109 & 109L) ^{CC}		4 BIOLOGY 109 & 109L (or BIOLOGY 108 & 108L) ^{CC}	4
CHEM 211 & 211L (or MATH 120) ^{CC}		5 CHEM 212R & CHEM 212LR (or CHEM 211 & 211L) ^{CC}	5
GEFSE 101		3 ENGLISH 110	3
GECRT-SC 101		3 GECRT-SS 101	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 202 or 206 ^{CC}		3 BIOLOGY 206 or 202 ^{CC}	3
MATH 210, STAT 235, or STAT 115 (or CHEM 212R & CHEM 212LR if not yet completed)		4 CHEM 320 & 320L ^{CC}	5

BIOLOGY 250 or LIFE-SCI 201 (recommended elective)	1	COMM-ST 110, 140, or 277	3
ENGLISH 225	3	GECUE 201	3
GECRT-AH 101	3		
GECDV 201	3		
	17		14

Third Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 441		3 BIOLOGY 3XX/4XX Major Elective	3
BIOLOGY 3XX/4XX Major Elective		3 BIOLOGY 3XX/4XX Major Elective (WI Writing Intensive course, if needed)	3
BIOLOGY Laboratory Elective		2 HISTORY 101, 102, or POL-SCI 210	3
PHYSICS 210 or 240		4 General Elective	3
General Elective (or MATH 210, 216, STAT 235, or 115 if not yet completed)		3 General Elective	3
	15		15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 3XX/4XX Major Elective		3 BIOLOGY 498WI, LIFE-SCI 497, or LIFE-SCI 499	3
BIOLOGY 3XX/4XX Major Elective		3 BIOLOGY 3XX/4XX Major Elective	2
3XX/4XX General Elective		3 General Elective (3XX/4XX if needed)	3
3XX/4XX General Elective		3 General Elective	3
General Elective		3 General Elective	3
	15		14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

School of Biological Sciences Academic Support

SBS-undergrad@umkc.edu

http://sbs.umkc.edu/undergraduate_support.cfm

816-235-2580

Bachelor of Science: Biology

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Identify fundamental concepts in the biological sciences, including the relationship between structure and function at all levels of biological organization, evolution and the role of natural selection in the process, ecological relationships between organisms and their environment.
- Describe cellular structure and explain the major biochemical processes that occur in cells.
- Describe and explain the mechanisms of heredity and the flow of genetic information.
- Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
- Employ techniques and procedures commonly used in modern biology laboratories.
- Analyze and critically evaluate scientific data.
- Write clearly about topics in the biological sciences for a peer or professional audience.

The B.S. degree program is a rigorous curriculum designed for students interested in preparing for graduate studies or a professional school, or pursuing entry level employment in a science-related field.

Students interested in pursuing undergraduate degree programs offered by the School of Biological and Chemical Sciences are admitted through the UMKC Office of Admissions (<http://www.umkc.edu/admissions/>). Transfer and Readmitted students should contact the University admissions office and the School of Biological and Chemical Sciences for information about transfer admissions and evaluation of transfer coursework. Transfer admission eligibility includes an overall grade-point average of at least 2.0 for all college-level coursework attempted at previous institutions, an overall GPA of at least 2.0 in courses used to fulfill School of Biological Sciences major requirements, and a University of Missouri Biology GPA of at least 2.0.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		
		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	3
COMM-ST 140	Principles Of Communication	3
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	3
COMM-ST 277	Interpersonal Communication	3
Math Pathway (satisfied in major requirements below)		

Critical Thinking in Arts & Humanities (GECRT-AH)	3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)	3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)	3
Culture & Diversity Course (GECDEV)	3
Civic & Urban Engagement Course (GECUE)	3
Total Credits	27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Biology Course Requirements

The following core courses are required:

Code	Title	Credits
BIOLOGY 108L & BIOLOGY 108 or MOTRBIOL 100LB or MOTRBIOL 150LB	General Biology I Laboratory and General Biology I MOTR Essentials in Biology w/ Lab - Botany MOTR Biology with Lab	4
BIOLOGY 109L & BIOLOGY 109 or MOTRBIOL 100LZ or MOTRBIOL 150LZ	General Biology II Laboratory and General Biology II MOTR Essentials in Biology with Lab MOTR Biology w/Lab	4
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
BIOLOGY 441	Biochemistry	3
Total Credits		17

Biology Lab Requirements

Two of the following laboratory courses are required.

Code	Title	Credits
Select two of the following:		5
BIOLOGY 218L	Introductory Anatomy Laboratory	

or MOTRLIFS 100LA or MOTRLIFS 150LA	MOTR Anatomy focused Essentials in Human Biology with Lab MOTR Anatomy focused Human Biology w/Lab
BIOLOGY 302L	Ecology Laboratory
BIOLOGY 312WL	Laboratory in Developmental Biology, Genetics and Cell Biology
BIOLOGY 313WL or BIOLOGY 313L	Laboratory in Microbiology (WI) Laboratory in Microbiology
BIOLOGY 328WL or BIOLOGY 328L	Laboratory in Histology and Cellular Ultrastructure (WI) Laboratory in Histology and Cellular Ultrastructure
BIOLOGY 338L	Comparative Vertebrate Anatomy Laboratory
BIOLOGY 360WL or BIOLOGY 360L	Laboratory in Biochemistry and Molecular Biology (WI) Laboratory in Biochemistry and Molecular Biology

Biology Synthesis requirement:

Code	Title	Credits
Select from the following for a total of three credit hours:		3
BIOLOGY 498WI	Critical Analysis of Biological Issues (WI)	
LIFE-SCI 497 or LIFE-SCI 497WI	Directed Studies—Biological Sciences Directed Studies—Biological Sciences	
LIFE-SCI 499 or LIFE-SCI 499WI	Undergraduate Research-Biological Sciences Undergraduate Research-Biological Sciences	
Total Credits		3

Students must complete additional biology majors coursework for a total of 42 credit hours of biology courses with grades of C- or better. 26 of these hours must be 300- or 400-level. At least one biology course must be writing intensive (WI or WL). A minimum of 21 credit hours of biology courses must be taken from BIOLOGY or LIFE-SCI coursework at UMKC. The UM Biology GPA Must be at least 2.0.

Code	Title	Credits
Additional Majors Coursework Options ¹		17
BIOLOGY 115	First Year Seminar	
BIOLOGY 199L	Methods in Biological Research	
BIOLOGY 201 or LIFE-SCI 202	Preparing for Careers in Biology Careers in Health II	
BIOLOGY 250 or LIFE-SCI 201	Careers in Biological & Chemical Sciences I Careers in Health I	
BIOLOGY 302	General Ecology	
BIOLOGY 303	Invertebrate Zoology	
BIOLOGY 305	Marine and Freshwater Biology	
BIOLOGY 308	Vertebrate Zoology	
BIOLOGY 314	Entomology	
BIOLOGY 319	Global Health: New and Emerging Infectious Diseases	
BIOLOGY 322	General Parasitology	
BIOLOGY 326	Biological Conservation	
BIOLOGY 327	Biogeography and Biodiversity	
BIOLOGY 328	Histology	
BIOLOGY 329	Endocrinology	
BIOLOGY 346	Plant Biology	
BIOLOGY 350	Assisting Undergraduate Learning in Biology	
BIOLOGY 385	Special Topics	
BIOLOGY 397	Experience Based Education	
BIOLOGY 405	Introduction to Evolution	
BIOLOGY 409	Developmental Biology	
BIOLOGY 442	Neurobiology	

BIOLOGY 445	Evolutionary Ecology	
Total Credits		17

Physical Sciences and Mathematics Course Requirements

The following courses must be completed with grades of C- or better.

Code	Title	Credits
CHEM 211 or MOTRCHEM 150	General Chemistry I MOTR Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1
MATH 120	Precalculus (satisfies Math Pathway)	5
MATH 210	Calculus I	4
Select one of the following:		3-4
MATH 220	Calculus II	
STAT 235 or STAT 115 or MOTRMATH 110	Elementary Statistics Statistical Reasoning MOTR Statistical Reasoning	
PHYSICS 210 or PHYSICS 240	General Physics I Physics For Scientists and Engineers I	4-5
PHYSICS 220 or PHYSICS 250	General Physics II Physics For Scientists and Engineers II	4
Total Credits		38-40
Code	Title	Credits
General Electives		8-10

A maximum of 12 hours for a combination of 399, 497, and 499 coursework may be applied toward the major with only 4 credit hours at the 400-level.

Minimum GPA: 2.0 (*UM cumulative; UM Biology*)

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 108 & 108L (or BIOLOGY 109 & 109L) ^{CC}		4 BIOLOGY 109 & 109L (or BIOLOGY 108 & 108L) ^{CC}	4
CHEM 211 & 211L ^{CC}		5 CHEM 212R & CHEM 212LR ^{CC}	5
GEFSE 101		3 ENGLISH 110	3
GECRT-SC 101		3 GECRT-SS 101	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 202 or 206 ^{CC}		3 BIOLOGY 206 or 202 ^{CC}	3
CHEM 321 & 321L ^{CC}		4 CHEM 322R & CHEM 322L ^{CC}	4
MATH 120		5 MATH 210	4
BIOLOGY 250 or LIFE-SCI 201 (recommended Major Elective)		1 COMM-ST 110, 140, or 277	3
ENGLISH 225		3 GECRT-AH 101	3
		16	17

Third Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 441		3 BIOLOGY 3XX/4XX Major Elective	3
BIOLOGY Laboratory Elective		2 BIOLOGY 3XX/4XX Laboratory Elective	3
BIOLOGY Major Elective		3 PHYSICS 220 or 250	4
MATH 220 or STAT 235		4 GECDV 201	3
PHYSICS 210 or 240		4 GECUE 201	3
		16	16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 498WI, LIFE-SCI 497, or LIFE-SCI 499		3 BIOLOGY 3XX/4XX Major Elective	3
BIOLOGY 3XX/4XX Major Elective		3 BIOLOGY 3XX/4XX Major Elective (WI Writing Intensive Course, if needed)	3
BIOLOGY 3XX/4XX Major Elective		1 General Elective (3XX/4XX if needed)	3
HISTORY 101, 102, or POL-SCI 210		3 General Elective (3XX/4XX if needed)	3

General Elective	3	
	13	12
Total Credits: 120		

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

School of Biological Sciences Academic Support

SBS-undergrad@umkc.edu

http://sbs.umkc.edu/undergraduate_support.cfm

816-235-2580

Bachelor of Science: Biology - Bioinformatics Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

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Student Learning Outcomes

Students graduating from this program will:

- Identify fundamental concepts in the biological sciences, including the relationship between structure and function at all levels of biological organization, evolution and the role of natural selection in the process, ecological relationships between organisms and their environment.
- Describe cellular structure and explain the major biochemical processes that occur in cells.
- Describe and explain the mechanisms of heredity and the flow of genetic information.
- Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
- Employ techniques and procedures commonly used in modern biology laboratories.

- Analyze and critically evaluate scientific data.
- Write clearly about topics in the biological sciences for a peer or professional audience.

Students interested in pursuing undergraduate degree programs offered by the School of Biological and Chemical Sciences are admitted through the UMKC Office of Admissions (<http://www.umkc.edu/admissions/>). Transfer or Readmitted students should contact the University admissions office and the School of Biological and Chemical Sciences for information about transfer admissions and evaluation of transfer coursework. Transfer admission eligibility includes an overall grade-point average of at least 2.0 for all college-level coursework attempted at previous institutions, an overall GPA of at least 2.0 in courses used to fulfill Biological Sciences major requirements, and a University of Missouri Biology GPA of at least 2.0.

Program Requirements

This instructional program incorporates courses from biology, computer science and mathematics. Students will obtain skills for the analysis of complex data, extraction of information from genomic and proteomic databases, and the design and development of software and algorithms to support these activities.

The curriculum of UMKC Essentials and biology majors courses, combined with the mathematics, chemistry and physics components is designed to provide undergraduate students with a clear program for the undergraduate background needed for a career in bioinformatics or to provide them with a solid, biologically oriented curriculum to pursue graduate level research in this area.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.

- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Biology course requirements

The following core courses:

Code	Title	Credits
BIOLOGY 108L & BIOLOGY 108 or MOTRBIOL 100LB or MOTRBIOL 150LB	General Biology I Laboratory and General Biology I MOTR Essentials in Biology w/ Lab - Botany MOTR Biology with Lab	4
BIOLOGY 109L & BIOLOGY 109 or MOTRBIOL 100LZ or MOTRBIOL 150LZ	General Biology II Laboratory and General Biology II MOTR Essentials in Biology with Lab MOTR Biology w/Lab	4
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
BIOLOGY 441	Biochemistry	3
Total Credits		17

Emphasis course requirements:

Code	Title	Credits
BIOLOGY 360WL or BIOLOGY 360L	Laboratory in Biochemistry and Molecular Biology Laboratory in Biochemistry and Molecular Biology	3
BIOLOGY 405	Introduction to Evolution	3
BIOLOGY 430	Molecular Biology and Genetic Engineering	3
BIOLOGY 452	Bioinformatics	3
Total Credits		12

Biology laboratory courses:

Code	Title	Credits
Select one of the following:		2
BIOLOGY 218L or MOTRLIFS 100LA or MOTRLIFS 150LA	Introductory Anatomy Laboratory MOTR Anatomy focused Essentials in Human Biology with Lab MOTR Anatomy focused Human Biology w/Lab	
BIOLOGY 302L	Ecology Laboratory	
BIOLOGY 312WL	Laboratory in Developmental Biology, Genetics and Cell Biology (WI)	
BIOLOGY 313WL or BIOLOGY 313L	Laboratory in Microbiology (WI) Laboratory in Microbiology	
BIOLOGY 328WL or BIOLOGY 328L	Laboratory in Histology and Cellular Ultrastructure (WI) Laboratory in Histology and Cellular Ultrastructure	
BIOLOGY 338L	Comparative Vertebrate Anatomy Laboratory	
Total Credits		2

Biology Synthesis requirement:

Code	Title	Credits
Select from the following for a total of three credit hours:		3
BIOLOGY 498WI	Critical Analysis of Biological Issues (WI)	
LIFE-SCI 497	Directed Studies—Biological Sciences	

or LIFE-SCI 497WI	Directed Studies—Biological Sciences	
LIFE-SCI 499	Undergraduate Research-Biological Sciences	
or LIFE-SCI 499WI	Undergraduate Research-Biological Sciences	
Total Credits		3

Students must complete additional biology majors coursework for a total of 42 credit hours of biology courses with grades of C- or better. At least 26 of these must be at the 300- or 400-level. At least one biology course must be writing intensive (WI or WL). A minimum of 21 credit hours of biology courses must be taken from BIOLOGY or LIFE-SCI coursework at UMKC. The UM Biology GPA must be 2.0 or higher.

Code	Title	Credits
Additional Majors Coursework Options		8
BIOLOGY 115	First Year Seminar	
BIOLOGY 199L	Methods in Biological Research	
BIOLOGY 201	Preparing for Careers in Biology	
or LIFE-SCI 202	Careers in Health II	
BIOLOGY 250	Careers in Biological & Chemical Sciences I	
or LIFE-SCI 201	Careers in Health I	
BIOLOGY 302	General Ecology	
BIOLOGY 303	Invertebrate Zoology	
BIOLOGY 305	Marine and Freshwater Biology	
BIOLOGY 308	Vertebrate Zoology	
BIOLOGY 314	Entomology	
BIOLOGY 319	Global Health: New and Emerging Infectious Diseases	
BIOLOGY 322	General Parasitology	
BIOLOGY 326	Biological Conservation	
BIOLOGY 327	Biogeography and Biodiversity	
BIOLOGY 328	Histology	
BIOLOGY 329	Endocrinology	
BIOLOGY 346	Plant Biology	
BIOLOGY 350	Assisting Undergraduate Learning in Biology	
BIOLOGY 385	Special Topics	
BIOLOGY 397	Experience Based Education	
BIOLOGY 405	Introduction to Evolution	
BIOLOGY 409	Developmental Biology	
BIOLOGY 442	Neurobiology	
BIOLOGY 445	Evolutionary Ecology	
Total Credits		8

Physical sciences and mathematics requirements:

All of the following courses are required. A grade of C- or better is required in each course used to fulfill these requirements.

Code	Title	Credits
CHEM 211	General Chemistry I	4
or MOTRCHEM 150	MOTR Chemistry I	
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1
COMP-SCI 101	Problem Solving and Programming I	3
COMP-SCI 191	Discrete Structures I	3

COMP-SCI 201R & COMP-SCI 201L	Problem Solving and Programming II and Problem Solving and Programming II - Lab	4
MATH 120	Precalculus (satisfies Math Pathway)	5
MATH 210	Calculus I	4
STAT 235 or STAT 115 or MOTRMATH 110	Elementary Statistics Statistical Reasoning MOTR Statistical Reasoning	3
PHYSICS 210 or PHYSICS 240	General Physics I Physics For Scientists and Engineers I	4-5
PHYSICS 220 or PHYSICS 250	General Physics II Physics For Scientists and Engineers II	4-5
Total Credits		48-50

A minimum of 120 credit hours is required; and 36 of these must be at the junior/senior level. Electives may be taken from any area once other degree requirements have been met.

A maximum of 12 hours for a combination of 399, 497, and 499 coursework may be applied toward with major with only 4 credit hours at the 400-level.

Minimum GPA: 2.0 (*UM cumulative; UM Biology*)

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 108 & 108L (or BIOLOGY 109 & 109L) ^{CC}		4 BIOLOGY 109 & 109L (or BIOLOGY 108 & 108L) ^{CC}	4
CHEM 211 & 211L ^{CC}		5 CHEM 212R & CHEM 212LR ^{CC}	5
GEFSE 101		3 ENGLISH 110	3

GECRT-SC 101		3 MATH 120	5
		15	17
Second Year			
Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 202 or 206 ^{CC}		3 BIOLOGY 206 or 202 ^{CC}	3
CHEM 321 & 321L ^{CC}		4 CHEM 322R & CHEM 322L ^{CC}	4
COMP-SCI 101		3 COMP-SCI 191	3
MATH 210		4 COMM-ST 110, 140, or 277	3
ENGLISH 225		3 GECRT-SS 101	3
		17	16
Third Year			
Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 441		3 BIOLOGY 452	3
BIOLOGY 405		3 BIOLOGY 360L or 360WL	3
COMP-SCI 201R & COMP-SCI 201L		4 PHYSICS 220 or 250	4
PHYSICS 210 or 240		4 GECRT-AH 101	3
		GECDV 201	3
		14	16
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 3XX/4XX Laboratory Elective		2 BIOLOGY 498WI, LIFE-SCI 497, or LIFE-SCI 499	3
BIOLOGY 3XX/4XX Major Elective		2 BIOLOGY 430	3
STAT 235		3 BIOLOGY 3XX/4XX Major Elective (WI Writing Intensive course, if needed)	3
GECUE 201		3 BIOLOGY 3XX/4XX Major Elective	3
HISTORY 101, 102, or POL-SCI 210		3	
		13	12

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

School of Biological Sciences Academic Support

SBS-undergrad@umkc.edu

http://sbs.umkc.edu/undergraduate_support.cfm

816-235-2580

Bachelor of Science: Biology - Biomedical Sciences Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Identify fundamental concepts in the biological sciences, including the relationship between structure and function at all levels of biological organization, evolution and the role of natural selection in the process, ecological relationships between organisms and their environment.
- Describe cellular structure and explain the major biochemical processes that occur in cells.
- Describe and explain the mechanisms of heredity and the flow of genetic information.
- Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
- Employ techniques and procedures commonly used in modern biology laboratories.
- Analyze and critically evaluate scientific data.
- Write clearly about topics in the biological sciences for a peer or professional audience.

Students interested in pursuing undergraduate degree programs offered by the School of Biological and Chemical Sciences are admitted through the UMKC Office of Admissions (<http://www.umkc.edu/admissions/>). Transfer or Readmitted students should contact the University admissions office and the School of Biological and Chemical Sciences for information about transfer admissions and evaluation of transfer coursework. Transfer admission eligibility includes an overall grade-point average of at least 2.0 for all college-level coursework attempted at previous institutions, an overall GPA of at least 2.0 in courses used to fulfill Biological Sciences major requirements, and a University of Missouri Biology GPA of at least 2.0.

Program Requirements

The B.S. Biology, Biomedical Sciences Emphasis is designed to prepare highly motivated students for entrance into medical school, dental school, physician assistant programs, anesthesia assistant programs, and other graduate or professional programs in the life and health sciences. Entrance into the emphasis is competitive. Students seeking the B.S. in Biology may apply for admission to the Biomedical Sciences Emphasis during the Spring semester of their sophomore year. Please contact the Undergraduate Programs Office in the School of Biological and Chemical Sciences at (816) 235-2580 for more information.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		
		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3

Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

In addition to the UMKC Essentials requirements, students pursuing the B.S. Biology, Biomedical Sciences Emphasis must meet the following requirements:

Biology course requirements. The following core courses (17 credit hours)

Code	Title	Credits
BIOLOGY 108L & BIOLOGY 108 or MOTRBIOL 100LB or MOTRBIOL 150LB	General Biology I Laboratory and General Biology I MOTR Essentials in Biology w/ Lab - Botany MOTR Biology with Lab	4
BIOLOGY 109L & BIOLOGY 109 or MOTRBIOL 100LZ or MOTRBIOL 150LZ	General Biology II Laboratory and General Biology II MOTR Essentials in Biology with Lab MOTR Biology w/Lab	4
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3

BIOLOGY 441	Biochemistry	3
Total Credits		17

Emphasis course requirements

Code	Title	Credits
BIOLOGY 218	Introductory Anatomy	3
BIOLOGY 218L	Introductory Anatomy Laboratory	2
or MOTRLIFS 100LA	MOTR Anatomy focused Essentials in Human Biology with Lab	
or MOTRLIFS 150LA	MOTR Anatomy focused Human Biology w/Lab	
BIOLOGY 313	Microbiology	3
BIOLOGY 313WL	Laboratory in Microbiology (WI)	3
or BIOLOGY 313L	Laboratory in Microbiology	
BIOLOGY 316	Principles of Physiology	3
LIFE-SCI 201	Careers in Health I	1
LIFE-SCI 202	Careers in Health II	1
LIFE-SCI 310	Fundamentals of Medicine I	2
LIFE-SCI 320	Fundamentals of Medicine II	2
LIFE-SCI 330	Fundamentals of Medicine III	2
LIFE-SCI 340	Fundamentals of Medicine IV	2
MEDICINE 9115	Medical Terminology	1
or HLSC 125	Medical Terminology	
or NURSE 125	Medical Terminology	
Total Credits		25

Biology Synthesis requirement (Choose a total of 3 credit hours)

Code	Title	Credits
Select a total of 3 credit hours:		3
BIOLOGY 498WI	Critical Analysis of Biological Issues	
LIFE-SCI 497	Directed Studies—Biological Sciences	
or LIFE-SCI 497WI	Directed Studies—Biological Sciences	
LIFE-SCI 499	Undergraduate Research-Biological Sciences	
or LIFE-SCI 499WI	Undergraduate Research-Biological Sciences	
Total Credits		3

Physical Sciences and Mathematics Course Requirements. The following courses must be completed with grades of C- or better.

Code	Title	Credits
CHEM 211	General Chemistry I	4
or MOTRCHEM 150	MOTR Chemistry I	
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1
MATH 120	Precalculus (satisfies Math Pathway)	5
MATH 210	Calculus I	4
MATH 220	Calculus II	4
or STAT 235	Elementary Statistics	
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
PHYSICS 210	General Physics I	4

or PHYSICS 240	Physics For Scientists and Engineers I	
PHYSICS 220	General Physics II	4
or PHYSICS 250	Physics For Scientists and Engineers II	
Total Credits		39

Students must complete additional biology majors coursework for a total of 42 credit hours of biology courses with grades of C- or better. 26 of these hours must be 300- or 400-level. At least one biology course must be writing intensive (WI or WL). A minimum of 21 credit hours of biology courses must be taken from BIOLOGY or LIFE-SCI coursework at UMKC. The UM Biology GPA Must be at least 2.0.

A minimum of 120 credit hours is required; and 36 of these must be at the junior/senior level. Electives may be taken from any area once other degree requirements have been met.

Code	Title	Credits
General Electives		6

A maximum of 12 hours for a combination of 399, 497, and 499 coursework may be applied toward with major with only 4 credit hours at the 400-level.

Minimum GPA: 2.0 (*UM cumulative; UM Biology*)

Total Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 108 & 108L (or BIOLOGY 109 & 109L) ^{CC}		4 BIOLOGY 109 & 109L (or BIOLOGY 108 & 108L) ^{CC}	4
CHEM 211 & 211L ^{CC}		5 CHEM 212R & CHEM 212LR ^{CC}	5
GEFSE 101		3 ENGLISH 110	3
GECRT-SC 101		3 MATH 120	5
		15	17

Second Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 202 or 206 ^{CC}		3 BIOLOGY 206 or 202 ^{CC}	3
CHEM 321 & 321L ^{CC}		4 CHEM 322R & CHEM 322L ^{CC}	4
MATH 210		4 MATH 220 or STAT 235	4
ENGLISH 225		3 COMM-ST 110, 140, or 277	3
		GECRT-SS 101	3
		14	17

Third Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 218		3 BIOLOGY 441	3
BIOLOGY 218L		2 LIFE-SCI 202	1
LIFE-SCI 201		1 LIFE-SCI 320	2
LIFE-SCI 310		2 MEDICINE 9115 or HLSC 125	1
PHYSICS 210 or 240		4 PHYSICS 220 or 250	4
GECRT-AH 101		3 GECDV 201	3
		15	14

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 313		3 BIOLOGY 498WI, LIFE-SCI 497, or LIFE-SCI 499	3
BIOLOGY 313L or 313WL		3 LIFE-SCI 340	2
BIOLOGY 316		3 3XX/4XX General Elective	3
LIFE-SCI 330		2 3XX/4XX General Elective	3
GECUE 201		3 HISTORY 101, 102, or POL-SCI 210	3
		14	14

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

School of Biological Sciences Academic Support

SBS-undergrad@umkc.edu

http://sbs.umkc.edu/undergraduate_support.cfm

816-235-2580

Bachelor of Science: Biology - Biotechnology Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Identify fundamental concepts in the biological sciences, including the relationship between structure and function at all levels of biological organization, evolution and the role of natural selection in the process, ecological relationships between organisms and their environment.
- Describe cellular structure and explain the major biochemical processes that occur in cells.
- Describe and explain the mechanisms of heredity and the flow of genetic information.
- Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
- Employ techniques and procedures commonly used in modern biology laboratories.
- Analyze and critically evaluate scientific data.
- Write clearly about topics in the biological sciences for a peer or professional audience.

Students interested in pursuing undergraduate degree programs offered by the School of Biological and Chemical Sciences are admitted through the UMKC Office of Admissions (<http://www.umkc.edu/admissions/>). Transfer or Readmitted students should contact the University admissions office and the School of Biological and Chemical Sciences for information about transfer admissions and evaluation of transfer coursework. Transfer admission eligibility includes an overall grade-point average of at least 2.0 for all college-level coursework attempted at previous institutions, an overall GPA of at least 2.0 in courses used to fulfill Biological Sciences major requirements, and a University of Missouri Biology GPA of at least 2.0.

Program Requirements

The curriculum of UMKC Essentials and biology majors courses, combined with the mathematics, chemistry and physics components is designed to provide undergraduate students with a clear program for the undergraduate background needed for a career in biotechnology or to provide them with a solid, biologically oriented curriculum to pursue graduate level research in this area.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		
		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		
		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	

Math Pathway (satisfied in major requirements below)	
Critical Thinking in Arts & Humanities (GECRT-AH)	3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)	3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)	3
Culture & Diversity Course (GECDV)	3
Civic & Urban Engagement Course (GECUE)	3
Total Credits	27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Biology course requirements

Core courses:

Code	Title	Credits
BIOLOGY 108L & BIOLOGY 108 or MOTRBIOL 100LB or MOTRBIOL 150LB	General Biology I Laboratory and General Biology I MOTR Essentials in Biology w/ Lab - Botany MOTR Biology with Lab	4
BIOLOGY 109L & BIOLOGY 109 or MOTRBIOL 100LZ or MOTRBIOL 150LZ	General Biology II Laboratory and General Biology II MOTR Essentials in Biology with Lab MOTR Biology w/Lab	4
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
BIOLOGY 441	Biochemistry	3
Total Credits		17

Emphasis course requirements:

Code	Title	Credits
BIOLOGY 313	Microbiology	3
BIOLOGY 409	Developmental Biology	3

BIOLOGY 430	Molecular Biology and Genetic Engineering	3
BIOLOGY 452	Bioinformatics	3
Total Credits		12

Laboratory course requirements (9 credit hours; 3 of these hours must be WI):

Code	Title	Credits
BIOLOGY 312WL	Laboratory in Developmental Biology, Genetics and Cell Biology	3
BIOLOGY 313WL or BIOLOGY 313L	Laboratory in Microbiology (WI) Laboratory in Microbiology	3
BIOLOGY 360L	Laboratory in Biochemistry and Molecular Biology	3
Total Credits		9

Biology synthesis requirement:

Code	Title	Credits
Select from the following for a total of three credit hours:		3
BIOLOGY 498WI	Critical Analysis of Biological Issues	3
LIFE-SCI 497 or LIFE-SCI 497WI	Directed Studies—Biological Sciences Directed Studies—Biological Sciences	
LIFE-SCI 499 or LIFE-SCI 499WI	Undergraduate Research-Biological Sciences Undergraduate Research-Biological Sciences	
Total Credits		3

Students must complete additional biology majors coursework to total at least 42 credit hours of biology courses with grades of C- or better. At least 26 of these must be at the 300- or 400-level. At least one biology course must be writing intensive (WI or WL). A minimum of 21 credit hours of biology courses must be taken from BIOLOGY or LIFE-SCI coursework at UMKC. The UM Biology GPA must be at least 2.0.

Code	Title	Credits
Additional Majors Coursework (choose from the following):		1
BIOLOGY 115	First Year Seminar	
BIOLOGY 199L	Methods in Biological Research	
BIOLOGY 201 or LIFE-SCI 202	Preparing for Careers in Biology Careers in Health II	
BIOLOGY 250 or LIFE-SCI 201	Careers in Biological & Chemical Sciences I Careers in Health I	
BIOLOGY 397	Experience Based Education	
Any 200-level or above BIOLOGY or LIFE-SCI course		

Physical sciences and mathematics requirements

All of the following courses are required. A grade of C- or better is required in each course used to fulfill these requirements.

Code	Title	Credits
CHEM 211 or MOTRCHEM 150	General Chemistry I MOTR Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1
COMP-SCI 101	Problem Solving and Programming I	3
MATH 120	Precalculus (satisfies Math Pathway)	5
MATH 210	Calculus I	4
MATH 220	Calculus II	4

STAT 235 or STAT 115 or MOTRMATH 110	Elementary Statistics Statistical Reasoning MOTR Statistical Reasoning	3
PHYSICS 210 or PHYSICS 240	General Physics I Physics For Scientists and Engineers I	4-5
PHYSICS 220 or PHYSICS 250	General Physics II Physics For Scientists and Engineers II	4-5
Total Credits		45-47

A minimum of 120 credit hours is required, and 36 of these must be at the 300- or 400-level. Electives may be taken from any area once other degree requirements have been met. The UM Biology GPA must be 2.0 or higher.

A maximum of 12 hours for a combination of 399, 497, and 499 coursework may be applied toward with major with only 4 credit hours at the 400-level.

Code	Title	Credits
General Electives		3

Minimum GPA: 2.0 (*UM cumulative; UM Biology*)

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 108 & 108L (or BIOLOGY 109 & 109L) ^{CC}		4 BIOLOGY 109 & 109L (or BIOLOGY 108 & 108L) ^{CC}	4
CHEM 211 & 211L ^{CC}		5 CHEM 212R & CHEM 212LR ^{CC}	5
GEFSE 101		3 ENGLISH 110	3

GECRT-SC 101		3 MATH 120	5
		15	17
Second Year			
Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 202 or 206 ^{CC}		3 BIOLOGY 206 or 202 ^{CC}	3
CHEM 321 & 321L ^{CC}		4 CHEM 322R & CHEM 322L ^{CC}	4
MATH 210		4 MATH 220	4
ENGLISH 225		3 COMP-SCI 101	3
		COMM-ST 110, 140, or 277	3
		14	17
Third Year			
Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 313		3 BIOLOGY 360L	3
BIOLOGY 313L or 313WL		3 BIOLOGY 452	3
BIOLOGY 441		3 PHYSICS 220 or 250	4
PHYSICS 210 or 240		4 STAT 235	3
GECRT-SS 101		3 GECRT-AH 101	3
		16	16
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 409		3 BIOLOGY 498WI, LIFE-SCI 497, or LIFE-SCI 499	3
BIOLOGY 430		3 BIOLOGY Major Elective	1
BIOLOGY 312WL		3 GECUE 201	3
GECDV 201		3 HISTORY 101, 102, or POL-SCI 210	3
		3XX/4XX General Elective	3
		12	13

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

School of Biological Sciences Academic Support

SBS-undergrad@umkc.edu

http://sbs.umkc.edu/undergraduate_support.cfm

816-235-2580

Bachelor of Science: Biology - Cellular and Molecular Basis of Health and Disease Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Identify fundamental concepts in the biological sciences, including the relationship between structure and function at all levels of biological organization, evolution and the role of natural selection in the process, ecological relationships between organisms and their environment.
- Describe cellular structure and explain the major biochemical processes that occur in cells.
- Describe and explain the mechanisms of heredity and the flow of genetic information.
- Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
- Employ techniques and procedures commonly used in modern biology laboratories.
- Analyze and critically evaluate scientific data.
- Write clearly about topics in the biological sciences for a peer or professional audience.

Students interested in pursuing undergraduate degree programs offered by the School of Biological and Chemical Sciences are admitted through the UMKC Office of Admissions (<http://www.umkc.edu/admissions/>). Transfer or Readmitted students should contact the University admissions office and the School of Biological and Chemical Sciences for information about transfer admissions and evaluation of transfer coursework. Transfer admission eligibility includes an overall grade-point average of at least 2.0 for all college-level coursework attempted at previous institutions, an overall GPA of at least 2.0 in courses used to fulfill Biological Sciences major requirements, and a University of Missouri Biology GPA of at least 2.0.

Program Requirements

This instructional program fully prepares individuals for admission to a professional school in medicine, including allopathic, osteopathic or podiatric medicine programs. By completing the requirements of the bachelor's of science in biology with the cellular and molecular basis of health and disease emphasis, students will complete all of the minimum prerequisites and the upper level biology electives which are highly recommended by most medical schools.

The courses selected provide a foundation of knowledge in modern cellular and molecular biology, essential for understanding medical science. The curriculum of general education and biology majors courses, combined with the mathematics, chemistry and physics components, provides the background essential to understanding the latest diagnostic and treatment technologies.

UMKC Essentials requirements are the same as for all students seeking a bachelor's degree in biology. Completion of the emphasis requirements will be noted on the UMKC transcript.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Biology course requirements

Core courses:

Code	Title	Credits
BIOLOGY 108L & BIOLOGY 108 or MOTRBIOL 100LB or MOTRBIOL 150LB	General Biology I Laboratory and General Biology I MOTR Essentials in Biology w/ Lab - Botany MOTR Biology with Lab	4
BIOLOGY 109L & BIOLOGY 109	General Biology II Laboratory and General Biology II	4

or MOTRBIOL 100LZ	MOTR Essentials in Biology with Lab	
or MOTRBIOL 150LZ	MOTR Biology w/Lab	
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
BIOLOGY 441	Biochemistry	3
Total Credits		17

Emphasis course requirements:

Code	Title	Credits
BIOLOGY 313	Microbiology	3
BIOLOGY 313WL	Laboratory in Microbiology	3
or BIOLOGY 313L	Laboratory in Microbiology	
BIOLOGY 316	Principles of Physiology	3
BIOLOGY 409	Developmental Biology	3
BIOLOGY 430	Molecular Biology and Genetic Engineering	3
BIOLOGY 435	Immunology	3
Total Credits		18

Laboratory course requirements:

Code	Title	Credits
Select one of the following:		2
BIOLOGY 218L	Introductory Anatomy Laboratory	
or MOTRLIFS 100LA	MOTR Anatomy focused Essentials in Human Biology with Lab	
or MOTRLIFS 150LA	MOTR Anatomy focused Human Biology w/Lab	
BIOLOGY 312WL	Laboratory in Developmental Biology, Genetics and Cell Biology	
BIOLOGY 328L	Laboratory in Histology and Cellular Ultrastructure	
or BIOLOGY 328WL	Laboratory in Histology and Cellular Ultrastructure	
BIOLOGY 360L	Laboratory in Biochemistry and Molecular Biology	
or BIOLOGY 360WL	Laboratory in Biochemistry and Molecular Biology	
Total Credits		2

Biology Synthesis requirement:

Code	Title	Credits
Select from the following to total three credit hours:		3
BIOLOGY 498WI	Critical Analysis of Biological Issues	
LIFE-SCI 497	Directed Studies—Biological Sciences	
or LIFE-SCI 497WI	Directed Studies—Biological Sciences	
LIFE-SCI 499	Undergraduate Research-Biological Sciences	
or LIFE-SCI 499WI	Undergraduate Research-Biological Sciences	
Total Credits		3

A total of 42 credit hours of biology courses must be completed with grades of C- or better. At least 26 of these must be at the 300- or 400-level. A minimum of 21 credit hours of biology courses must be taken from BIOLOGY or LIFE-SCI coursework at UMKC with one course designated as Writing Intensive (WI or WL). The UM Biology GPA must be at least 2.0.

Code	Title	Credits
Additional Majors Coursework		2

Physical sciences and mathematics requirements

All of the following courses are required. A grade of C- or better is required in each course used to fulfill these requirements.

Code	Title	Credits
CHEM 211	General Chemistry I	4
or MOTRCHEM 150	MOTR Chemistry I	

CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1
MATH 120	Precalculus (satisfies Math Pathway)	5
MATH 210	Calculus I	4
select one of the following:		3-4
MATH 220	Calculus II	
STAT 235	Elementary Statistics	
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
PHYSICS 210	General Physics I	4-5
or PHYSICS 240	Physics For Scientists and Engineers I	
PHYSICS 220	General Physics II	4-5
or PHYSICS 250	Physics For Scientists and Engineers II	
Total Credits		38-41

A minimum of 120 credit hours is required; and 36 of these must be at the 300- or 400-level. Electives may be taken from any area once other degree requirements have been met.

A maximum of 12 hours for a combination of 399, 497, and 499 coursework may be applied toward with major with only 4 credit hours at the 400-level.

Code	Title	Credits
General Electives		10

Minimum GPA: 2.0 (*UM cumulative; UM Biology*)

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 108 & 108L (or BIOLOGY 109 & 109L) ^{CC}		4 BIOLOGY 109 & 109L (or BIOLOGY 108 & 108L) ^{CC}	4
CHEM 211 & 211L ^{CC}		5 CHEM 212R & CHEM 212LR ^{CC}	5
GEFSE 101		3 ENGLISH 110	3
GECRT-SC 101		3 MATH 120	5
		15	17

Second Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 202 or 206 ^{CC}		3 BIOLOGY 206 or 202 ^{CC}	3
CHEM 321 & 321L ^{CC}		4 CHEM 322R & CHEM 322L ^{CC}	4
MATH 210		4 MATH 220 or STAT 235	4
LIFE-SCI 201 (recommended Major Elective)		1 ENGLISH 225	3
COMM-ST 110, 277, or 140		3 GECRT-SS 101	3
		15	17

Third Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 441		3 BIOLOGY 430	3
BIOLOGY 313		3 BIOLOGY Laboratory Elective	2
BIOLOGY 313L or 313WL		3 PHYSICS 220 or 250	4
PHYSICS 210 or 240		4 LIFE-SCI 202 (recommended Major Elective)	1
GECRT-AH 101		3 GECDV 201	3
		16	13

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 316		3 BIOLOGY 498WI, LIFE-SCI 497, or LIFE-SCI 499	3
BIOLOGY 409		3 BIOLOGY 435	3
GECUE 201		3 HISTORY 101, 102, or POL-SCI 210	3
3XX/4XX General Elective		3 General Elective (3XX/4XX/WI Writing Intensive Course, if needed)	3
General Elective		3	
		15	12

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

School of Biological Sciences Academic Support

SBS-undergrad@umkc.edu

http://sbs.umkc.edu/undergraduate_support.cfm

816-235-2580

Bachelor of Science: Biology - Clinical Laboratory Science Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Identify fundamental concepts in the biological sciences, including the relationship between structure and function at all levels of biological organization, evolution and the role of natural selection in the process, ecological relationships between organisms and their environment.
- Describe cellular structure and explain the major biochemical processes that occur in cells.
- Describe and explain the mechanisms of heredity and the flow of genetic information.
- Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
- Employ techniques and procedures commonly used in modern biology laboratories.
- Analyze and critically evaluate scientific data.
- Write clearly about topics in the biological sciences for a peer or professional audience.

Students interested in pursuing undergraduate degree programs offered by the School of Biological and Chemical Sciences are admitted through the UMKC Office of Admissions (<http://www.umkc.edu/admissions/>). Transfer or Readmitted students should contact the University admissions office and the School of Biological and Chemical Sciences for information about transfer admissions and evaluation of transfer coursework. Transfer

admission eligibility includes an overall grade-point average of at least 2.0 for all college-level coursework attempted at previous institutions, an overall GPA of at least 2.0 in courses used to fulfill Biological Sciences major requirements, and a University of Missouri Biology GPA of at least 2.0.

Program Requirements

The SBC offers a program leading to a BS degree in Biology with the Clinical Laboratory Science emphasis. The typical student spends the first three years on the UMKC campus completing the general education and basic science course requirements of the baccalaureate degree. A final 12 month course of clinical studies is completed in an affiliated hospital clinical program, which is approved by the Council on Medical Education of the American Medical Association and accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). Affiliated clinical programs are located at North Kansas City Memorial and Saint Luke's hospitals. After completing the clinical program and earning a bachelor's degree, students are eligible to take a national certification board examination. Passing the certification examination is not a condition for receiving the BS degree in Biology with the Clinical Laboratory Science emphasis but is often required for employment in the field.

Acceptance into a hospital clinical program is competitive. Admission into the BS degree in Biology with the Clinical Laboratory Science emphasis at UMKC does not guarantee acceptance of the student by an affiliated hospital clinical program. Clinical instruction in the hospital is a 12-month, full-time day program.

Application to the clinical program is made directly by the student to any (or all) of the affiliated hospitals. The student should apply during the summer or fall of his/her junior year. A list of program contacts is available from an SBC Advisor. Hospital programs differ in admission criteria, application deadlines and early admission options. Early application is advised.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Biology course requirements. Biology courses that fulfill the BS in Biology with the Clinical Laboratory Science emphasis requirements are listed below. A total of 32 credit hours of biology courses is required and at least 16 of these must be at the 300 or 400 level. A minimum of 16 credit hours of Biology courses must be earned from UMKC SBC. A grade of C- or better is required in each course used to fulfill these requirements.

The following courses are **required** of all students seeking the BS degree in Biology with the Clinical Laboratory Science emphasis.

Code	Title	Credits
BIOLOGY 108L & BIOLOGY 108 or MOTRBIOL 100LB or MOTRBIOL 150LB	General Biology I Laboratory and General Biology I MOTR Essentials in Biology w/ Lab - Botany MOTR Biology with Lab	4
BIOLOGY 109L & BIOLOGY 109 or MOTRBIOL 100LZ or MOTRBIOL 150LZ	General Biology II Laboratory and General Biology II MOTR Essentials in Biology with Lab MOTR Biology w/Lab	4
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
BIOLOGY 313	Microbiology	3
BIOLOGY 313WL	Laboratory in Microbiology	3
BIOLOGY 316	Principles of Physiology	3
BIOLOGY 435	Immunology	3
BIOLOGY 441	Biochemistry	3
Total Credits		29

In addition, students must take 3 or more additional hours to be chosen from:

Code	Title	Credits
Choose Three or More Additional Hours (one hour must be upper level)		3
BIOLOGY 218	Introductory Anatomy	
BIOLOGY 218L or MOTRLIFS 100LA or MOTRLIFS 150LA	Introductory Anatomy Laboratory MOTR Anatomy focused Essentials in Human Biology with Lab MOTR Anatomy focused Human Biology w/Lab	
BIOLOGY 328	Histology	
BIOLOGY 328L or BIOLOGY 328WL	Laboratory in Histology and Cellular Ultrastructure Laboratory in Histology and Cellular Ultrastructure	
BIOLOGY 360L or BIOLOGY 360WL	Laboratory in Biochemistry and Molecular Biology Laboratory in Biochemistry and Molecular Biology	
BIOLOGY 430	Molecular Biology and Genetic Engineering	
Total Credits		3

Physical sciences and mathematics requirements. The following are required. A grade of C- or better is required in each course used to fulfill these requirements.

Code	Title	Credits
CHEM 211 or MOTRCHEM 150	General Chemistry I MOTR Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4

CHEM 212LR	Experimental General Chemistry II	1
CHEM 320	Elementary Organic Chemistry	4
CHEM 320L	Experimental Organic Chemistry	1
CHEM 341WI	Analytical Chemistry I: Quantitative Analysis	4
MATH 120	Precalculus (satisfies Math Pathway)	5
MATH 210	Calculus I	3-4
or STAT 235	Elementary Statistics	
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
PHYSICS 210	General Physics I	4
PHYSICS 220	General Physics II	4
Total Credits		35-36

Satisfactory completion of a clinical program at an affiliated hospital. This will allow the student to earn 30 credit hours toward the bachelor's degree. Ten of the clinical hours are allowed as upper level biology toward the 42 hours required for the BS. Twenty of the clinical hours are allowed as upper level general science credit. Completion of the clinical program also fulfills the Biology Synthesis requirement.

Code	Title	Credits
Clinical Program		30

A total of **120** credit hours (minimum) is required; these may be taken from any area once other degree requirements have been met. For most students, more than 120 credit hours will be needed to meet all requirements.

A maximum of 12 hours for a combination of 399, 497, and 499 coursework may be applied toward with major with only 4 credit hours at the 400-level.

Minimum GPA: 2.0 (*UM cumulative; UM Biology*)

Total Credit Hours: 122-127

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 108 & 108L (or BIOLOGY 109 & 109L) ^{CC}	4	BIOLOGY 109 & 109L (or BIOLOGY 108 & 108L) ^{CC}	4
CHEM 211 & 211L ^{CC}	5	CHEM 212R & CHEM 212LR ^{CC}	5
GEFSE 101	3	ENGLISH 110	3
GECRT-SC 101	3	GECRT-SS 101	3
	15		15

Second Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 202 or 206 ^{CC}	3	BIOLOGY 206 or 202 ^{CC}	3
STAT 235, 115, or MATH 210	3	CHEM 320 & 320L ^{CC}	5
PHYSICS 210	4	PHYSICS 220	4
COMM-ST 110, 277, or 140	3	GECRT-AH 101	3
ENGLISH 225	3		
	16		15

Third Year

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
BIOLOGY 441	3	BIOLOGY 435	3	Clinical Program at Affiliate Hospital	6
BIOLOGY 313	3	BIOLOGY 3XX/4XX Major Elective	3		
BIOLOGY 313WL	3	CHEM 341WI	4		
BIOLOGY 316	3	GECUE 201	3		
GECDV 201	3	HISTORY 101, 102, or POL-SCI 210	3		
	15		16		6

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
Clinical Program at Affiliate Hospital	12	Clinical Program at Affiliate Hospital	12
	12		12

Total Credits: 122

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

School of Biological Sciences Academic Support

SBS-undergrad@umkc.edu

http://sbs.umkc.edu/undergraduate_support.cfm

816-235-2580

Bachelor of Science: Biology-Pre-Dentistry Interest Area

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Identify fundamental concepts in the biological sciences, including the relationship between structure and function at all levels of biological organization, evolution and the role of natural selection in the process, ecological relationships between organisms and their environment.
- Describe cellular structure and explain the major biochemical processes that occur in cells.
- Describe and explain the mechanisms of heredity and the flow of genetic information.
- Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
- Employ techniques and procedures commonly used in modern biology laboratories.
- Analyze and critically evaluate scientific data.
- Write clearly about topics in the biological sciences for a peer or professional audience.

Students interested in pursuing undergraduate degree programs offered by the School of Biological and Chemical Sciences are admitted through the UMKC Office of Admissions (<http://www.umkc.edu/admissions/>). Transfer or Readmitted students should contact the University admissions office and the School of Biological and Chemical Sciences for information about transfer admissions and evaluation of transfer coursework. Transfer admission eligibility includes an overall grade-point average of at least 2.0 for all college-level coursework attempted at previous institutions, an overall GPA of at least 2.0 in courses used to fulfill the Biological Sciences major requirements, and a University of Missouri Biology GPA of at least 2.0.

Program Requirements

This instructional program fully prepares individuals for admission to a professional school in dentistry. By completing the requirements of the bachelor's of science in biology with the pre-dentistry interest area, students will complete all of the minimum prerequisites and upper level electives suggested by dental schools across the United States. The courses selected provide a foundation of knowledge in modern dentistry, essential for understanding dental science. The curriculum of general education and biology majors courses, combined with the mathematics, chemistry and physics components, provides the background essential to understanding the latest diagnostic and treatment technologies.

UMKC Essentials requirements are the same as for all students seeking a bachelor's degree in biology.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3

ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Biology course requirements

Core courses:

Code	Title	Credits
BIOLOGY 108L & BIOLOGY 108 or MOTRBIOL 100LB or MOTRBIOL 150LB	General Biology I Laboratory and General Biology I MOTR Essentials in Biology w/ Lab - Botany MOTR Biology with Lab	4
BIOLOGY 109L & BIOLOGY 109 or MOTRBIOL 100LZ or MOTRBIOL 150LZ	General Biology II Laboratory and General Biology II MOTR Essentials in Biology with Lab MOTR Biology w/Lab	4
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3

BIOLOGY 441	Biochemistry	3
Total Credits		17

Interest area course requirements

Code	Title	Credits
BIOLOGY 218 & 218L or MOTRLIFS 100LA or MOTRLIFS 150LA	Introductory Anatomy and Introductory Anatomy Laboratory MOTR Anatomy focused Essentials in Human Biology with Lab MOTR Anatomy focused Human Biology w/Lab	5
BIOLOGY 313	Microbiology	3
BIOLOGY 316	Principles of Physiology	3
BIOLOGY 328 & 328WL	Histology and Laboratory in Histology and Cellular Ultrastructure	5
BIOLOGY 409	Developmental Biology	3
BIOLOGY 435 or BIOLOGY 430	Immunology Molecular Biology and Genetic Engineering	3
Total Credits		22

Biology Synthesis requirement

Code	Title	Credits
Select from the following to total three credit hours:		3
BIOLOGY 498WI	Critical Analysis of Biological Issues	
LIFE-SCI 497 or LIFE-SCI 497WI	Directed Studies—Biological Sciences Directed Studies—Biological Sciences	
LIFE-SCI 499 or LIFE-SCI 499WI	Undergraduate Research-Biological Sciences Undergraduate Research-Biological Sciences	
Total Credits		3

Students must complete additional biology majors coursework to total 42 credit hours of biology courses with grades of C- or better. At least 26 of these must be at the 300- or 400-level. At least one biology course must be writing intensive (WI or WL). A minimum of 21 credit hours of biology courses must be taken from BIOLOGY or LIFE-SCI coursework at UMKC. The UM biology GPA must be at least 2.0.

Physical sciences and mathematics requirements

All of the following courses are required. A grade of C- or better is required in each course used to fulfill these requirements.

Code	Title	Credits
MATH 210	Calculus I (satisfies Math Pathway)	4
MATH 220 or STAT 235 or STAT 115 or MOTRMATH 110	Calculus II Elementary Statistics Statistical Reasoning MOTR Statistical Reasoning	3
PHYSICS 210 or PHYSICS 240	General Physics I Physics For Scientists and Engineers I	4-5
PHYSICS 220 or PHYSICS 250	General Physics II Physics For Scientists and Engineers II	4-5
CHEM 211 or MOTRCHEM 150	General Chemistry I MOTR Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3

CHEM 322L	Organic Chemistry Laboratory II	1
Total Credits		33-35
Code	Title	Credits
General Electives		12-15

A minimum of 120 credit hours is required; and 36 of these must be at the 300- or 400-level.

A maximum of 12 hours for a combination of 399, 497, and 499 coursework may be applied toward with major with only 4 credit hours at the 400-level.

Minimum GPA: 2.0 (*UM cumulative; UM Biology*)

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 108 & 108L (or BIOLOGY 109 & 109L) ^{CC}		4 BIOLOGY 109 & 109L (or BIOLOGY 108 & 108L) ^{CC}	4
CHEM 211 & 211L ^{CC}		5 CHEM 212R & CHEM 212LR ^{CC}	5
GEFSE 101		3 ENGLISH 110	3
GECRT-SC 101		3 GECRT-SS 101	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 202 or 206 ^{CC}		3 BIOLOGY 206 or 202 ^{CC}	3
CHEM 321 & 321L ^{CC}		4 CHEM 322R & CHEM 322L ^{CC}	4

MATH 210	4	MATH 220, 226, or STAT 235	4
LIFE-SCI 201 (recommended elective)	1	COMM-ST 110, 140, or 277	3
ENGLISH 225	3		
	15		14

Third Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 441		3 BIOLOGY 328	2
BIOLOGY 409		3 BIOLOGY 328WL	3
PHYSICS 210 or 240		4 PHYSICS 220 or 250	4
GECRT-AH 101		3 LIFE-SCI 202 (recommended elective)	1
GECDV 201		3 GECUE 201	3
		HISTORY 101, 102, or POL-SCI 210	3
	16		16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 313		3 BIOLOGY 498WI, LIFE-SCI 497, or LIFE-SCI 499	3
BIOLOGY 316		3 BIOLOGY 430 or 435	3
BIOLOGY 218		3 3XX/4XX General Elective	3
BIOLOGY 218L		2 General Elective	3
3XX/4XX General Elective		3 General Elective	3
	14		15

Total Credits: 120

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

School of Biological Sciences Academic Support

SBS-undergrad@umkc.edu

http://sbs.umkc.edu/undergraduate_support.cfm

816-235-2580

Doctor of Philosophy Study

Degree Requirements

The Ph.D. program at UMKC is interdisciplinary. Students interested in studies at the doctoral level in the disciplines of cell biology and biophysics, or molecular biology and biochemistry, should apply to the Interdisciplinary Ph.D. program in the School of Graduate Studies. Students interested in a combination of cell biology and biophysics *with* molecular biology and biochemistry should apply to our graduate programs.

Detailed information on the general and discipline-specific admission requirements for the Ph.D. is found in the School of Graduate Studies (p. 1538) section of this catalog, with specific details on the school's Web site at <http://www.umkc.edu/iphd> (<http://www.umkc.edu/iphd/>).

Students pursuing Interdisciplinary Ph.D. studies who have selected cell biology and biophysics, or molecular biology and biochemistry as one of their disciplines should consult the School of Graduate Studies (p. 1538) section of this catalog for degree requirements and other academic regulations applicable to their degree program.

Dual Degree: Biology BA-MD

Student Learning Outcomes

Students graduating from this program will:

- Identify fundamental concepts in the biological sciences, including the relationship between structure and function at all levels of biological organization, evolution and the role of natural selection in the process, ecological relationships between organisms and their environment.
- Describe cellular structure and explain the major biochemical processes that occur in cells.
- Describe and explain the mechanisms of heredity and the flow of genetic information.
- Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
- Employ techniques and procedures commonly used in modern biology laboratories.
- Analyze and critically evaluate scientific data.
- Write clearly about topics in the biological sciences for a peer or professional audience.

Program Requirements

Code	Title	Credits
First Semester Experience Course		3
Critical Thinking in Arts & Humanities		3
Critical Thinking in Natural & Physical Sciences		3
Critical Thinking in Social & Behavioral Sciences		3
Culture & Diversity Course		3
Civic & Urban Engagement Course		3
Math Pathway (Satisfied in major requirements below)		
Composition:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Communication:		
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Program Prerequisites

Code	Title	Credits
PSYCH 210	General Psychology (Focus C)	3
SOCIOL 101	Sociology: An Introduction	3
SOCIOL 211	Social And Psychological Development Through The Life Cycle	3
Total Credits		9

Major Requirements

Biology course requirements. Biology courses that fulfill the BA degree requirements are listed below. A grade of C- or better is required in each course used to fulfill these requirements.

Code	Title	Credits
BIOLOGY 108	General Biology I (Focus B)	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
BMS 9265	Human Biochemistry 1 - Medical	5
Total Credits		15

Specialized requirements:

Code	Title	Credits
Take all of the following:		
LS-ANATO 219	Functional Anatomy I	3
LS-MCRB 121	Human Biology III (Microbiology)	3
BMS 9296	Human Structure Function I	6
BMS 9297	Human Structure Function II	5
BMS 9298	Human Structure Function III	5
BMS 9399	Human Structure Function IV	6
Total Credits		28

Biology Required Labs

Code	Title	Credits
LS-ANATO 219L	Functional Anatomy I Laboratory	1
LS-MCRB 121L	Human Biology III (Microbiology) Lab	1
Total Credits		2

Biology Synthesis Requirement

Code	Title	Credits
BIOLOGY 498WI	Critical Analysis of Biological Issues	3
Total Credits		3

Physical sciences and mathematics requirements: All of the following courses are required. A grade of C- or better is required in each course used to fulfill these requirements.

Code	Title	Credits
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1

CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 320	Elementary Organic Chemistry	4
CHEM 320L	Experimental Organic Chemistry	1
Select one of the following:		3-4
MATH 210	Calculus I	
MATH 216	Calculus for Biological Sciences	
STAT 235	Elementary Statistics	
or MOTRMATH 110	MOTR Statistical Reasoning	
Total Credits		18-19

Additional information about the BA/MD program may be found on the School of Medicine Website (p. 1833).

Master of Arts: Biology

Student Learning Outcomes

Students graduating from this program will:

- Students will be able to integrate fundamental concepts in anatomy, biochemistry, cell biology and physiology.
- Students will be able to apply basic biological sciences knowledge to clinical situations.
- Students will be able to create a professional and reflective professional school application.
- Students will develop strategies for conducting professional school interviews.

Admission Requirements

- BS or BA in Biology or Chemistry (preferred).
- Undergraduate GPA of 3.0 or higher.
- Three letters of recommendation.
- Statement of purpose.
- Minimum score on one of the following exams: MCAT (≥ 485), DAT (≥ 15), PCAT (≥ 24) or GRE (≥ 300).

Plan of Study

Code	Title	Credits
Required Courses		
BIOLOGY 5511	Professional Development	1
BIOLOGY 5510	Gross Anatomy for Nurse Anesthetists	3
BIOLOGY 5510L	Gross Anatomy for Nurse Anesthetists	1
BIOLOGY 5515	Biochemistry	4
BIOLOGY 5539	Mammalian Physiology	4
BIOLOGY 5540	Pathophysiology	4
LS-CBB 5520	Cell and Molecular Biology II	3
BIOLOGY 5592	Master of Arts Topics in Biology	4
Elective Courses		6
BIOLOGY 5528	Human Genomic Epidemiology	
BIOLOGY 5542	Neurobiology	
BIOLOGY 5593	Master of Science Topics	
BIOLOGY 5516	Global Health: New and Emerging Infections Diseases	
BIOLOGY 5517	From Bench to Bedside: Translational Research	
BIOLOGY 5518	Graduate Histology	
LS-CBB 5504	Graduate Virology	
LS-MBB 5509	Graduate Developmental Biology	
MEDB 5501	Applied Biostatistics I	
MEDB 5510	Clinical Research Methodology	

Master of Science: Cellular and Molecular Biology

Student Learning Outcomes

Students graduating from this program will:

- describe the structures and functions of key biological molecules, how these molecules interact to perform the major biochemical processes of living organisms, and key regulatory events that govern these biochemical processes.
- describe the storage, transmission and expression of genetic information, including key genetic regulatory events.
- employ oral and written communication skills in the presentation of information in cell and molecular biology.
- integrate fundamental knowledge of biochemistry and cell and molecular biology to understand and develop experimental approaches for testing hypotheses about biological mechanisms.

Degree Requirements

Thesis Option

Code	Title	Credits
LS-MBB 5561 & LS-MBB 5562	General Biochemistry I and General Biochemistry II	7
LS-CBB 5530 & LS-CBB 5520	Cell and Molecular Biology I and Cell and Molecular Biology II	6
LS-MBB 5611 or LS-CBB 5612	Seminar in Molecular Biology and Biochemistry Seminar in Cell Biology and Biophysics	1
LS-MBB 5599 or LS-CBB 5599	Thesis Research in Molecular Biology and Biochemistry Thesis Research in Cell Biology and Biophysics	6

Electives

Select ten credit hours from the following: ¹		10
BIOLOGY 5510	Gross Anatomy for Nurse Anesthetists	
BIOLOGY 5510L	Gross Anatomy for Nurse Anesthetists	
BIOLOGY 5519	Principles of Evolution	
BIOLOGY 5525	Bioinformatics and Data Analysis	
BIOLOGY 5528	Human Genomic Epidemiology	
BIOLOGY 5539	Mammalian Physiology	
BIOLOGY 5540	Pathophysiology	
BIOLOGY 5542	Neurobiology	
BIOLOGY 5593	Master of Science Topics	
LS-CBB 5501	Graduate Biophysical Principles	
LS-CBB 5504	Graduate Virology	
LS-CBB 5596	Advanced Experimental Cell Biology I	
LS-CBB 5597	Advanced Experimental Cell Biology II	
LS-MBB 5509	Graduate Developmental Biology	
LS-MBB 5565	Structure And Function Of Proteins	
LS-MBB 5596	Advanced Experimental Molecular Biology I	
LS-MBB 5597	Advanced Experimental Molecular Biology II	

¹ Elective courses may also be selected from other alternatives approved by the Biological Sciences Graduate Programs Committee. A limited number of credit hours of upper-level undergraduate courses may be allowed.

Students pursuing the thesis option must also satisfactorily complete written and oral thesis exams.

Non-Thesis Option

Code	Title	Credits
LS-MBB 5561 & LS-MBB 5562	General Biochemistry I and General Biochemistry II	7
LS-CBB 5530 & LS-CBB 5520	Cell and Molecular Biology I and Cell and Molecular Biology II	6
LS-MBB 5611 or LS-CBB 5612	Seminar in Molecular Biology and Biochemistry Seminar in Cell Biology and Biophysics	1
Electives		
Select sixteen credit hours from the following: ¹		16
BIOLOGY 5510	Gross Anatomy for Nurse Anesthetists	
BIOLOGY 5510L	Gross Anatomy for Nurse Anesthetists	
BIOLOGY 5519	Principles of Evolution	
BIOLOGY 5525	Bioinformatics and Data Analysis	
BIOLOGY 5528	Human Genomic Epidemiology	
BIOLOGY 5539	Mammalian Physiology	
BIOLOGY 5540	Pathophysiology	
BIOLOGY 5542	Neurobiology	
BIOLOGY 5593	Master of Science Topics	
LS-CBB 5501	Graduate Biophysical Principles	
LS-CBB 5504	Graduate Virology	
LS-CBB 5538	Molecular Recognition in Cellular Biology	
LS-CBB 5596	Advanced Experimental Cell Biology I	
LS-CBB 5597	Advanced Experimental Cell Biology II	
LS-MBB 5509	Graduate Developmental Biology	
LS-MBB 5538	Molecular Recognition in Molecular Biology	
LS-MBB 5565	Structure And Function Of Proteins	
LS-MBB 5596	Advanced Experimental Molecular Biology I	
LS-MBB 5597	Advanced Experimental Molecular Biology II	
Total Credits		30

¹ Elective courses may also be selected from other alternatives approved by the Biological Sciences Graduate Programs Committee. A limited number of credit hours of upper-level undergraduate courses may be allowed.

Emphasis in Bioinformatics

The emphasis in bioinformatics is a degree option with specific requirements.

This degree option trains students in the fundamental principles of bioinformatics and prepares them for careers in research, medical and corporate settings. Students will learn how to manage and analyze data stored in databases, become familiar with the various computational tools and techniques available to analyze biological data, become familiar with the types of questions and problems within biology that lend themselves to bioinformatics analysis and gain proficiency with a variety of statistical techniques necessary to analyze genomic, proteomic and integrated biological data sets.

Emphasis requirements, in addition to the specified degree requirements.

Required Electives

Code	Title	Credits
BIOLOGY 5519	Principles of Evolution	3
MEDB 5501 or MIS 5552	Applied Biostatistics I Data Base Management	3
BIOLOGY 5525	Bioinformatics and Data Analysis	3
Total Credits		9

Minor: Biology

Student Learning Outcomes

Students graduating from this program will:

- Identify fundamental concepts in the biological sciences, including the relationship between structure and function at all levels of biological organization, evolution and the role of natural selection in the process, ecological relationships between organisms and their environment.
- Describe cellular structure and explain the major biochemical processes that occur in cells.
- Describe and explain the mechanisms of heredity and the flow of genetic information.
- Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
- Employ techniques and procedures commonly used in modern biology laboratories.
- Analyze and critically evaluate scientific data.
- Write clearly about topics in the biological sciences for a peer or professional audience.

Program Requirements

Code	Title	Credits
BIOLOGY 108L & BIOLOGY 108 or MOTRBIOL 100LB or MOTRBIOL 150LB	General Biology I Laboratory and General Biology I MOTR Essentials in Biology w/ Lab - Botany MOTR Biology with Lab	4
BIOLOGY 109L & BIOLOGY 109 or MOTRBIOL 100LZ or MOTRBIOL 150LZ	General Biology II Laboratory and General Biology II MOTR Essentials in Biology with Lab MOTR Biology w/Lab	4
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
Select one of the following laboratory courses:		2-3
BIOLOGY 218L or MOTRLIFS 100LA or MOTRLIFS 150LA	Introductory Anatomy Laboratory MOTR Anatomy focused Essentials in Human Biology with Lab MOTR Anatomy focused Human Biology w/Lab	
BIOLOGY 302L	Ecology Laboratory	
BIOLOGY 312WL	Laboratory in Developmental Biology, Genetics and Cell Biology	
BIOLOGY 313L	Laboratory in Microbiology	
BIOLOGY 313WL	Laboratory in Microbiology	
BIOLOGY 360L	Laboratory in Biochemistry and Molecular Biology	
BIOLOGY 360WL	Laboratory in Biochemistry and Molecular Biology	
BIOLOGY 328L	Laboratory in Histology and Cellular Ultrastructure	
BIOLOGY 328WL	Laboratory in Histology and Cellular Ultrastructure	
BIOLOGY 338L	Comparative Vertebrate Anatomy Laboratory	
Upper-level Biology Majors Courses ¹		7
Total Credits		23-24

¹ The seven hours may include any of the upper-level lab courses listed above.

Total Biology hours:21

Standards that must be met for the minor:

1. Only grades of C- or better will be allowed to count toward fulfillment of the required 21 hours of biology coursework.
2. Students seeking a biology minor must have a minimum cumulative 2.0 UM biology GPA in courses used to fulfill the minor requirements.
3. At least 11 of the 21 required hours must be earned from BIOLOGY or LIFE-SCI coursework at UMKC.
4. At least 4 of the 7 hours of junior/senior level coursework must be earned from BIOLOGY or LIFE-SCI coursework at UMKC.

Chemistry

Department of Chemistry

Spencer Chemistry Building

5009 Rockhill Road, Suite 233

Kansas City, MO 64110-2499

Phone: (816) 235-2273

Fax: (816) 235-5502

Umkc-chemdept@umkc.edu

<http://sbc.umkc.edu/>

The Department of Chemistry offers programs of study leading to the bachelor of arts, bachelor of science and master of science degrees, and participates in UMKC's interdisciplinary Ph.D. program. To the extent that each program is flexible (see degree requirements), it is possible to specialize at the graduate level in the areas of analytical, inorganic, organic, physical or polymer chemistry.

Research facilities and Laboratories

Major Instrumentation

- Varian Inova 400 MHz NMR spectrometer.
- Bruker 250 MHz NMR spectrometer with solid state probe.
- IBM 200 Electron Spin Resonance Spectrometer.
- AA and ICP-AA spectrophotometers.
- CARY-1 UV-Visible dual beam spectrophotometer.
- Cambridge Structural Database Subscription (Van Horn).
- Raman and Infrared Spectroscopy Lab (Durig).
- Positron Annihilation and Gamma-ray Spectroscopy Lab (Van Horn).
- ABI Pioneer peptide synthesizer.
- Sprint BioCad liquid chromatography system.
- Finnigan MAT Double Focusing mass spectrometer.

Research Instrumentation

- Ocean Optics UV-Vis-NIR and other UV-Visible spectrophotometers.
- Metrohm Titrando system with "PC Control" software.
- BAS Epsilon electrochemistry apparatus (Peng).
- Shimadzu HPLC (Van Horn).
- Shimadzu RF-5301PC Fluorescence spectrophotometer.
- Perkin Elmer Polarimeter (Buszek).

Support Facilities

- Chemical Stores.

On Campus Resources

- Jasco J-710 Circular Dichroism Spectropolarimeter.
- Varian 600 MHz NMR Spectrometer (Laity).
- ESI-mass spectrometer and Triple-Quad LC-ESI MS with nanospray adaptor (School of Pharmaceutical Sciences).
- Machine Shop (Department of Physics).

Computer facilities include UMKC's Academic Research servers using HP's Itanium technology and numerous personal computers located in Spencer Hall and Flarsheim Hall for teaching and research purposes. A computational research laboratory is also housed in the department with a number of high-speed workstations and modern software.

Faculty

Paul M. Barron; assistant teaching professor of chemistry, coordinator of general chemistry laboratories, principal undergraduate advisor; Ph.D. (University of Nebraska).

Keith R. Buszek^{2,3} professor of chemistry; B.S. (University of California, Irvine); Ph.D. (University of California, Los Angeles).

Xiaobo Chen^{2,3}; associate professor of chemistry; B.S. (Peking University, China); M.S. (Chinese Academy of Sciences); Ph.D. (Case Western Reserve University).

Jerry R. Dias^{2,3} curators' professor emeritus of chemistry; B.S. (San Jose State College); Ph.D. (Arizona State University).

Andrea Drew Gounev; teaching professor of chemistry, coordinator of organic laboratories, principal undergraduate advisor; B.S. Ph.D. (University of South Carolina).

Todor K. Gounev; teaching professor of chemistry; B.S., M.S. (University of Sophia, Bulgaria); Ph.D. (University of South Carolina).

Andrew J. Holder² professor of chemistry; B.S. (Mobile College); Ph.D. (University of Southern Mississippi).

Lena Hoober-Burkhardt; assistant teaching professor of chemistry, coordinator of advanced chemistry laboratories, undergraduate advisor; B.A. (Princeton University); Ph.D. (University of Southern California).

Kathleen V. Kilway^{2,3} chair and curators' teaching professor of chemistry; B.S. (St. Mary's College); M.S., Ph.D. (University of California-San Diego).

Shin Moteki^{2,3} assistant professor of chemistry; Ph.D. (University of Nebraska-Lincoln).

Nathan A. Oyler^{2,3} associate professor of chemistry; B.S. (University of Arizona); Ph.D. (University of Washington).

Zhonghua Peng^{2,3} curators' professor of chemistry; B.S. (University of Science and Technology of China); M.S. (Chinese Academy of Sciences); Ph.D. (University of Chicago).

Mohammad Rafiee^{2,3} assistant professor of chemistry; B.S., Ph.D. (Bu-Ali Sina University, Iran).

J. David Van Horn^{2,3} associate professor of chemistry; B.A. (Point Loma Nazarene College); Ph.D. (University of Utah).

Charles J. Wurrey² curators' distinguished teaching professor emeritus and James C. Olson professor of chemistry; B.S. (Northern Michigan University); Ph.D. (Massachusetts Institute of Technology).

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

Emeritus faculty

John W. Connolly, Jerry R. Dias (Curators' Professor Emeritus of Chemistry), Henry A. Droll, Peter Groner, Y.C. Jerry Jean (Curator's Professor Emeritus), Peter F. Lott, Layton L. McCoy, Thomas C. Sandreczki, Kenneth S. Schmitz, Timothy F. Thomas, Charles J. Wurrey (Curator's Distinguished Teaching Professor Emeritus and James C. Olson's Professor of Chemistry)

Undergraduate

Undergraduate Degrees:

- Minor in Chemistry
- Bachelor of Arts: Chemistry
- Bachelor of Science: Chemistry

General Information about Undergraduate Programs

Admission Requirements

Other than University of Missouri admission requirements, there are no special prerequisites for beginning either the bachelor of arts or the bachelor of science program. High school chemistry and a good working knowledge of algebra and arithmetic are desirable for entering the bachelor of science program. It should be noted that much of the bachelor of science program, and some of the bachelor of arts program, are highly structured in the order which chemistry courses must be taken. It is assumed that transfer students, Associates degree students, and community college students should have begun the appropriate course sequence in their previous schools. All students are required to consult with a Chemistry Undergraduate Advisor before their registration at UMKC.

Advising

Those seeking either a bachelor of science or a bachelor of arts degree should see one of the Chemistry Department's undergraduate faculty advisors at the earliest possible time. Students who major in Chemistry must see an undergraduate faculty advisor each semester prior to enrolling in courses.

Pre-Medicine, Pre-Dentistry and Pre-Health Professions Academic Advising

The School of Biological and Chemical Sciences' (SBC) experienced team of advisors is knowledgeable about admission requirements and application processes for health profession programs. It is important for students considering eventual application to medical, dental, or veterinary school or other professional programs to consult early and often with an SBC advisor about appropriate course selection and additional preparation.

Advisors assist the student in investigating programs throughout the country and in planning an individualized undergraduate course of study. In addition SBC offers Careers in Healthcare I and II to assist student preparation through the exploration of healthcare options and the professional school application including decisions on where to apply, developing a personal statement, interview skills and letters of recommendation. Each student receives support and encouragement during all phases of the application process. Students are strongly encouraged to take advantage of advisor expertise by discussing their career plans beginning with their first semester at UMKC. Please see the additional catalog section on Pre-Medicine/Pre-Health (<https://catalog.umkc.edu/pre-medicine-pre-health-home-page/>) for other information.

Career Implication of the Bachelor's Degree

The Department of Chemistry offers two bachelor of science degree programs. Both require a minimum of 43 credit hours of chemistry courses; they are designed for those who want to work in the field of chemistry. The American Chemical Society approved degree is based on the guidelines established by the American Chemical Society (ACS) and specifically requires Organic and Inorganic Synthesis (CHEM 382) and a Biochemistry course (either CHEM 367 or BIOLOGY 441). Many of those receiving the bachelor of science degree have gone on to graduate work, professional schools, and advanced degrees. Others have gone directly into the chemical industry (laboratory assistants).

In contrast, the bachelor of arts degree is more flexible because it requires only a minimum of 26 credit hours of chemistry. The bachelor of arts student is shown a minimum of what chemistry is about. By choosing suitable courses, this degree prepares the individual with the chemical background for work in other areas. Examples include technical librarian, medical technologist, business administration, public health, and sales or advertising in the chemical industry. The majority of students pursuing the bachelor of arts in chemistry do so in preparation for professional schools, such as medicine, dentistry, and pharmacy. The bachelor of arts can also provide a student with a background in chemistry equivalent to that of a bachelor of science, but tailored to the individual's desires.

Teacher Certification in Chemistry

Certification as a middle school (grades 5-9) science or secondary (grades 9-12) chemistry teacher in or Missouri requires that a student complete a teacher preparation program. Once you complete a bachelor's degree in chemistry, you can apply to the School of Education for the Master of Arts in Teaching program, which prepares you for the teaching profession and teacher certification. A separate application for the Master of Arts in Teaching program is required. For further information about the program, consult the School of Education section of this catalog or contact the Division of Teacher Education and Curriculum Studies at (816) 235-2245.

Honors Program

Students with outstanding records of achievement may be eligible to enroll in special honors courses. Such courses are designated by the letter H preceding the course number, or special arrangements can be made with instructors of regular courses. Students enrolled in the special courses should consult with their faculty advisor to arrange for optimal degree planning.

Prerequisites and Co-requisites

A minimum grade of C- or higher is required for all prerequisite and co-requisite courses for all students taking courses within the Department of Chemistry. Additionally, students must be concurrently enrolled in all co-requisite courses. In exceptional cases, students may receive written consent to waive one or both of these requirements from the Chair of the Chemistry Undergraduate Curriculum Committee by completing and submitting a detailed petition form to the Department and only if approval of the petition is granted.

Academic Standing

Academic standing is determined at the end of each semester, fall, spring and summer for each student. Good standing at the university is attained with a University of Missouri (UM) cumulative GPA of 2.0 or higher and in SBC with a UM chemistry GPA (major's applicable courses) of 2.0 or higher.

Grade Point Average

In general, the UM GPA is calculated by dividing the total grade points earned in courses on any UM campus by the total number of graded semester hours attempted. If a course attempted within UM is repeated, the previous hours and grade point remain in the student's GPA. Courses taken credit/no credit, courses earning grades of S, P, I or AT, and courses transferred from non-University of Missouri institutions are not included in the UM GPA calculations. See appropriate sections below.

In general, the UM chemistry GPA is calculated by dividing the total grade points earned in majors courses on any UM campus by the total number of graded semester hours attempted. If a course attempted within UM is repeated, the previous hours and grade point remain in the student's GPA.

Courses taken credit/no credit, courses earning grades of S, P, I or AT, and courses transferred from non-University of Missouri institutions are not included in the UM GPA calculations. See appropriate sections below.

Request for GPA Adjustments for repeated courses may be initiated by students and submitted by an SBC Academic Advisor after completion of the repeating attempt. A student's academic standing may be revised after the GPA adjustment is made in Pathway. GPA adjustments may be used for a maximum of 15 semester hours. See the UMKC Repeated Courses policy and GPA Readjustment form for more information.

If a student's UM cumulative GPA and/or UM chemistry GPA falls below the 2.0 minimum the student will no longer be in good standing. Students who fail to maintain good standing will be placed on Academic Warning, Probation, or will be declared Academically Ineligible to continue.

ACADEMIC WARNING

First Time College (FTC) students with a declared major in SBC will be placed on Academic Warning when their UM cumulative GPA and/or UM chemistry GPA is between 1.5 and 2.0 at the end of their first semester at UMKC.

A student on Academic Warning will have the same requirements as students on Academic Probation as described below. Students may return to good academic standing by raising their UM cumulative GPA and/or UM chemistry GPA to the minimum 2.0 required. If the student cannot raise their UM cumulative GPA and/or UM chemistry GPA to 2.0 or higher after the warning semester, they may be placed on Academic Probation for a maximum of 2 (two) additional semesters. After 1 (one) warning semester and 2 (two) probation semesters, the student must return to good standing or be declared academically ineligible to continue as a student in SBC and/or UMKC.

First Time College (FTC) students with a declared major in SBC will be placed on Academic Probation when their UM cumulative GPA and/or UM chemistry GPA is below 1.5 at the end of their first semester at UMKC. See Academic Probation below.

Transfer students and continuing students are not eligible to be placed on Academic Warning.

ACADEMIC PROBATION

Students with a declared major in SBC will be placed on Academic Probation if their UM cumulative GPA and/or UM chemistry GPA falls below 2.0. When an SBC student is placed on academic probation as a result of the previous semester grades, the students will be notified prior to the beginning of the next semester through their UMKC email. The student will be required to enter into an Academic Success Contract designed to provide the student with assistance to support a return to good standing. The contract will specify enrollment requirements and keep the advisor and student in close contact throughout the semester to provide additional support. The contract will outline the student's responsibilities while on probation including, but not limited to the following:

1. Return to good standing by raising UM cumulative GPA and/or UM chemistry GPA above the minimum 2.0. **OR**
2. If the student cannot return to good standing after the contract semester, they may be continued on probation for one additional semester if they earn a grade of **C- or higher in all contracted courses AND** earn a 2.5 (**B- average**) or higher semester/chemistry GPA during the contracted semester.
3. Participate in additional activities as listed in the contract.

The contract's requirements may be altered ONLY in consultation with the student's assigned academic advisor. The requirements of the contract are binding with or without the student signature.

If a student fails to meet the terms of the contract, they may be declared academically ineligible to enroll in future semesters as a student with a declared major in SBC.

If a student cannot raise their UM cumulative GPA and/or UM chemistry GPA above 2.0, they may remain on probation one additional semester provided they meet the requirements in #2 above. If a student's UM cumulative and/or UM chemistry GPA is still below 2.0 after a second semester on probation, they will be declared academically ineligible to continue as a student in SBC. A student may, if eligible (UM cumulative GPA above 2.0), transfer to another academic unit at UMKC.

Students who have been placed on academic probation and have returned to good standing may be placed on academic probation again if their UM cumulative GPA and/or UM chemistry GPA fall below the minimum 2.0 required.

ACADEMIC INELIGIBILITY

Students on academic probation or academic warning that do not meet the terms of their Academic Success Contract with SBC become academically ineligible to enroll in future semesters as a student with a declared major in SBC. Students declared academically ineligible will be notified through their UMKC email prior to the start of the next semester. If the student's UM cumulative GPA is above 2.0 the student may continue at UMKC, but will need to meet with an advisor in a different academic unit to discuss options and declare a major other than chemistry to do so. Students will have until the date given in the email notification to change their major; failure to make these changes by the date indicated will result in cancellation of their registration with any fees paid refunded. Students who have become academically ineligible may re-declare chemistry as their major after raising their UM cumulative GPA and UM chemistry GPA above the minimum 2.0 required.

Graduate

Graduate Degrees:

- Master of Science: Chemistry
 - Emphasis areas:
 - Analytical
 - Inorganic
 - Organic
 - Physical
 - Polymer
 - Thesis-Based Option
 - Non-Thesis Option

Graduate Study in Chemistry Information

Both the Master of Science (MS) degree and interdisciplinary Ph.D. degree with Chemistry as the primary discipline have the basic aim of training students to work independently in chemistry. Both programs train the student through a broad but flexible base of coursework for further education, but the interdisciplinary Ph.D. places a greater emphasis on original research.

Master of Science: Chemistry

The Chemistry Department offers the master of science degree, with an emphasis in analytical, inorganic, organic, physical, or polymer chemistry. Students may complete a M.S. in Chemistry in a Thesis-Based or in a Non-Thesis Option. The non-thesis M.S. program has an emphasis on coursework, while the Thesis-Based degree has an emphasis on both coursework and original research. Graduating chemistry M.S. students will be exposed to the most recent advances in chemical sciences. In addition, thesis-based M.S. students will experience the excitement of performing guided research.

Students, who have received a grade of B- (2.7) or better in graduate coursework taken as part of a degree program at another institution, may transfer up to 6 credit hours of this work on approval of a majority of the student's committee. A written request for this approval must be submitted within one year of full admission to the program.

Interdisciplinary Doctor of Philosophy Program: Chemistry

Doctor of philosophy (Ph.D.) programs at UMKC are interdisciplinary. Students desiring to study at the doctoral level in the discipline of chemistry (as the primary unit) must apply to the School of Graduate Studies. Detailed information on the general and discipline-specific admission requirements for the doctoral degree may be found in the Graduate Academic Regulations and Information (<https://catalog.umkc.edu/general-graduate-academic-regulations-information/>) section of this catalog.

Students pursuing an Interdisciplinary Ph.D. degree, who have selected chemistry as one of their disciplines, should consult the School of Graduate Studies section of this catalog for degree requirements, and other academic regulations applicable to their degree programs. The interdisciplinary Ph.D. with Chemistry as the primary unit has research track only. (For further information on the Interdisciplinary Ph.D. Program, see the chemistry (<https://catalog.umkc.edu/colleges-schools/graduate-studies/chemistry/>) discipline within the School of Graduate Studies (<https://catalog.umkc.edu/colleges-schools/graduate-studies/>) section of this catalog.)

Courses

CHEM 111 Physical Basis Of Chemistry Credits: 3

An introductory course in the basic principles applicable to chemistry for students who intend to take but are not adequately prepared to take CHEM 211. The emphasis is on quantitative relationships and problem solving. NOTE: This course does not count towards a Chemistry major or minor.
Prerequisites: Departmental consent.

CHEM 115 Elements Of Chemistry I Credits: 4

A one-term course in general chemistry with special emphasis on organic chemistry and biochemistry. A terminal course that does not meet requirements as a prerequisite for any higher level chemistry course. NOTE: This course does not count towards a Chemistry major or minor.
Co-requisites: CHEM 115L.

CHEM 115L Elements Of Chemistry, Laboratory I Credit: 1

A one-term course in general chemistry with special emphasis on organic chemistry and biochemistry. A terminal course that does not meet requirements as a prerequisite for any higher level chemistry course. NOTE: This course does not count towards a Chemistry major or minor.
Co-requisites: CHEM 115.

CHEM 160 Chemistry, Society, And The Environment Credits: 3

This course is intended to offer a survey of chemical and scientific concepts surrounding current issues. The emphasis will be on the application of fundamental chemical knowledge to allow a full understanding of these issues in the context of currently known facts and theories. Through classroom discussion and application of the scientific method, the ramifications of the issues will be examined. Topics will include pollution, the importance of the chemical industry, its responsibilities to society, and other items of current scientific and environmental interest. NOTE: This course does not count towards a Chemistry major or minor.

CHEM 160L Laboratory For Chemistry, Society, And The Environment Credit: 1

This course is offered in support of CHEM 160. It will consist of field activities, experiments, and demonstrations to reinforce the concepts and ideas presented in that course. NOTE: This course does not count towards a Chemistry major or minor.

CHEM 206 Human Nutrition Credits: 3

Introduction to nutrition for health and wellness and the use of chemical energy in the breakdown and synthesis of biomolecules. Nutrition as it applies to a variety of life situations from infancy to older adults. Learning encompasses elements of anatomy and physiology related to nutrition and health. NOTE: This course does not count towards a Chemistry major or minor.

CHEM 211 General Chemistry I Credits: 4

Stoichiometry, gas laws, thermochemistry, atomic structure, molecular shapes and bonding theories. Recommended preparation: working knowledge of College Algebra.

Co-requisites: CHEM 211L.

CHEM 211 - MOTR CHEM 150L: Chemistry I with Lab**CHEM 211L Experimental General Chemistry I Credit: 1**

Introduction to the laboratory techniques used in studying the chemical properties of substances. Some quantitative techniques are included.

Co-requisites: CHEM 211.

CHEM 211L - MOTR CHEM 150L: Chemistry I with Lab**CHEM 212LR Experimental General Chemistry II Credit: 1**

Introduction to analysis and synthesis. Descriptive chemistry of the more common elements.

Prerequisites: CHEM 211 and CHEM 211L (each with a grade of C- or better).

Co-requisites: CHEM 212R.

CHEM 212R General Chemistry II Credits: 4

Liquids and solids, solutions, equilibrium, kinetics, electrochemistry and thermodynamics. Introductory course to all advanced work in chemistry.

Prerequisites: CHEM 211 and CHEM 211L (each with a grade of C- or better).

Co-requisites: CHEM 212LR.

CHEM 311 Laboratory Safety And Health I Credit: 1

An introduction to laboratory safety and health. Topics to be discussed include good laboratory practice; laboratory hazards; safe chemical handling, storage and disposal; first aid; protective equipment; and federal regulations.

Prerequisites: CHEM 320 or CHEM 321.

CHEM 320 Elementary Organic Chemistry Credits: 4

This one-semester course covers all fundamental principles of organic chemistry, including modern bonding theory, analytical techniques, physical properties, and chemical reactions. This course is designed to satisfy requirements for students in the UMKC Six-Year Medical Program or certain Biology B.A. majors. This course is not recommended for pre-medical, pre-dental, pre-pharmacy or other pre-health students.

Prerequisites: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

Co-requisites: CHEM 320L.

CHEM 320L Experimental Organic Chemistry Credit: 1

Elementary organic chemistry experiments to teach basic laboratory operations.

Prerequisites: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

Co-requisites: CHEM 320.

CHEM 321 Organic Chemistry I Credits: 3

The two terms (CHEM 321, CHEM 322R) constitute an integrated unit in which the chemistry of aliphatic, aromatic, and some heterocyclic compounds are studied. The study begins with simple monofunctional compounds and ends with polyfunctional natural products.

Prerequisites: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

Co-requisites: CHEM 321L.

CHEM 321L Organic Chemistry Laboratory I Credit: 1

Introduces the student to basic techniques and procedures in isolation, purification, and characterization of organic compounds and simple reactions used in the organic chemistry laboratory. The student will also be trained in the proper way to write a scientific laboratory report.

Prerequisites: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

Co-requisites: CHEM 321.

CHEM 322L Organic Chemistry Laboratory II Credit: 1

An extension of CHEM 321L. This course builds from the basic techniques, procedures, and writing to more advanced organic operations.

Prerequisites: CHEM 321 and CHEM 321L (or equivalents; each with a C- or better).

Co-requisites: CHEM 322R.

CHEM 322R Organic Chemistry II Credits: 3

Continuation of CHEM 321.

Prerequisites: CHEM 321 and CHEM 321L (each with a grade of C- or better).

Co-requisites: CHEM 322L.

CHEM 330 Elementary Physical Chemistry Credits: 3

An introductory course in the principles of physical chemistry for students who have not had calculus.

Prerequisites: CHEM 320 or CHEM 322R (each with a grade of C- or better).

CHEM 341 Analytical Chemistry I: Quantitative Analysis Credits: 4

Principles of gravimetric, volumetric, electrolytic, and other methods of analysis.

Prerequisites: CHEM 212R and 212LR (each with a C- or better).

CHEM 341WI Analytical Chemistry I: Quantitative Analysis Credits: 4

Principles of gravimetric, volumetric, electrolytic, and other methods of analysis.

Prerequisites: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

CHEM 345R Instrumental Analysis Credits: 3

An introductory course on the use of instruments for chemical analysis with particular reference to applications of interest to medical technologists and other students in the sciences. Emphasis will be placed on optical, electrochemical and separation methods.

Prerequisites: CHEM 341WI (with a grade of C- or better).

CHEM 367 Bioorganic Chemistry Credits: 3

An examination into the current topics at the interface between chemistry and biology. Emphasis will be on the current literature and will include such topics as nucleic acid chemistry, protein chemistry, and carbohydrate chemistry.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 382 Inorganic And Organic Synthesis Credits: 2

A number of inorganic, organic, and organometallic compounds will be prepared using a variety of synthetic techniques.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 387 Environmental Chemistry I Credits: 3

A survey of how chemical principles can be applied to the environment. Included will be topics in aquatic chemistry, atmospheric chemistry and chemistry of the geosphere and soil.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 390 Special Topics In Chemistry Credits: 1-3

This course will focus on an area of chemistry of contemporary significance. The amount of credit is to be determined by arrangement with the department. May be repeated for credit when the topic varies but no more than three hours of credit may be applied to major course requirements.

Recommended preparation: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

Prerequisites: Departmental consent.

CHEM 392 Chemistry Internship/Practical Training Credits: 1-3

Practical work in chemistry in an industrial, academic or other professional setting. Prior to the start of work, the department must approve the internship/practical training.

Prerequisites: CHEM 212R and CHEM 212LR (each with a C- or better).

CHEM 395 Directed Readings In Chemistry Credits: 1-3

Intensive readings in areas of joint interest to the enrolled student and the cooperating faculty member. Readings may not duplicate or substitute for current course offerings. Recommended preparation: CHEM 322R and CHEM 322L (each with a grade of C- or better).

Prerequisites: Departmental consent.

CHEM 399 Intro To Research Credits: 1-3

Special problems to introduce undergraduate chemistry majors to research methods. A comprehensive written report is required and a copy of the report is to be retained in the chemistry office. Recommended preparation: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

Prerequisites: Departmental consent.

CHEM 410 Chemical Literature Credit: 1

A systematic introduction to the efficient use of the chemical literature. Topics will include both classical search methods and computer search methods.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 431 Physical Chemistry I Credits: 3

A first course in physical chemistry having a calculus base. This course emphasizes thermodynamics with an introduction to the basic principles of quantum mechanics.

Prerequisites: MATH 250; and PHYSICS 220 or PHYSICS 250.

CHEM 432 Physical Chemistry II Credits: 3

A second course in physical chemistry having a calculus base. This course emphasizes the quantum mechanics description of atoms and molecules, molecular spectroscopy, statistical mechanics, and kinetics.

Prerequisites: CHEM 431 (with a grade of C- or better).

Co-requisites: CHEM 437WI.

CHEM 434 Molecular Spectroscopy Credits: 3

A theoretical introduction to molecular spectroscopy and its relation to structure. Electronic, vibrational and rotational spectra of chemical systems will be discussed.

Prerequisites: CHEM 432 (with a grade of C- or better).

CHEM 437WI Experimental Physical Chemistry I Credits: 3

Experimental methods in physical chemistry. One hour lecture and six hours laboratory each week. Satisfies writing intensive requirements for the B.A. or B.S. degree.

Co-requisites: CHEM 432.

CHEM 442R Analytical Chemistry II: Instrumental Analysis Credits: 3

The experimental and theoretical aspects of optical and electrochemical, chromatographic and other physicochemical methods of analysis.

Prerequisites: CHEM 341WI (with a grade of C- or better).

CHEM 445 Introduction To Principles Of Forensic Investigation Credits: 2

A survey of the physicochemical forensic techniques employed in the detection, examination, processing, preservation and court presentation of evidence.

Prerequisites: CHEM 212R and CHEM 212LR (each with a grade of C- or better).

CHEM 451R Inorganic Chemistry Credits: 3

Modern concepts and theories of inorganic chemistry.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 471 Introduction To Polymer Chemistry Credits: 3

Survey of organic and inorganic monomers and polymers; the occurrence, synthesis, structures and properties of natural and synthetic polymers; discussion of general properties of plastics, elastomers, fibers, resins, and plasticizers.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 480 Computer Applications To Chemical Problems Credits: 3

The course will survey the field of computational chemistry, concentrating on methods, programs and general utility to the research chemist. The student will learn the principles of the theory underlying the methods and will use selected software to carry out chemical calculations.

Prerequisites: CHEM 320 and CHEM 320L; or CHEM 322R and CHEM 322L (each with a grade of C- or better).

CHEM 490 Special Topics In Chemistry Credits: 1-3

This course will focus on an area of chemistry of contemporary significance. The amount of credit is to be determined by arrangement with the department. May be repeated for credit when the topic varies but no more than three hours of credit may be applied to major course requirements.

Prerequisites: CHEM 431 (with a grade of C- or better).

CHEM 495 Directed Readings In Chemistry Credits: 1-3

Intensive readings in areas of joint interest to the enrolled student and the cooperating faculty member. Readings may not duplicate or substitute for current course offerings. Recommended preparation: CHEM 431 with a grade of C- or better.

Prerequisites: Departmental consent.

CHEM 499 Senior Research Credits: 1-9

The student is given an original research problem and will be held responsible for all previous experience in working toward its solution. A well-written, comprehensive, and well documented research report is required, and a copy of the report is to be retained in the Chemistry department. Recommended preparation: CHEM 431 with a grade of C- or better.

Prerequisites: Departmental consent.

CHEM 5511 Laboratory Safety And Health I Credit: 1

An introduction to laboratory safety and health. Topics to be discussed include good laboratory practice; laboratory hazards; safe chemical handling; storage and disposal; first aid; protective equipment; and federal regulations.

CHEM 5520R Survey Of Organic Chemistry Credits: 3

An intensive advanced survey of the structure, synthesis and reactions of organic compounds.

CHEM 5521R Mechanisms Of Organic Reactions Credits: 3

A comprehensive course in which the mechanisms of organic reactions are discussed in light of modern chemical principles.

Prerequisites: CHEM 322R and CHEM 432.

CHEM 5522 Synthetic Organic Chemistry Credits: 3

A critical approach to the synthesis and modification of organic molecules; newer methods will be emphasized.

Prerequisites: CHEM 322R and CHEM 432.

CHEM 5529 Selected Topics In Organic Chemistry Credits: 3

Selected topics from the chemistry and theories of organic structures with particular attention to recent developments.

CHEM 5530 Systematic Physical Chemistry Credits: 3

An intensive and comprehensive review of the principles of physical chemistry. This course may either emphasize thermodynamics with an introduction to principles of quantum mechanics or emphasize quantum mechanical description of atoms and molecules, molecular spectroscopy, statistical mechanics and kinetics.

CHEM 5530A Physical Chemistry I Credits: 3

This graduate course reviews principles of physical chemistry, focusing on thermodynamics, equilibria and electrochemistry.

CHEM 5530B Physical Chemistry II Credits: 3

This graduate course reviews principles of physical chemistry, focusing on quantum chemistry, molecular spectroscopy and structure, and kinetics.

CHEM 5531 Classical Thermodynamics Credits: 3

A rigorous treatment of the laws of thermodynamics and their application to ideal and non-ideal equilibrium systems.

CHEM 5532 Chemical Kinetics Credits: 3

Empirical analysis of chemical reaction rates. Theories of unimolecular and bimolecular reactions, reactions in solution and complex reactions. Review of modern and classical techniques used to study chemical kinetics.

CHEM 5533 Quantum Chemistry Credits: 3

Application of quantum mechanical methods to the study of systems of chemical interest. Exact solutions and approximate methods will be discussed.

CHEM 5534 Molecular Spectroscopy Credits: 3

A theoretical introduction to molecular spectroscopy and its relation to structure. Electronic, vibrational and rotational spectra of chemical systems will be discussed.

CHEM 5535 Statistical Thermodynamics Credits: 3

A rigorous treatment of the fundamental concepts of statistical thermodynamics, with applications to specific systems that reflect the interests of students participating in the course.

CHEM 5539 Selected Topics In Physical Chemistry Credits: 3

Selected topics and recent developments in physical chemistry.

Prerequisites: CHEM 5530.

CHEM 5541R Advanced Analytical Chemistry Credits: 3

An intensive review of modern concepts of analytical chemistry.

Prerequisites: CHEM 432.

CHEM 5551R Advanced Inorganic Chemistry I Credits: 3

A systematic treatment of bonding, structure, reactions and reaction mechanisms of inorganic compounds, with emphasis on classical transition metal compounds and organometallic compounds.

Prerequisites: CHEM 451R.

CHEM 5559 Selected Topics In Inorganic Chemistry Credits: 3

Various special topics in the inorganic area to be offered in different semesters.

Prerequisites: CHEM 5551R.

CHEM 5567 Advanced Bioorganic Chemistry Credits: 3

This course examines the organic chemistry and laboratory synthesis of the major biopolymers and organic chemistry related to biological systems. Emphasis is on literature and library research and natural product and solid phase organic synthesis, combinatorial synthesis, bioconjugates and applied bioorganic chemistry.

CHEM 5571R Introduction To Polymer Chemistry Credits: 3

Survey of organic and inorganic monomers and polymers; the occurrence, synthesis, structures and properties of natural and synthetic polymers; discussion of general properties of plastics, elastomers, fibers, resins and plasticizers.

Prerequisites: CHEM 432.

CHEM 5580R Computer Applications To Chemical Problems Credits: 3

The purpose of this course is to survey the field of computational chemistry, concentrating on methods, programs and general utility to the research chemist. The student will learn the principles of the theory underlying the methods and will use selected software to carry out chemical calculations.

Prerequisites: CHEM 320 / CHEM 320L or CHEM 322R / CHEM 322L with "C-" or better.

CHEM 5587 Environmental Chemistry I Credits: 3

A survey of how chemical principles can be applied to the environment. Included will be topics in aquatic chemistry, atmospheric chemistry and chemistry of the geosphere and soil.

CHEM 5588 Environmental Chemistry II Credits: 3

Discussion of selected topics in advanced environmental chemistry, such as environmental toxicology, environmental risk, the chemistry of hazardous wastes and their treatment, and environmental analytical chemistry.

CHEM 5590 Directed Studies Credits: 1-3

Intensive readings and/or research in an area selected by the graduate student in consultation with the instructor.

CHEM 5598 Research Methodology Conference Credits: 3

Student will meet on an individual basis with two faculty members who are involved in research. The student's adviser will coordinate this course.

CHEM 5599 Research And Thesis Credits: 1-9

Research for thesis.

CHEM 5611 Chemistry Seminar Credit: 1

Presentation and discussion of topics currently appearing in United States and foreign literature.

CHEM 5699 Research And Dissertation Credits: 1-16

Research for dissertation.

CHEM 5899 Required Graduate Enrollment Credit: 1**CHEM H206 Human Nutrition Credits: 3**

Introduction to nutrition for health and wellness and the use of chemical energy in the breakdown and synthesis of biomolecules. Nutrition as it applies to a variety of life situations from infancy to older adults. Learning encompasses elements of anatomy and physiology related to nutrition and health.

CHEM H212R Honors: General Chemistry II Credits: 4

Liquids and solids, solutions, equilibrium, kinetics, electrochemistry and thermodynamics. Introductory course to all advanced work in chemistry.

CHEM H321 Honors: Organic Chemistry I Credits: 3

The two terms (CHEM H321, CHEM H322R) constitute an integrated unit in which the chemistry of aliphatic, aromatic, and some heterocyclic compounds are studied. The study begins with simple monofunctional compounds and ends with polyfunctional natural products.

CHEM H321L Organic Chemistry Laboratory I - Honors Credit: 1

Introduces the student to basic techniques and procedures in isolation, purification, and characterization of organic compounds and simple reactions used in the organic chemistry laboratory. The student will also be trained in the proper way to write a scientific laboratory report.

CHEM H322L Organic Chemistry Laboratory II Credit: 1

An extension of CHEM 321L. This course builds from the basic techniques, procedures, and writing to more advanced organic operations.

Prerequisites: CHEM 321 and CHEM 321L (each with a C- or better).

Co-requisites: CHEM 322R.

CHEM H322LR Organic Chemistry Laboratory II-Honors Credits: 2

A more intense version of CHEM 322L. See course description for CHEM 322L.

Prerequisite: CHEM 321L.

CHEM H322R Honors: Organic Chemistry II Credits: 3**CHEM H399 Introduction To Research Credits: 1-3**

Special problems to introduce undergraduate chemistry majors to research methods. A comprehensive written report is required and a copy of the report is to be retained in the chemistry office. May be taken only after consultation with a member of the chemistry staff.

Prerequisites: CHEM 212R.

CHEM H499 Senior Research - Honors Credits: 1-9

Course frequency subject to enrollments, staffing and financial exigency.

Bachelor of Arts: Chemistry

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Apply chemical concepts to solving theoretical and practical problems.
- Follow general laboratory practice guidelines and demonstrate proper laboratory safety practices.
- Read, analyze, interpret, and cite the chemical literature as applied to answering chemical questions.
- Clearly and accurately communicate scientific information in an ethical manner.

Students graduating with a baccalaureate degree in chemistry will be prepared for entry into professional schools (e.g., medical, dental, pharmaceutical, or veterinary), graduate programs, or chemical industries.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3

ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

- All majors must receive a C- or better in all chemistry courses with an overall chemistry GPA of 2.0 for graduation.
- A minimum grade of C- is required for all prerequisite courses (including physics and mathematics courses). In exceptional cases, students may receive written consent by submitting a petition to the Chemistry Undergraduate Curriculum Committee which has to be approved to waive this requirement.
- Each chemistry major must be advised by the Chemistry Undergraduate Advisor every semester.
- Students must maintain academic standing as determined by the academic unit. Please see <https://catalog.umkc.edu/colleges-schools/sbc/chemistry/#undergraduatetext> for more information.

Code	Title	Credits
General Chemistry		
CHEM 211 or MOTRCHEM 150	General Chemistry I MOTR Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1

CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II	5
Organic Chemistry ¹		
CHEM 321 & 321L	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 322R & CHEM 322L	Organic Chemistry II and Organic Chemistry Laboratory II	4
Analytical Chemistry		
CHEM 341WI or CHEM 341	Analytical Chemistry I: Quantitative Analysis Analytical Chemistry I: Quantitative Analysis	4
Chemistry Electives ¹		4
Physics		
PHYSICS 210	General Physics I	4
PHYSICS 220	General Physics II	4
Math		
MATH 110 or MATH 120	Precalculus Algebra (Satisfies Math Pathway) Precalculus	3
Take any MATH or STAT course 200-level or above; MOTRMATH 110; or STAT 115.		3
Total Credits		40

¹ Any combination of 300-level and 400-level chemistry courses to bring the total credit hours to 26. Certain biochemistry courses also may be included in this total. Please confer with the principal undergraduate advisor.

No more than three hours total in CHEM 395, CHEM 399, CHEM 495 and CHEM 499 may be used in meeting the major course requirements. CHEM 320 and CHEM 321 may not both be counted toward the required number of credit hours. (CHEM 321 + CHEM 322R and CHEM 320 + CHEM 322R are both acceptable combinations for meeting, in part, the bachelor of arts departmental course requirements, although the CHEM 320 + CHEM 322R combination is not preferred. The combinations CHEM 320 + CHEM 321 and CHEM 320 + CHEM 321 + CHEM 322R are not acceptable.)

Similarly, either CHEM 330 or the combination CHEM 431 + CHEM 432 is acceptable, but the combination CHEM 330 + CHEM 431 + CHEM 432 is not acceptable.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		50

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office

of Registration and Records) and “what if” exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
CHEM 211 & 211L ^{CC}		5 CHEM 212R & CHEM 212LR ^{CC}	5
MATH 120 or 110 ^{CC}		5 MATH 210 or STAT 235 ^{CC}	4
GEFSE 101		3 BIOLOGY 250 or LIFE-SCI 201 (recommended elective)	1
ENGLISH 110		3 GECRT-SC 101	3
		16	13

Second Year

Fall Semester	Credits	Spring Semester	Credits
CHEM 321 & 321L ^{CC}		4 CHEM 322R & CHEM 322L ^{CC}	4
COMM-ST 110, 277, or 140		3 ENGLISH 225	3
GECRT-AH 101		3 GECRT-SS 101	3
GECDV 201		3 GECUE 201	3
HISTORY 101, 102, or POL-SCI 210		3 General Elective	3
		16	16

Third Year

Fall Semester	Credits	Spring Semester	Credits
PHYSICS 210 ^{CC}		4 PHYSICS 220	4
3XX/4XX General Elective		3 3XX/4XX General Elective	3
BIOLOGY 251 (recommended elective; or LIFE-SCI 202 in Spring)		1 3XX/4XX General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		14	16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
CHEM 341WI		4 CHEM 3XX/4XX Major Elective	4
3XX/4XX General Elective (BIOLOGY 397 recommended)		3 3XX/4XX General Elective	3
3XX/4XX General Elective		3 3XX/4XX General Elective	3
General Elective		3 General Elective	3

General Elective	3	
	16	13
Total Credits: 120		

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

School of Biological Sciences Academic Support

SBS-undergrad@umkc.edu

http://sbs.umkc.edu/undergraduate_support.cfm

816-235-2580

Bachelor of Science: Chemistry

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

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In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Apply chemical concepts to solving theoretical and practical problems.
- Follow general laboratory practice guidelines and demonstrate proper laboratory safety practices.
- Read, analyze, interpret, and cite the chemical literature as applied to answering chemical questions.
- Articulate scientific information, both orally and in writing.

- Analyze and solve scientific problems as part of a team.
- Demonstrate ethical scientific practice, treatment of data and other people's work.

Students graduating with a baccalaureate degree in chemistry will be prepared for entry into professional schools (e.g., medical, dental, pharmaceutical, or veterinary), graduate programs, or chemical industries.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

The Chemistry Department bachelor of science degree is certified by the American Chemical Society (ACS) and requires the 43 credit hours in chemistry listed below, specifically the 2 credit hours of CHEM 382, 3 credit hours of CHEM 367 or LS-BIOC 341 and an upper division elective which may be chosen from selected departments¹.

Students must successfully complete the major requirements below with at least 12 hours of the noted upper division (300+) course requirements completed at UMKC.

- All majors must receive a C- or better in all chemistry courses with an overall chemistry GPA of 2.0 for graduation.
- A minimum grade of C- is required for all prerequisite courses (including physics and mathematics courses). In exceptional cases, students may receive written consent by submitting a petition to the Chemistry Undergraduate Curriculum Committee which has to be approved to waive this requirement.
- Each chemistry major must be advised by the Chemistry Undergraduate Advisor every semester.
- Students must maintain academic standing as determined by the academic unit. Please see <https://catalog.umkc.edu/colleges-schools/sbc/chemistry/#undergraduatetext> for more information.

Code	Title	Credits
General Chemistry		
CHEM 211 or MOTRCHEM 150	General Chemistry I MOTR Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II	5
Organic Chemistry		
CHEM 321 & 321L	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 322R & CHEM 322L	Organic Chemistry II and Organic Chemistry Laboratory II	4
Analytical Chemistry		
CHEM 341WI or CHEM 341	Analytical Chemistry I: Quantitative Analysis Analytical Chemistry I: Quantitative Analysis	4
CHEM 442R	Analytical Chemistry II: Instrumental Analysis	3
Physical Chemistry		
CHEM 431	Physical Chemistry I	3
CHEM 432	Physical Chemistry II	3
CHEM 437WI or CHEM 437	Experimental Physical Chemistry I Experimental Physical Chemistry I	3
Chemical Literature		
CHEM 410	Chemical Literature	1
Inorganic Chemistry		
CHEM 451R	Inorganic Chemistry	3
Advanced Work		
One of the following: ¹		3
CHEM 387, CHEM 392, CHEM 399, or above CHEM 400		
MATH course higher than 250 with 220 as a prerequisite		
BIOLOGY 300 or Higher		
PHYSICS 300 or Higher		
STAT 400 or Higher		
Math		
MATH 120	Precalculus (satisfies Math Pathway)	5
MATH 210	Calculus I	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4
Engineering Physics		
PHYSICS 240 or PHYSICS 210	Physics For Scientists and Engineers I General Physics I	5
PHYSICS 250 or PHYSICS 220	Physics For Scientists and Engineers II General Physics II	5
ACS Requirements ¹		

CHEM 382	Inorganic And Organic Synthesis	2
CHEM 367	Bioorganic Chemistry	3
or BIOLOGY 441	Biochemistry	
Total Credits		73

- ¹ On rare occasions, a student may need more flexibility than the ACS-certified B.S. degree allows. In this case, course substitutions may be selected and approved by a chemistry advisor so that the student may still complete the bachelor of science degree in chemistry as a non-ACS-certified degree.

General Electives

Students must take elective credit hours to meet the minimum credit hour requirement for their degree, including at least 36 credit hours of coursework at the 300-level or above. The minimum required by the university is 120 credit hours, of which at least 30 credit hours must be taken at UMKC, but some degree programs require more.

Code	Title	Credits
General Electives		17

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
CHEM 211 & 211L ^{CC}		5 CHEM 212R & CHEM 212LR ^{CC}	5
MATH 120 ^{CC}		5 MATH 210 ^{CC}	4
GEFSE 101		3 ENGLISH 225	3
ENGLISH 110		3 GECRT-SC 101	3

		BIOLOGY 250 or LIFE-SCI 201 (recommended elective)	1
		16	16
Second Year			
Fall Semester	Credits	Spring Semester	Credits
CHEM 321 & 321L ^{CC}		4 CHEM 322R & CHEM 322L ^{CC}	4
PHYSICS 240 ^{CC}		5 PHYSICS 250 ^{CC}	5
MATH 220		4 MATH 250	4
COMM-ST 110, 140, or 277		3 GECRT-SS 101	3
		16	16
Third Year			
Fall Semester	Credits	Spring Semester	Credits
CHEM 431		3 CHEM 432	3
CHEM 341WI		4 CHEM 437WI	3
CHEM 410		1 GECRT-AH 101	3
BIOLOGY 251 (recommended elective; or LIFE-SCI 202 in Spring)		1 GECUE 201	3
GECDV 201		3 General Elective	3
HISTORY 101, 102, or POL-SCI 210		3	
		15	15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
CHEM 382		2 CHEM 442R	3
CHEM 367 or BIOLOGY 441		3 CHEM 451R	3
BIOLOGY 397 (or General Elective)		3 CHEM/BIO/PHYSICS/MATH 3XX/4XX Major Elective	3
General Elective		3 General Elective	3
General Elective		3	
		14	12
Total Credits: 120			

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

School of Biological Sciences Academic Support

SBS-undergrad@umkc.edu

http://sbs.umkc.edu/undergraduate_support.cfm

816-235-2580

Master of Science: Chemistry-Non-Thesis-Based Option

Student Learning Outcomes

Students graduating from this program will:

- Possess an extensive knowledge in both breadth and depth in chemistry
- Demonstrate critical thinking and problem solving skills
- Search, read, understand and use scientific literature
- Articulate scientific information both orally and in writing

Requirements for Admission

Applicants should have the equivalent of an American Chemical Society (ACS)-approved bachelor's degree in chemistry. This degree includes the equivalent of: one year of general chemistry, quantitative analysis, one year of organic chemistry, one year of physical chemistry, physical chemistry laboratory, instrumental analysis, inorganic chemistry, one year of physics, and three semesters of calculus, and the ACS-recommended distribution of advanced courses and course credits. Applicants should take particular note of the physical chemistry requirement. They may be admitted as provisional students if they have a limited number of undergraduate deficiencies. At the time that admission is offered, applicants will be notified of any requirements to be met for reclassification as fully admitted. Undergraduate courses included in these requirements must be completed with grades of C- or higher.

Applications are only accepted through the online system, and include:

1. Official, confidentially transmitted transcripts.
2. Statement of purpose.
3. Two confidentially transmitted letters of recommendation (academic and/or professional).
4. English language proficiency requirement.

Applicants from foreign countries, who have an official language other than English, must achieve scores of at least 550 (paper-based), 213 (computer-based), or 79 (internet-based) on the Test of English as a Foreign Language (TOEFL) to be considered for admission.

Placement Examinations

Incoming students must take placement examinations in analytical, inorganic, organic, and physical chemistry. Placement examinations are typically administered the week before the first week of classes of the fall and spring semesters. Students scoring below the 50th percentile in the organic and/or physical chemistry exams are required to enroll in CHEM 5520R and/or CHEM 5530A/CHEM 5530B, respectively. Enrollment in other graduate organic or physical chemistry courses is not permitted until CHEM 5520R or CHEM 5530A/CHEM 5530B, respectively, is (are) successfully completed. CHEM 5530A/CHEM 5530B is currently offered concurrently with CHEM 431 or CHEM 432. A student is required to take either CHEM 5530A/CHEM 431 or CHEM 5530B/CHEM 432 or both, depending on his/her performances in the various sub-disciplines of the physical chemistry placement exam. Should a student be required to take both CHEM 5530A/CHEM 431 and CHEM 5530B/CHEM 432, the average grade of the two CHEM 5530 courses will be considered for the fulfillment of the physical chemistry deficiency. Two grades of C+ or lower, or one grade of less than C- in CHEM 5520R or CHEM 5530, will result in termination from the degree program. These courses may not be counted toward the M.S. coursework requirements. Students must complete all additional coursework required as a result of the placement exams by the end of their first three regular semesters.

Graduate Program Committee

Upon admission to M.S. program in chemistry, students will be advised by the department's principal graduate advisor, acting on behalf of the chemistry graduate program committee. Based on the committee's evaluation of the students' transcripts and placement exam scores, the principal graduate advisor will inform students of any deficiencies and how they should be removed. The principal graduate advisor also will advise students on course curriculum. For the thesis degree, the curriculum advising is performed by the research advisor (once they have been selected). The graduate program committee serves as the supervisory committee for non-thesis M.S. students.

Seminar Attendance

Full-time M.S. students are required to attend all regularly scheduled and special departmental seminars and colloquia. Part-time students are also required to attend these seminars but may petition the Chair of the Department of Chemistry to waive this requirement all but one semester. Such students will be required either to participate fully during one semester, including the presentation of a one-hour seminar, or to present two one-hour seminars in lieu of full participation.

Minimum Requirements for Master of Science Degree

In addition to the requirements listed here, all M.S. students are subject to the all general M.S. requirements of the University. See the School of Graduate Studies (p. 1538) section of this catalog for a complete listing.

Master of Science Chemistry Options:

- Analytical Chemistry
- Inorganic Chemistry
- Organic Chemistry
- Physical Chemistry
- Polymer Chemistry

Coursework

The emphasis of this program is coursework. Non-thesis M.S. students are required to complete a minimum of 31 credit hours of graduate-level coursework. Non-thesis M.S. Students are required to complete:

Code	Title	Credits
One of the following Organic Chemistry Courses:		3
CHEM 5521R	Mechanisms Of Organic Reactions	
CHEM 5522	Synthetic Organic Chemistry	
One of the following Physical Chemistry Courses:		3
CHEM 5531	Classical Thermodynamics	
CHEM 5532	Chemical Kinetics	
CHEM 5533	Quantum Chemistry	
CHEM 5534	Molecular Spectroscopy	
CHEM 5535	Statistical Thermodynamics	
Additional credit hours from graduate-level Chemistry courses numbered between CHEM 5521R, and CHEM 5589 (excluding CHEM 5530, and CHEM 5540)		9
CHEM 5611	Chemistry Seminar	1
Additional 15 credit hours from graduate courses approved by the Graduate Program Committee (6 credit hours of CHEM 5590, CHEM 5599, or CHEM 5699 may be applied)		15
Total Credits		31

Students who receive a grade of C+ or lower in more than two courses applicable to the M.S. program or who have a cumulative grade-point average of less than 3.0 on courses applicable toward the M.S. degree after completing 18 or more credit hours of such courses, will be terminated from the degree program. Grades received for CHEM 5590 and any undergraduate-level courses are not included in the minimum GPA calculation.

Students who have received a grade of B- or better in graduate chemistry coursework taken as part of a degree program at another institution may have up to 6 credit hours of equivalent required coursework waived upon approval of a majority of the graduate program committee. A written request for this approval must be submitted within one year of full admission to the M.S. program.

Master of Science: Chemistry-Thesis-Based Option

Student Learning Outcomes

Students graduating from this program will:

- Possess an extensive knowledge in both breadth and depth in chemistry
- Demonstrate critical thinking and problem solving skills
- Search, read, understand and use scientific literature
- Articulate scientific information both orally and in writing
- Design and conduct rational experimental research

Requirements for Admission

Applicants should have the equivalent of an American Chemical Society (ACS)-approved bachelor's degree in chemistry. This degree includes the equivalent of: one year of general chemistry, quantitative analysis, one year of organic chemistry, one year of physical chemistry, physical chemistry laboratory, instrumental analysis, inorganic chemistry, one year of physics, and three semesters of calculus, and the ACS-recommended distribution of advanced courses and course credits. Applicants should take particular note of the physical chemistry requirement. They may be admitted as

provisional students if they have a limited number of undergraduate deficiencies. At the time that admission is offered, applicants will be notified of any requirements to be met for reclassification as fully admitted. Undergraduate courses included in these requirements must be completed with grades of C- or higher.

Applications are only accepted through the online system, and include:

1. Official, confidentially transmitted transcripts.
2. Statement of purpose.
3. Two confidentially transmitted letters of recommendation (academic and/or professional).
4. English language proficiency requirement.

Applicants from foreign countries, who have an official language other than English, must achieve scores of at least 550 (paper-based), 213 (computer-based), or 79 (internet-based) on the Test of English as a Foreign Language (TOEFL) to be considered for admission.

Placement Examinations

Incoming students must take placement examinations in analytical, inorganic, organic, and physical chemistry. Placement examinations are typically administered the week before the first week of classes of the fall and spring semesters. Students scoring below the 50th percentile in the organic and/or physical chemistry exams are required to enroll in CHEM 5520R and/or CHEM 5530A/CHEM 5530B, respectively. Enrollment in other graduate organic or physical chemistry courses is not permitted until CHEM 5520R or CHEM 5530A/CHEM 5530B, respectively, is (are) successfully completed. CHEM 5530A/CHEM 5530B is currently offered concurrently with CHEM 431 or CHEM 432. A student is required to take either CHEM 5530A/CHEM 431 or CHEM 5530B/CHEM 432 or both, depending on his/her performances in the various sub-disciplines of the physical chemistry placement exam. Should a student be required to take both CHEM 5530A/CHEM 431 and CHEM 5530B/CHEM 432, the average grade of the two CHEM 5530 courses will be considered for the fulfillment of the physical chemistry deficiency. Two grades of C+ or lower, or one grade of less than C- in CHEM 5520R or CHEM 5530, will result in termination from the degree program. These courses may not be counted toward the M.S. coursework requirements. Students must complete all additional coursework required as a result of the placement exams by the end of their first three regular semesters.

Graduate Program Committee

Upon admission to M.S. program in chemistry, students will be advised by the department's principal graduate advisor, acting on behalf of the chemistry graduate program committee. Based on the committee's evaluation of the students' transcripts and placement exam scores, the principal graduate advisor will inform students of any deficiencies and how they should be removed. The principal graduate advisor also will advise students on course curriculum. For the thesis degree, the curriculum advising is performed by the research advisor (once they have been selected). The graduate program committee serves as the supervisory committee for non-thesis M.S. students.

Seminar Attendance

Full-time M.S. students are required to attend all regularly scheduled and special departmental seminars and colloquia. Part-time students are also required to attend these seminars but may petition the Chair of the Department of Chemistry to waive this requirement all but one semester. Such students will be required either to participate fully during one semester, including the presentation of a one-hour seminar, or to present two one-hour seminars in lieu of full participation.

Minimum Requirements for Master of Science Degree

In addition to the requirements listed here, all M.S. students are subject to the all general M.S. requirements of the University. See the School of Graduate Studies (p. 1538) section of this catalog for a complete listing.

Master of Science Chemistry Options:

- Analytical Chemistry
- Inorganic Chemistry
- Organic Chemistry
- Physical Chemistry
- Polymer Chemistry

Coursework

The emphasis of this program is research. A minimum of 31 credit hours (including research and thesis) is required. Full-time students should complete the formal coursework requirement no later than the end of their second year.

Code	Title	Credits
Select one of the following Physical Chemistry Courses:		
CHEM 5531	Classical Thermodynamics	3
CHEM 5533	Quantum Chemistry	

CHEM 5534	Molecular Spectroscopy	
Select one of the following Organic Chemistry Courses:		3
CHEM 5521R	Mechanisms Of Organic Reactions	
CHEM 5522	Synthetic Organic Chemistry	
Additional credit hours from graduate-level Chemistry Courses numbered CHEM 5521R to CHEM 5589 (excluding CHEM 5530 and CHEM 5540)		6
Additional graduate-level courses for a minimum of 12 credit hours (with no more than 6 credit hours of directed studies, CHEM 5590, applied)		12
CHEM 5611	Chemistry Seminar	1
CHEM 5599	Research And Thesis (under direction of student's research advisor)	6
Total Credits		31

The selected courses must be approved by the student's supervisory committee. Students who receive a grade of C+ or lower in more than two courses applicable to the M.S. program or who have a cumulative GPA lower than 3.0 on courses (not including CHEM 5590, CHEM 5599 or any undergraduate courses) applicable toward the M.S. degree after completing 18 or more credit hours of such courses, will be terminated from the degree program.

Students, who have received a grade of B- or better in graduate coursework taken as part of a degree program at another institution, may transfer up to 6 credit hours of this work on approval of a majority of the student's committee. A written request for this approval must be submitted within one year of full admission to the program.

Minor: Chemistry

Student Learning Outcomes

Students graduating from this program will:

- Have a functional knowledge of all the basic areas of chemistry including analytical, organic, physical, inorganic and biochemistry.
- Be able to integrate their knowledge in these areas and use their critical thinking skills in order to become problem solvers.
- Be proficient in chemistry laboratories, especially with respect to: Following and understanding general laboratory practice guidelines, especially proper laboratory safety. Performing chemical analyses. Performing simple chemical synthesis. Understanding and using modern chemical instrumentation.
- Students graduating with a minor degree in chemistry should be proficient in the basic skills of chemistry. They will: Be able to articulate clearly scientific information, both in written and oral forms. Be able to use effectively the scientific literature.

Students graduating with a baccalaureate degree in chemistry will be prepared for entry into professional schools (e.g., medical, dental, pharmaceutical, or veterinary), graduate programs, or chemical industries.

Program Requirements

Students may elect to obtain a minor in chemistry in conjunction with a major in another academic discipline. The minimum departmental requirements are 18 credit hours of chemistry with at least 9 of these hours from courses at the 300 or 400 level. Students must complete 9 credit hours from the Department of Chemistry at UMKC, and 6 of those 9 hours must be courses at the 300 or 400 level. In addition, the minor courses must be selected from more than one area of chemistry and a minimum grade of a C- is required for all minor and prerequisite courses.

Code	Title	Credits
CHEM 211 or MOTRCHEM 150	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
Select courses from at least two different areas below:		8
Analytical		
CHEM 341WI or CHEM 341	Analytical Chemistry I: Quantitative Analysis	
CHEM 345R	Instrumental Analysis	
CHEM 311	Laboratory Safety And Health I	
CHEM 387	Environmental Chemistry I	
CHEM 390	Special Topics In Chemistry	
CHEM 395	Directed Readings In Chemistry	

CHEM 442R	Analytical Chemistry II: Instrumental Analysis
Biochemistry	
BIOLOGY 441	Biochemistry
BMS 9265	Human Biochemistry 1 - Medical
CHEM 367	Bioorganic Chemistry
Inorganic	
CHEM 382	Inorganic And Organic Synthesis
CHEM 410	Chemical Literature
CHEM 451R	Inorganic Chemistry
Organic	
CHEM 320	Elementary Organic Chemistry
CHEM 320L	Experimental Organic Chemistry
CHEM 321	Organic Chemistry I
CHEM 321L	Organic Chemistry Laboratory I
CHEM 322L	Organic Chemistry Laboratory II
CHEM 322R	Organic Chemistry II
Physical	
CHEM 431	Physical Chemistry I
CHEM 432	Physical Chemistry II
or CHEM 330	Elementary Physical Chemistry
CHEM 434	Molecular Spectroscopy
CHEM 437WI	Experimental Physical Chemistry I
or CHEM 437	Experimental Physical Chemistry I
CHEM 480	Computer Applications To Chemical Problems
Polymer	
CHEM 471	Introduction To Polymer Chemistry

Total Credits

18

Chemistry

Discipline Coordinator

Zhonghua Peng, (816) 235-2288, pengz@umkc.edu

Chemistry faculty who are members of the doctoral faculty.

Chemistry is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the [School of Graduate Studies](#).

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in [Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission](#) and [Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements](#).

Discipline-specific Admission Requirements

Chemistry as a Primary Discipline

Normally, only applications to full-time academic status will be considered. To qualify for full admission (Note: full admission is unrelated to full-time academic status), applicants are expected to have the equivalent of an American Chemical Society-approved bachelor's degree in chemistry, which includes coursework in general chemistry, analytical chemistry, one year of organic chemistry, inorganic chemistry and one year of physical chemistry requiring calculus and physics as prerequisites. (For example, see UMKC's B.S. program in the Chemistry section in this catalog.) Applicants will be admitted as provisional students with a limited number of undergraduate deficiencies. They will be notified, at the time admission is offered, of any requirements to be met for reclassification as fully admitted. Undergraduate courses included in these requirements must be completed with grades of "C" or higher.

Applicants should take particular note of the physical chemistry requirement.

Applications are only accepted through the online system, and include:

1. Official, confidentially transmitted transcripts.
2. Statement of purpose.

3. Three confidentially transmitted letters of recommendation (academic and/or professional).
4. English language proficiency requirement.

Suggested Compatible Co-disciplines

Curriculum and Instruction (p. 1568), Engineering (p. 1579), Geosciences (p. 1583), Mathematics (p. 1589), Pharmaceutical Sciences (p. 1599), Pharmacology (p. 1600), Physics (p. 1602)

Chemistry as a Co-discipline

Applicants are expected to have undergraduate coursework in general chemistry and organic chemistry. Applicants accepted as provisional students will be notified, at the time admission is offered, of any requirements to be met for reclassification as fully admitted. Undergraduate courses included in these requirements must be completed with grades of "C" or higher.

Core Program Requirements

Chemistry as a Primary Discipline

Coursework Requirements

Students are to see the principal graduate advisor, or their research advisor, for advising and signature prior to registering each semester.

Students must successfully complete a minimum of fifteen credit hours and a maximum of eighteen credit hours of didactic chemistry graduate coursework, among which one course must be from Group A, one course from Group B, and a minimum of two additional courses (six credit hours) from any graduate chemistry course numbered 5500 to 5589, excluding CHEM 5520R, CHEM 5530A, CHEM 5530B and CHEM 5540R. The remaining required chemistry credit hours may be satisfied with directed studies (CHEM 5590). In addition, students must complete one credit hour of chemistry seminar (CHEM 5611). A grade of C+ (2.3) or less in more than two chemistry courses applicable to the Ph.D. program will result in termination from Ph.D. candidacy.

Code	Title	Credits
Group A		
CHEM 5531	Classical Thermodynamics	3
CHEM 5532	Chemical Kinetics	3
CHEM 5533	Quantum Chemistry	3
CHEM 5534	Molecular Spectroscopy	3
CHEM 5535	Statistical Thermodynamics	3
Group B		
CHEM 5521R	Mechanisms Of Organic Reactions	3
CHEM 5522	Synthetic Organic Chemistry	3

In addition, students must successfully complete twelve (12) to fifteen (15) credit hours of 400-level or above coursework in other disciplines, among which a minimum of nine (9) credit hours must be in their co-discipline(s). A minimum of three (3) credit hours in the codiscipline must be at the 5500+ level. Students may be required to take additional courses as outlined by their plan of study.

Any of the above chemistry courses will be credited toward the Ph.D. coursework requirement if taken as part of any previous graduate program at UMKC and a grade of B- (2.7) or better is received. Also, students who have received a grade of B- (2.7) or better in graduate chemistry coursework taken as part of a degree program at another institution may have up to six credit hours of equivalent required coursework waived upon approval of a majority of the supervisory committee. A written request for this waiver is to be submitted and approved before submission of the student's plan of study.

Courses/Experiences Providing Instruction in Research Methodology

Expertise in research methodology will be acquired under the mentorship of the research advisor and supervisory committee. The student's progress will be assessed annually by his/her supervisory committee and the results will be forwarded to the School of Graduate Studies.

Number of Credit Hours Required beyond Bachelor's Degree

A total of 46 credit hours are required, among which 30 credit hours are from didactic courses, 15 credit hours from dissertation research and 1 credit hour of chemistry seminar. Among the 30 didactic hours, a minimum of 15 credit hours and a maximum of 18 credit hours are from chemistry, and a minimum of 9 credit hours are from the co-discipline. Up to six credit hours of chemistry courses may be waived, as described above under Coursework Requirements.

Chemistry as a Co-discipline

Coursework Requirements

Students are required to complete a minimum of three courses (nine credit hours) at the 400-level or above from classes offered by the Department of Chemistry or in conjunction with other units as approved in the student's plan of study. At least three of these credit hours must be at the 5500+ level and taken from courses offered by the Department of Chemistry. The systematic courses CHEM 5520R and CHEM 5530 may be used to satisfy the "400-level or above" requirement, but not the "5500+ level" requirement. CHEM 5590, CHEM 5599 and CHEM 5699 may not be used to satisfy these

requirements. Students who receive a grade of C+ (2.3) or less in two or more courses used to satisfy these requirements will be disqualified from using Chemistry as their co-discipline.

Any of the above chemistry courses will be credited toward the Ph.D. coursework requirement if taken as part of any previous graduate program at UMKC and if a grade of B- (2.7) or better is received. Transfer credit from another institution cannot be applied to Chemistry's co-discipline requirement.

Special Requirements

Chemistry as a Primary Discipline

Placement Examinations

Incoming students take placement examinations in analytical inorganic, organic and physical chemistry. Placement examinations are typically administered the week preceding the first week of classes of the fall and spring semesters. Students scoring below the 50th percentile in the organic and/or physical chemistry exams are required to enroll in CHEM 5520R and/or CHEM 5530A /CHEM 5530B, respectively. Enrollment in other graduate organic or physical chemistry courses is not permitted until CHEM 5520R and/or CHEM 5530A /CHEM 5530B, respectively, is(are) successfully completed. CHEM 5530A /CHEM 5530B is currently offered concurrently with CHEM 431 or CHEM 432. A student is required to take either CHEM 5530A/CHEM 431 or CHEM 5530B/CHEM 432 or both, depending on his/her performances in the various sub-disciplines of the physical chemistry placement exam. Should a student be required to take both CHEM 5530A/CHEM 431 and CHEM 5530B/CHEM 432, the average grade of the two CHEM 5530 courses will be considered for the fulfillment of the physical chemistry deficiency. Two grades of C+ (2.3) or lower, or one grade of less than C- (1.7) in CHEM 5520R / CHEM 5530 will result in termination from the degree program. These courses may not be counted toward the coursework requirements above. Students must complete all additional coursework required as a result of the placement exam scores by the end of their first three regular semesters.

Research Advisor

Full-time students are to select a research advisor from the doctoral faculty of the Department of Chemistry and a supervisory committee by the end of their first regular (e.g. fall or spring) semester on campus. For chemistry as the primary discipline, the student's supervisory committee shall consist of the research advisor in chemistry and two additional chemistry doctoral faculty as well as at least one doctoral faculty member from each co-discipline.

Seminar

Students are required to attend and participate in all regularly scheduled and special Chemistry Department seminars and colloquia. Students are required to present a one-hour chemistry seminar (CHEM 5611) during their second year following full admission to the Ph.D. program, based on their dissertation research project. This seminar will include a thorough review of the literature pertinent to their project and a description of the objectives, the proposed methodology and the significance of this research. An abstract is to be posted and distributed one week prior to the presentation date.

Time Constraints and Financial Support

Students must complete all requirements for their degree within seven years from the date of full admission to the Ph.D. program. Under compelling circumstances and on the written recommendation of a majority of the supervisory committee, a single extension for up to one year may be requested for approval by the dean of the School of Graduate Studies. Full-time (as defined in the current UMKC catalog) Ph.D. students may receive financial support (in the form of fellowships or teaching assistantships) from the Department of Chemistry for a maximum of five years. Students from countries not having English as their first language, and who are to be supported as GTAs, must meet the UMKC standards for international students to become certified as GTAs. Full information on that process can be found here: Policy on Award of Teaching Assistantships (p. 465).

Dissertation

All supervisory committee members are to receive a final draft of the dissertation for approval of form and content at least two weeks before submission to the dean of the School of Graduate Studies for certification. Candidates should submit preliminary drafts well in advance of this deadline. After the dissertation is certified for acceptance, the student must present an oral defense of his/her research in the form of a dissertation seminar. The supervisory committee will make a final determination of the acceptability of the dissertation immediately following this presentation. Only minor changes may be made to the dissertation at this point.

Expectations for Interdisciplinary Work

Chemistry as a Primary Discipline

Students develop and pursue a plan of study that includes coursework from the primary discipline and co-discipline(s). The interdisciplinary nature of the student's program is emphasized in the comprehensive examination, which includes material from all disciplines in the plan of study.

Chemistry as a Co-discipline

The Department of Chemistry will cooperate with the student's primary discipline in assessing the interdisciplinary nature of the student's progress.

Comprehensive Examination Guidelines

Chemistry as Primary Discipline

All students are required to prepare a research proposal describing a research project. An abstract is to be posted and distributed, and a written copy of this proposal (in standard NSF or NIH format) given to all members of the examination committee (consisting of the student's supervisory committee and others selected by the Dean of the School of Graduate Studies) at least one week prior to presentation in a proposal seminar. This seminar must be presented to all members of the examination committee by the end of the second year following full admission to the Ph.D. program.

A written comprehensive examination will be prepared and administered by the examination committee before completion of the student's third year following full admission to the Ph.D. program. This examination will be based on the student's coursework and on general knowledge in all areas of his/her specialization. All efforts will be made to emphasize the multidisciplinary nature of the student's program in this examination. If the student fails the written portion of the comprehensive examination, he/she may petition the examination committee to allow for a single opportunity to retake it. This second examination must be completed no earlier than 12 weeks and no later than six months from the date of completion of the first examination.

The research proposal and the written comprehensive exam constitute parts of the comprehensive exam. An IPhD student may elect to enroll in 3 credit hours of CHEM 5590, the grade for which will be CR/NC-only and will be based on the outcome of the comprehensive exam; retroactive enrollment is allowed. An Interdisciplinary PhD student with chemistry as the primary discipline, who has passed the comprehensive exam can have up to 9 credit hours of CHEM 5590/CHEM 5599/ CHEM 5699 counted towards a non-thesis MS degree in Chemistry.

Chemistry as a Co-discipline

The comprehensive examination will be determined by the student's primary discipline in cooperation with the co-discipline(s).

School of Computing and Engineering

Robert H. Flarsheim Science and Technology Hall (<http://www.umkc.edu/virtualtour/flarsheim-hall.asp>)

SS&C Student Services Center, Room 336
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Dean:

Kevin Z. Truman

Associate Dean of Faculty & Research

Masud Chowdhury

Assistant Dean of Academic Affairs

Katherine H. Bloemker

Assistant Dean of Student Affairs

Marjory Eisenman

Department of Civil and Mechanical Engineering:

Chair:

John T. Kevern
352 Flarsheim Hall
(816) 235-5550

See CME Catalog (p. 1269)

Department of Computer Science Electrical Engineering:

Chair:

Ghulam M. Chaudhry
546 Flarsheim Hall
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See CSEE Catalog (p. 1308)

History

The University has offered engineering degree programs since 1956. Increased technology demands during the mid-80s, combined with a generous gift from United Telecom (now Sprint), led to the development of UMKC's high-tech Computer Science and Telecommunications Program in 1984. These programs were combined in 2001 to form the School of Computing and Engineering (SCE).

Mission

The mission of the School of Computing and Engineering is to provide competitive educational opportunities and focused research in computing and engineering generating the technical work force and research needed for economic development.

Departments and Degree Programs

The School of Computing and Engineering has two departments:

- Civil and Mechanical Engineering (<http://www.sce.umkc.edu/cme/>)
- Computer Science Electrical Engineering (<http://sce.umkc.edu/about/computer-science-electrical-engineering/>)

Each department offers undergraduate and graduate degrees. The Civil and Mechanical Engineering Department offers B.S. in Civil Engineering, B.S. in Mechanical Engineering -- both accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>, M.S. in Civil Engineering, and M.S. in Mechanical Engineering. The Computer Science Electrical Engineering Department offers B.A./B.S. in Computer Science, B.S. in Electrical & Computer Engineering, Bachelor of Information Technology (B.I.T), M.S. in Computer Science, and M.S. in Electrical Engineering. The B.S. in Computer Science and the Bachelor of Information Technology degrees are accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org>. The B.S. in Electrical & Computer Engineering is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>.

The School also participates in UMKC's Interdisciplinary Ph.D. program through four disciplines: computer science, electrical and computer engineering, engineering (for civil and mechanical engineering) and telecommunications and computer networking. (See the School of Graduate Studies section of this catalog for details about the Interdisciplinary Ph.D. Program.)

Financial Assistance

The University has several financial aid programs, scholarships and awards for the benefit of our students: see <https://finaid.umkc.edu/> for opportunities available to all UMKC students. There are several School of Computing and Engineering scholarships available exclusively for SCE students. To be eligible, applicants must be accepted to both UMKC and SCE degree program. All award recipients must maintain full-time student enrollment (minimum 12 credit hours/semester for undergraduate; 9 credit hours/semester per graduate) throughout the academic year of the award.

Applications are due by March 1 for full consideration for the next fall semester's scholarship awards; however applications are accepted and kept on file year-round should additional awards become available. Current SCE scholarship recipients must re-apply each year by March 1 to be considered for the next academic year. More information about the scholarship process is available at <https://sce.umkc.edu/affordability> (<https://sce.umkc.edu/affordability/>).

The Dean's International Scholar Award (DISA) is available to SCE international students. DISA awards are determined upon admission; therefore, no specific application form is required. Students must maintain at least a 3.0 GPA and remain in good standing to continue to receive the DISA.

Assistantships

There are Graduate Research Assistantships available through various faculty conducting funded research, and information on these can be obtained from individual faculty. Most faculty with funded research programs will award research assistantships to students whose performance they have been able to observe in the class room.

A limited number of graduate assistantships are available to fully-enrolled graduate students with excellent academic performance and solid communications skills.

Applications are available through the academic departments.

Faculty

Department of Civil and Mechanical Engineering

Mujahid Abdulrahim; assistant professor; B.S., M.S., Ph.D. (University of Florida).

Walter A. Accurso; instructor; B.S. (University of Kansas); M.B.A. (Keller Graduate School of Management).

C. Mauli Agrawal²; chancellor, UMKC; professor; B.Tech. (Indian Institute of Technology Kanpur, India); M.S. (Clemson University); Ph.D. (Duke University).

Bryan R. Becker; James C. Olson professor; B.S. (University of Missouri-Rolla); M.S. (University of Missouri-Columbia); Ph.D. (University of Tennessee-Knoxville); P.E.

Katherine H. Bloemker; associate teaching professor; B.S., M.S. (Stanford University); Ph.D. (University of Missouri-Kansas City)

Darran Cairns; associate teaching professor; B.SC., Ph.D. (University of Birmingham).

ZhiQiang Chen^{2,3}; associate professor; B.S. (Southeast University, Nanjing, China); M.S. Michigan Technological University); Ph.D. (University of California-San Diego).

Mun Y. Choi²; president, UM System; professor; B.S. (University of Illinois-Urbana Champaign); M.A., Ph.D. (Princeton University).

Travis Fields^{2,3}; associate professor; B.S., M.S., Ph.D. (University of Nevada, Reno).

Thiagarajan Ganesh^{2,3}; professor; B.Tech., M.Tech. (Indian Institute of Technology-Madras); Ph.D. (Louisiana State University-Baton Rouge).

Ceki Halmen^{2,3}; associate professor; B.S. (Bogazici University, Istanbul, Turkey); M.S., Ph.D. (Texas A&M University).

Megan Hart^{2,3}; assistant professor; B.S. (Western Washington University), B.S., M.S., Ph.D. (Missouri University of Science and Technology); R.G.

John T. Kevern^{2,3}; professor; B.S. (University of Wisconsin-Platteville); M.S., Ph.D. (Iowa State University); LEED AP.

Gregory King^{2,3}; associate professor; B.S., M.S., Ph.D. (University of Kansas).

Amirfarhang Mehdizadeh^{2,3}; assistant professor; B.S. (University of Tehran, Iran); M.S., Dr.Ing. (Darmstadt University of Technology, Germany).

Gregory Muleski; instructor; B.S. (Rockhurst University); M.S., Ph.D. (University of Notre Dame).

Zahra Niroobakhsh^{2,3}; assistant professor; B.S. (University of Tehran, Iran); M.S. (Technical University of Darmstadt, Germany); Ph.D. (The Pennsylvania State University).

Mary Cristina Ruales Ortega; associate teaching professor; B.S. (Universidad del Valle, Colombia); M.S. (University of Puerto Rico); Ph.D. (Florida International University).

Sarvenaz Sobhansarbandi^{2,3}; assistant professor; B.S. (University of Kashan, Iran); M.S. (Eastern Mediterranean University, Cyprus); Ph.D. (University of Texas at Dallas)

William E. Stewart, Jr.; professor emeritus; B.S., M.S., Ph.D. (University of Missouri-Rolla); P.E. (Retired).

Antonis Stylianou^{2,3}; associate professor; B.S., M.S., Ph.D. (University of Kansas).

Kevin Z. Truman²; dean, professor, School of Computing & Engineering, B.A. (Monmouth College); B.S., M.S. (Washington University); Ph.D. (University of Missouri-Rolla).

Department of Computer Science and Electrical Engineering

Cory Beard^{2,3}; associate professor; B.S., M.S. (University of Missouri-Columbia); Ph.D. (University of Kansas).

Kendall Bingham¹; instructor; B.S., M.S. (University of Missouri-Kansas City).

Deb Chatterjee^{2,3}; associate professor; B.E.Tel.E. (Jadavpur University, India); M.Tech. (India Institute of Technology-Kharagpur, India); M.A.Sc. (Concordia University, Canada); Ph.D. (University of Kansas).

Baek-Young Choi^{2,3}; associate professor; B.S. (Pusan National University, Korea); M.S. (Pohang University of Science and Technology, Korea); Ph.D. (University of Minnesota).

Masud H. Chowdhury^{2,3}; professor; B.S. (Bangladesh U. of Engineering & Technology, Dhaka 1000, Bangladesh); Ph.D. (Northwestern University).

Reza Derakhshani^{2,3}; professor; B.S. (Iran University of Science and Technology); M.S., Ph.D. (West Virginia University).

Wajeb Gharibi²; associate teaching professor; Ph.D (Belarus Academy of Sciences).

Preetham Goli²; assistant teaching professor; B.Tech (Andhra University, India), Ph.D. (University of Houston)

Yijie Han^{2,3}; associate professor; B.S. (University of Science and Technology of China), Ph.D. (Duke University).

Brian Hare; associate teaching professor; M.S. (University of Houston and University of Missouri-Kansas City).

Ahmed M. Hassan^{2,3}; assistant professor; B.S., M.S. (Cairo University); Ph.D. (University of Arkansas)

Richard G. Hetherington; founding director, computer science program, and professor emeritus; B.A. (Brothers College, Drew University); M.S., Ph.D. (University of Wisconsin-Madison).

Faisal Khan^{2,3}; associate professor; B.S. (Bangladesh University of Engineering and Technology); M.S. (Arizona State University); Ph.D. (University of Tennessee, Knoxville)

Kevin Kirkpatrick¹; associate teaching professor; B.S. (University of Missouri-Rolla); M.S. (University of Missouri - Columbia).

Mahbube Khoda Siddicki¹; assistant teaching professor; B.S., M.S. (Asian Institute of Technology); M.S. (Paul Sabatier University); Ph.D. (South Dakota State University).

Yugyung Lee^{2,3}; professor; B.S. (University of Washington); Ph.D. (New Jersey Institute of Technology).

Zhu Li^{2,3}; associate professor; B.S. (Sichuan University, China); M.S. (University of Louisiana-Lafayette) Ph.D. (Northwestern University)

Deepankar (Deep) Medhi^{2,3}; curators' professor; B.Sc. (Cotton College, Gauhati University); M.Sc. (University of Delhi); M.S., Ph.D. (University of Wisconsin-Madison).

Ken Mitchell²; associate professor; B.M., M.M. (Indiana University); M.S., Ph.D. (University of Missouri-Kansas City).

Farid Nait-Abdesselam^{2,3}; professor; B.Eng (University of Algiers); M.S. (University of Paris); Ph.D. (University of Versailles, France).

Mostafizur Rahman^{2,3}; assistant professor; B.S. (North South University, Bangladesh); Ph.D. (University of Massachusetts-Amherst)

David G. Skitek; assistant professor emeritus; B.S. (University of Missouri-Rolla); M.S.E., Ph.D. (Arizona State University); P.E. (Retired)

Sejung Song^{2,3}; associate professor; B.S. (Pusan National University, Korea); M.S., Ph.D. (University of Minnesota - Twin Cities).

Yusuf Sawar Uddin; assistant professor; B.S., M.S. (Bangladesh University of Engineering and Technology); Ph.D. (University of Illinois, Urbana-Champaign).

Dianxiang Xu^{2,3}; professor; B.S., M.S., Ph.D. (Nanjing University).

May Zeineldin; instructor; B.S. (October 6th University, Cairo, Egypt); M.S. (University of Arkansas-Fayetteville).

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

⁴ Located at UM-St. Louis campus

Civil Engineering Courses

CIV-ENGR 111 First Year Cornerstone Credit: 1

An exploration of the diverse emphasis specific career opportunities of Civil Engineers, with a goal of providing students the needed fundamental skills, knowledge and resources for identifying the most appropriate career path(s) consistent with the student's interests, skills, and objectives.

CIV-ENGR 113 Engineering Measurements Credit: 1

This course provides a fundamental introduction to the elements of surveying. Basics including terminology, coordinate systems, equipment, legal descriptions, and calculations will be taught in the classroom. Field laboratory sessions will introduce the students to setting up basic equipment, running a level loop, and laying out a site based on plan designs.

CIV-ENGR 190 Special Topics Credits: 1-3

Selected introductory topics in the area of computing. May be repeated for credit when topic varies.

CIV-ENGR 275 Engineering Statics Credits: 3

Fundamentals of statics; static equilibrium; internal forces; introduction to elements of mechanics of elastic materials, and properties of areas.

Prerequisites: PHYSICS 240.

CIV-ENGR 276 Strength Of Materials Credits: 3

The course introduces and emphasizes the concepts and analysis methods for stress and strain, torsion, bending and shear stresses in beams, combined stresses, and deflection theory using a calculus based methodology. Introduction to buckling and energy methods may be included.

Prerequisites: CIV-ENGR 275.

CIV-ENGR 318 GIS for Engineers Credits: 3

This course covers the fundamental concepts and methods for use of GIS software used to solve engineering applications and problems. The course uses module based practical learning to apply and integrate foundational knowledge, develop the skills required to model various types of imagery data, incorporate this data into projects for management and design, and provide the skills necessary for students to depict ideas and design graphically. A personal computer capable of running the software is required for the course. Non-engineering majors by instructor permission only.

Prerequisites: SCE Student.

CIV-ENGR 319 Engineering Computation and Statistics Credits: 3

A review of descriptive statistics, statistical distribution functions and application to engineering problems. Introduction to hypothesis testing, analysis of variance, correlation/regression and design of factorial experiments.

Prerequisites: MATH 268 or MATH 220.

CIV-ENGR 321 Structural Analysis Credits: 4

This course introduces the basic analysis and computer methods that are required to analyze basic structural elements and simple structures. Topics covered in this course include design loads, analysis of statically determinate beams, frames and trusses, shear and moment diagrams, influence diagrams, beam deflections, statically indeterminate structures (beams and frames), displacement methods, introduction to energy and matrix methods.

Prerequisites: CIV-ENGR 276.

CIV-ENGR 323 Structural Steel Design Credits: 3

Basic principles of structural steel design. Design of beams, axially loaded members, columns, and bolted and welded connections.

Prerequisites: CIV-ENGR 321.

CIV-ENGR 335 Soil Mechanics Credits: 3

Detailed study of physical and mechanical properties of soil governing its behavior as an engineering material. Machine Shop Safety is required prior to taking this class.

Prerequisites: CIV-ENGR 276, CHEM 211, CHEM 211L.

CIV-ENGR 342 Water and Wastewater Treatment Processes Credits: 3

Methods for determining and characterizing water quality, effects of pollution on streams and lakes, and an introduction to engineering systems for the distribution, collection and treatment of water and wastewater.

Prerequisites: CIV-ENGR 351 or MEC-ENGR 351; and CHEM 211 and CHEM 211L.

CIV-ENGR 351 Fluid Mechanics Credits: 3

Concepts of the statics and dynamics of fluids, with emphasis on principles of continuity, momentum and energy. Boundary layers, dimensional analysis and drag are covered briefly. Thorough treatment of pipe flow.

Prerequisites: CIV-ENGR 275.

Co-requisites: MATH 345 or MEC-ENGR 272.

CIV-ENGR 357 Engineering Hydraulics Credits: 3

Analysis and design of closed conduit systems for water supply; fundamentals of open channel flow; principles of pumping and hydropower generation; transients and control of surge pressures in pipelines.

Prerequisites: CIV-ENGR 351 or MEC-ENGR 351.

CIV-ENGR 378WI Civil Engineering Materials Credits: 3

This course provides students with a working knowledge of the design and performance of Asphaltic Concrete (AC) and Portland Cement Concrete (PCC) mixtures through understanding the properties and requirements of the component materials and their effects on subsequent performance. An understanding of the design, production process, construction, durability, and operations and maintenance will be provided. A significant portion of this course requires hands-on laboratory testing and analysis. Roadway and highway pavements will provide a primary context within which these concrete systems will be studied. Machine Shop Safety is required prior to taking this course.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 276.

CIV-ENGR 390 Engineering Coop/Internship Credits: 0

Students may participate in structured Engineering Coop/Internship under the supervision of employer. They must carry out significant professional responsibilities and whatever additional assignments are determined by the employer.

Prerequisites: Departmental consent.

CIV-ENGR 400 Problems Credits: 1-4

Directed investigation of civil engineering problems.

Prerequisites: Departmental consent.

CIV-ENGR 401ES Special Topics in Civil Engineering Credits: 3

Hydraulic conductivity measurements. Seepage analysis and control. Earth dam and embankment design. Computer applications.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 401HA Hydrologic Analysis and Design Credits: 3

Practical implementation of hydrologic and hydraulic system design in accordance with published design criteria and using methods and numerical modeling accepted by local, state, and national government agencies.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 401SD Special Topics In Civil Engineering Credits: 3

Study of soil behavior under cyclic and dynamic loading conditions. Foundation design for vibratory loadings. Introductory earthquake engineering including dynamic ground response for determination of dynamic soil properties. Evaluation of soil liquefaction potential during earthquakes by both laboratory and in situ field methods. Design consideration for embankments and earth retaining structures under seismic loading conditions. Construction blasting and vibration effects on underground systems.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 401SV Topics in Civil Engineering Credit: 1

This course provides a fundamental introduction to the elements of surveying. Basics including terminology, coordinate systems, equipment, legal descriptions, and calculations will be taught in the classroom. Field laboratory sessions will introduce the students to setting up basic equipment, running a level loop, and laying out a site based on plan designs.

CIV-ENGR 404 Project Management of Integrated Design and Construction Credits: 3

Provide a body of knowledge that includes the principles, knowledge areas, skills, and tools applicable to successful project management for the performance of integrated design and construction of capital projects, specifically as applicable to the post-award period. This post-award period is the time from the formal project award by the owner through project design and construction, testing, commissioning, close-out and completion of the project warranties.

CIV-ENGR 405 Capital Project Delivery Methods Credits: 3

Provide a body of knowledge that acquaints students with the capital project delivery methods in both public and private business sectors of the U.S design – construction industry. Project delivery means how a capital project comprising both design and construction is planned, procured, contracted and implemented by an owner to achieve desired objectives. Delivery methods discussed in this class include traditional design – bid- build, design – build, design-build plus added services such as operations and maintenance, CM @ Risk and other approaches. Roles and responsibilities of owners, owner consultants, and design and construction firms are presented and discussed.

CIV-ENGR 406 Construction Project Risk Management Credits: 3

Risk management skill sets are necessary tools for the successful project manager. Project Management Institute's (PMI) 6 steps of project risk management constitute the basis of the content, which includes an expanded knowledge of risk identification, qualitative and quantitative risk analysis, risk control, contract risks, and risk transfer options. Business and project risks such as client selection, project planning, and project execution, will be considered as well as legacy risks that remain with the business and participants beyond the project completion. Different risk management strategies will be discussed, including risk avoidance, risk mitigation, and risk transfer.

Prerequisites: Senior Standing.

CIV-ENGR 409 Fundamentals of Engineering Review Credit: 1

This course consists of a series of lectures and is intended as a review class for all the subjects included in the Fundamentals of Engineering exam. Classes specifically focus on the review of equations and formulas included in the reference handbook published by NCEES.

CIV-ENGR 411 Civil Engineering Systems Design I Credits: 2

Comprehensive and realistic design project using the systems approach. Design choices and their effect upon the environment. Design constraints include constructability, minimization of environmental impact and cost-effectiveness. Managerial and professional aspects of design practice.

Prerequisites: CIV-ENGR 467 and CIV-ENGR 497.

Co-requisites: CIV-ENGR 422WI and CIV-ENGR 432.

CIV-ENGR 412 Civil Engineering Systems Design II Credits: 3

Continuation of CIV-ENGR 411.

Prerequisites: CIV-ENGR 411 and departmental consent.

CIV-ENGR 415 Engineering Leadership and Ethics Credits: 3

Analysis of leadership, including 360-degree assessment of students' leadership. Discussion of leadership cases and application to engineering careers. Frequent analysis of engineering ethics cases using the NSPE Code.

CIV-ENGR 417 Advanced Structural Analysis Credits: 3

The course is designed as a continued study of structural analysis methods with emphases on indeterminate structures (trusses, beam/columns, and frames), advanced analysis methods, and introduction to nonlinear structural effects including geometric nonlinearity and inelasticity. Advanced structural analysis methods including force, displacement, matrix, energy, and limit analysis methods will be introduced and practiced. Both computer based and hands-on analysis will be involved.

Prerequisites: CIV-ENGR 321

CIV-ENGR 421 Matrix Methods of Structural Analysis Credits: 3

The basic components of this class are matrix theories and applied computer analysis methods using a computer-based structural analysis software. These include: (1) study of matrix formulation of direct stiffness method, virtual work principle and formulation of displacement-based frame elements, theories and significance of geometric and material nonlinearity; (2) Sap2000-based analysis of 2D/3D trusses and 2D/3D frames considering different loading and material/geometric nonlinearity.

Prerequisites: CIV-ENGR 321.

CIV-ENGR 422WI Reinforced Concrete Design Credits: 3

Basic principles of reinforced concrete design. Design of beams for flexure and shear; design of short and slender columns. Bond stress development. Footing design.

Prerequisites: CIV-ENGR 321.

CIV-ENGR 423 Advanced Structural Steel Design Credits: 3

Design of steel structures and bridges. Topics include composite beams, plate girder design, and moment resistant connections.

Prerequisites: CIV-ENGR 323.

CIV-ENGR 425 Prestressed Concrete Credits: 3

Design and behavior of prestressed concrete structures; material and system of pretensioned and post tensioned systems; prestress losses; flexure, shear, bond, deflections and partial prestress in determinate structures; indeterminate beams-introduction.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 427 Advanced Reinforced Concrete Design Credits: 3

Advanced topics in the design of footings, retaining walls, two-way floor slabs, torsion and continuous structures, shear friction, strut and tie design, precast design.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 429 Design of Structures for Blast and Fire Credits: 3

General overview of Blast Design; risk assessment and design criteria; simplifies Blast Effects Analysis; ground shock, material response; antiterrorism design considerations; weapons effects and mitigation; internal explosions; progressive collapse analysis; and introduction to Fire Design.

CIV-ENGR 431 Fundamentals of Geomaterial Characterization Credits: 3

A geomaterial is any construction material comprised primarily of soil. This course overviews state-of-the-art instrumental techniques for analysis of the physio-chemical properties of soils, aggregates, hydraulic concrete, and asphaltic concrete. Evaluation techniques will be applied to determining beneficial reuse opportunities for industrial by-product materials from the Kansas City region.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

CIV-ENGR 432 Foundation Engineering Credits: 3

Design of basic foundation structures, footings, retaining walls, pile foundations, dams.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 436 Advanced Soil Mechanics Credits: 3

Theoretical soil mechanics as applied to solution of specific engineering problems.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 442 Hydraulic Structures Credits: 3

A review of the history and hydraulic design procedures for a variety of hydraulic structures including spillways, water measurement structures, canal structures and energy dissipation structures.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 446 Limnology Credits: 3

Physical, biological and chemical issues important in surface fresh waters. Includes carbonate chemistry, algal assay and thermocline analysis.

Prerequisites: CHEM 211, MATH 345.

CIV-ENGR 447 Contracts and Law for Engineers Credits: 3

This course covers a broad range of substantive legal topics giving the student a grounding in the legal implications of certain situations that they may encounter during their careers. The course includes coverage of basic contract law, environmental regulations and compliance, construction law, antitrust law, intellectual property law, civil procedure, employment law, business entities (corporate law) product liability and criminal law and procedure. The objective of the course is to provide students with a fundamental understanding of the wide range of federal and state laws governing behavior in our complicated and rule of law driven society.

Prerequisites: Senior standing.

CIV-ENGR 449 Environmental Compliance, Auditing and Permitting Credits: 3

This course provides a high level overview of the most important statutes that have been enacted to protect the environment. The course covers regulation of hazardous waste, the Clean Air and Clean Water Acts, the Resource Conservation and Recovery Act, the All Appropriate Inquiry Rule and the law addressing sites contaminated with hazardous substances and the technology options employed to remediate those sites. In addition, the course provides coverage of environmental audits and emergency planning for extremely hazardous substances, the regulation of underground storage tanks, safe drinking water and the National Environmental Policy Act among other statutes.

Prerequisites: Senior standing.

CIV-ENGR 452 Hydraulics of Open Channels Credits: 3

This is a first course in the fundamentals of open channel (free surface) water flow. Over ninety-nine percent of all the water that is moved on the planet's surface is by free surface flow. Study of free surface flow is essential to the study of storm water drainage systems, flood control, water and wastewater treatment and the study of the form and processes of river evolution. This class provides the fundamental physical principles of free surface flow as a prelude to a significant number of other topics that pertain to engineering and geomorphic analysis.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 453 Hydraulics and Variability of Rivers Credits: 3

Introduction to the concepts of alluvial channel behavior, evolution and change due to natural and man-induced modifications to streams and watersheds. Numerous case studies of river behavior are studied from the perspective of hydraulics, geomorphology and sediment transport.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 454 River Stability and Scour Credits: 3

Bridge hydraulics, stream stability, scour at bridge piers and abutments, hydraulic modeling of floods, countermeasures for protection of bridge infrastructure.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 456 Urban Hydrology Credits: 3

Analysis of urban drainage systems in accordance with published municipal criteria. This course is an in-depth course for senior undergraduate students interested in the hydrological sciences and for graduate students specializing in water resources. Specifically this course will focus on the engineering procedures and techniques specified by municipalities to design and maintain efficient, safe, storm drainage systems. This course also focuses on the unique issues associated with estimating and designing for rainfall/runoff in urban metropolitan areas, including channel and reservoir routing of floods through stream channels, retention structures, culverts, and storm sewers.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 463 Construction Law Credits: 3

This course introduces professional, ethical, and legal concepts of the professional practice of engineering, and the role of the consulting engineer, specifically in the A/E/C industry during the design, procurement, and construction processes. A conceptual framework is developed for understanding the industry standard agreements (AIA, EJCDC, ConCensus) and the various participants roles and duties in project execution. The engineer's "professional standard of care" is examined and revisited throughout the semester, specifically what it means to be a "Professional Engineer". Emphasis is placed on project and contract management and the applicable law.

CIV-ENGR 466 Green Building and Sustainable Infrastructure Credits: 3

This class will discuss various green rating systems for buildings and infrastructure. Upon completion of this course students will be prepared for the LEED Green Associate Exam. The course will also discuss infrastructure project sustainability from a life cycle perspective. A semester project will involve stormwater management using "green" techniques and methods to mitigate the urban heat island. Upon completion of the course, students will better understand what sustainability means and how it applies in the context of our built environment and have a good idea of how technology will impact our sustainable future.

Prerequisites: Junior standing.

CIV-ENGR 467 Introduction to Construction Management Credits: 3

Structure of the construction industry; construction drawings and specifications; estimating and bidding; construction contracts, bonds and insurance; planning and scheduling of construction operations; project management; computer techniques.

CIV-ENGR 468 Construction Planning and Scheduling Credits: 3

This course is intended to provide an in-depth examination of the construction planning and scheduling process, as it relates to civil engineering projects. Topics will include planning and scheduling of construction operations by the critical path method, Network diagramming, scheduling computations, and time-cost trade-offs. Manpower and equipment leveling. Computer and noncomputer techniques.

Prerequisites: CIV-ENGR 467.

CIV-ENGR 469 Construction Methods and Equipment Credits: 3

Introduction to methods used to plan, construct, and manage heavy civil projects. Topics will include development, project control, equipment productivity, earthmoving fundamentals, formwork design, and other issues in heavy civil projects.

Prerequisite: CIV-ENGR 467.

CIV-ENGR 470 Corrosion Engineering Credits: 3

This course will cover the physical interaction of metallic materials with their environments, called corrosion. Corrosion is an electrochemical process and the thermodynamics and kinetics of corrosion processes will be discussed. Students will be expected to identify different forms of corrosion and be able to select appropriate materials for their working environment to prevent corrosion related problems. Second half of the class will concentrate on corrosion of metals in concrete and prevention methods.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 471 Advanced Portland Cement Concrete Credits: 3

This course will cover topics such as cement chemistry, concrete proportioning, aggregates, mineral and chemical admixtures, fresh and hardened properties of concrete, and durability of concrete. Design and proportioning of concrete mixtures for desired fresh and hardened properties will be emphasized. Specialty concrete types such as high strength/high performance concrete, lightweight concrete, pervious concrete, high volume fly ash concrete, and fiber reinforced concrete will also be covered.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 473 Durability of Civil Engineering Materials Credits: 3

This course will explore the identification, causes of, and remediation of material-related durability deterioration in civil engineering projects. The primary focus will be on reinforced concrete, plain concrete, and soil for a variety of applications. Course content will be delivered primarily through laboratory activities and handouts. Lab activities will use advanced analysis techniques and help the students identify and measure deterioration mechanisms. Various non-destructive evaluation techniques will be discussed. Students have hands on experiences with samples production, data collection, and data analysis for all of the lab activities.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

CIV-ENGR 475 Seismic Design of Structures Credits: 3

Introduction to basic analysis and design principles for the seismic design of buildings (concrete, steel, wood). General seismic principles, codes and loads, static lateral force procedure, dynamic lateral force procedure, topics in rigidities of buildings.

Prerequisites: CIV-ENGR 323 (or CIV-ENGR 422WI), and MEC-ENGR 285.

CIV-ENGR 484 Pavement Materials Design, Maintenance, and Rehabilitation Credits: 3

Traffic loading and volume, stress and deflection, characterization of pavement materials, design of flexible and rigid pavements, design of overlays, evaluation of pavement performance, maintenance techniques, and rehabilitation options.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

CIV-ENGR 487 Applied Finite Element Analysis Credits: 3

The study of advanced simulation techniques for the solution to engineering problems. The use of Finite Element Method toward solving mechanical, structural, vibration and potential flow problems will be explored. Current commercial simulation tools will be used extensively.

Prerequisites: MEC-ENGR 272 and MEC-ENGR 130.

CIV-ENGR 491 Internship Credits: 6

For International students who must register to cover off-campus employment which is approved as related to their degree by their departmental advisor and ISAO.

Prerequisites: Departmental consent.

CIV-ENGR 497 Engineering Hydrology Credits: 3

Fundamental concepts of hydrology in engineering; computation principles of runoff from rainfall; measurement of hydrologic quantities; quantitative and statistical estimation of design stream-flow magnitude and frequency; principles of unsteady routing of hydrographs.

Prerequisites: CIV-ENGR 319; and CIV-ENGR 351 or MEC-ENGR 351.

CIV-ENGR 5500 Problems Credits: 1-6

Supervised investigation in civil engineering to be presented in the form of a report.

Prerequisites: Graduate standing.

CIV-ENGR 5501 Advanced Topics in Civil Engineering Credits: 1-3

Current technical developments in civil engineering.

CIV-ENGR 5501AE Advanced Topics in Civil Engineering Credits: 1-3**CIV-ENGR 5504 Project Management of Integrated Design and Construction Credits: 3**

Provide a body of knowledge that includes the principles, knowledge areas, skills, and tools applicable to successful project management for the performance of integrated design and construction of capital projects, specifically as applicable to the post-award period. This post-award period is the time from the formal Project award by the owner through Project design and construction, testing, commissioning, close-out and completion of the Project warranties.

CIV-ENGR 5505 Capital Project Delivery Methods Credits: 3

Provide a body of knowledge that acquaints students with the capital project delivery methods in both public and private business sectors of the U.S design – construction industry. Project delivery means how a capital project comprising both design and construction is planned, procured, contracted and implemented by an owner to achieve desired objectives. Delivery methods include traditional design – bid- build, design – build, design-build plus added services such as operations and maintenance, CM @ Risk and other approaches. Roles and responsibilities of owners, owner consultants, and design and construction firms are presented and discussed. Owner procurement approaches, project risk.

CIV-ENGR 5506 Construction Project Risk Management Credits: 3

Risk management skill sets are necessary tools for the successful project manager. Project Management Institute's (PMI) 6 steps of project risk management constitute the basis of the content, which includes an expanded knowledge of risk identification, qualitative and quantitative risk analysis, risk control, contract risks, and risk transfer options. Business and project risks such as client selection, project planning, and project execution, will be considered as well as legacy risks that remain with the business and participants beyond the project completion. Different risk management strategies will be discussed, including risk avoidance, risk mitigation, and risk transfer.

CIV-ENGR 5515 Engineering Leadership & Ethics Credits: 3

Analysis of leadership, including 360-degree assessment of students' leadership. Discussion of leadership cases and application to engineering careers. Frequent analysis of engineering ethics cases using the NSPE Code.

Prerequisites: Graduate status.

CIV-ENGR 5516 Advanced Engineering Mathematics Credits: 3

The class is a review of and introduction to advanced mathematical theories and methods for graduate students in Civil and Mechanical Engineering. The basic topics include 2nd-order ODE/PDEs, advanced linear algebra, continuous and discrete Fourier transform, advanced probability and statistics methods, and commonly numerical methods (e.g. linear and generalized linear regression, iterative methods, and maximum likelihood estimation. Successful completion of Calculus III and working knowledge of a mathematical software package (Matlab preferred) is recommended.

CIV-ENGR 5517 Advanced Structural Analysis Credits: 3

The course is designed as a continued study of structural analysis methods with emphases on indeterminate structures (trusses, beam/columns, and frames), advanced analysis methods, and introduction to nonlinear structural effects including geometric nonlinearity and inelasticity. Advanced structural analysis methods including force, displacement, matrix, energy, and limit analysis methods will be introduced and practiced. Both computer based and hands on analysis will be involved.

Prerequisites: Undergraduate coursework in structural analysis strongly recommended.

CIV-ENGR 5521 Matrix Methods of Structural Analysis Credits: 3

An introduction to the fundamentals of stiffness and flexibility methods for analysis of truss and frame structures. Application of the computer programs to three dimensional structures.

Prerequisites: CIV-ENGR 321.

CIV-ENGR 5523 Advanced Structural Steel Design Credits: 3

Design of steel building structures. Topics include composite deck and beam design, stability design, plastic design, plate girder design, simple and eccentric shear connections, and partial and fully restrained moment resistant connections.

Prerequisites: CIV-ENGR 323.

CIV-ENGR 5526 Prestressed Concrete Credits: 3

Design and behavior of prestressed concrete structures; material and system or pretensioned and post tensioned systems; prestress losses; flexure, shear, bond, deflections and partial prestress in determinate structures; indeterminate beams-introduction.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 5527 Advanced Reinforced Concrete Design Credits: 3

Advanced Topics in the design of footings, retaining walls two way floor slabs, torsion and continuous structures, shear friction, strut and tie design, precast design.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 5529 Advanced Design of Structures for Blast and Fire Credits: 3

General overview of Blast Design; risk assessment and design criteria; simplified Blast Effects Analysis; ground shock, material response; antiterrorism design considerations; weapons effects and mitigation; internal explosions; progressive collapse analysis; and introduction to Fire Design.

CIV-ENGR 5531 Fund of Geomaterial Characterization Credits: 3

A geomaterial is any construction material comprised primarily of soil. This course overviews state-of-the-art instrumental techniques for analysis of the physio-chemical properties of soils, aggregates, hydraulic concrete, and asphaltic concrete. Evaluation techniques will be applied to determining beneficial reuse opportunities for industrial by-product materials from the Kansas City region. Prerequisites are CE 335 Soil Mechanics and CE378 Civil Engineering Materials, or equivalent. 3 credit hours.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

CIV-ENGR 5532 Foundation Engineering Credits: 3

Design of basic foundation structures, footings, retaining walls, pile foundations, dams.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 5536 Advanced Soil Mechanics Credits: 3

Theoretical soil mechanics as applied to solution of specific engineering problems.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 5542 Hydraulic Structures Credits: 3

A review of the history and hydraulic design procedures for a variety of hydraulic structures including spillways, water measurement structures, canal structures and energy dissipation structures.

Prerequisites: CIV-ENGR 452 (or CIV-ENGR 5552).

CIV-ENGR 5544 Unit Processes in Environmental Engineering Credits: 3

Typical chemical and physical relationships are applied to unit processes of water and wastewater. Troubleshooting for operation problems is emphasized.

Prerequisites: CIV-ENGR 342.

CIV-ENGR 5545 Environmental Engineering Microbiology Credits: 3

Theory and application of fundamental principles of microbiology, toxicology, ecology, and aquatic biology of the microorganisms of importance to environmental engineers.

Prerequisites: CE342.

CIV-ENGR 5546 Limnology Credits: 3

A survey of the physical, biological, and chemical issues important in surface fresh waters. Includes carbonate chemistry, algal assay and Thermocline analysis.

Prerequisites: CHEM 211, MATH 345.

CIV-ENGR 5547 Contracts and Law for Engineers Credits: 3

This course covers a broad range of substantive legal topics giving the student a grounding in the legal implications of certain situations that they may encounter during their careers. The course includes coverage of basic contract law, environmental regulations and compliance, construction law, antitrust law, intellectual property law, civil procedure, employment law, business entities (corporate law) product liability and criminal law and procedure. The objective of the course is to provide students with a fundamental understanding of the wide range of federal and state laws governing behavior in our complicated and rule of law driven society.

CIV-ENGR 5549 Environmental Compliance, Auditing, & Permitting Credits: 3

This course provides a high level overview of the most important statutes that have been enacted to protect the environment. The course covers regulation of hazardous waste, the Clean Air and Clean Water Acts, the Resource Conservation and Recovery Act, the All Appropriate Inquiry Rule and the law addressing sites contaminated with hazardous substances and the technology options employed to remediate those sites. In addition, the course provides coverage of environmental audits and emergency planning for extremely hazardous substances, the regulation of underground storage tanks, safe drinking water and the National Environmental Policy Act among other statutes.

CIV-ENGR 5552 Hydraulics of Open Channels Credits: 3

This is a first course in the fundamentals of open channel (free surface) water flow. Over ninety-nine percent of all the water that is moved on the planet's surface is by free surface flow. Study of free surface flow is essential to the study of storm water drainage systems, flood control, water and wastewater treatment and the study of the form and processes of river evolution. This class provides the fundamental physical principles of free surface flow as a prelude to a significant number of other topics that pertain to engineering and geomorphic analysis.

Prerequisites: CIV-ENGR 351.

CIV-ENGR 5553 Hydraulics and Variability of Rivers Credits: 3

This course introduced concepts of alluvial channel behavior, evolution and change due to natural and man-induced modifications to streams and watersheds. Numerous case studies of river behavior are studied from the perspective of hydraulics, geomorphology and sediment transport.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 5554 River Stability and Scour Credits: 3

Bridge hydraulics, stream stability, scour at bridge piers and abutments, hydraulic modeling of floods, countermeasures for protection of bridge infrastructure.

Prerequisites: CIV-ENGR 452 or CIV-ENGR 5552.

CIV-ENGR 5556 Urban Hydrology Credits: 3

Analysis of urban drainage systems in accordance with published municipal criteria. This course is an in-depth, follow on course for senior undergraduate students interested in the hydrological sciences and for graduate students specializing in water resources. Specifically this course will focus on the engineering procedures and techniques specified by municipalities to design and maintain efficient, safe, storm drainage systems. This course also focuses on the unique issues associated with estimating and designing for rainfall/runoff in urban metropolitan areas, including channel and reservoir routing of floods through stream channels, retention structures, culverts, and storm sewers.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 5563 Construction Law Credits: 3

This course introduces professional, ethical, and legal concepts of the professional practice of engineering, and the role of the consulting engineer, specifically in the A/E/C industry during the design, procurement, and construction processes. A conceptual framework is developed for understanding the industry standard agreements (AIA, EJCDC, ConCensus) and the various participants roles and duties in project execution. The engineer's "professional standard of care" is examined and revisited throughout the semester, specifically what it means to be a "Professional Engineer". Emphasis is placed on project and contract management and the applicable law. Skills are developed in finding online resources of law, legal, and practice advice relevant to the practice of engineering and the construction industry

CIV-ENGR 5565 Project Finance Credits: 3

This class introduces students to the financial concepts faced by engineers in the businesses in which they work and for the projects to which they are assigned. Throughout the course students are reminded of the impact of two key variables – money and time – on their work. While not attempting to turn good engineers into mediocre accountants, the course includes a strong emphasis on managerial accounting. Students will learn how to read and apply financial statements and how to use these same financial concepts in developing pro formas to evaluate and support major capital investments. The effect of time on the value of money, appropriate discount factors, and the internal rate of return will be explored in the class. Students will learn to combine these financial factors with electronic spreadsheets to evaluate business opportunities and practices. All students will be required to develop a comprehensive financial model to evaluate/justify a real world capital project.

CIV-ENGR 5566 Green Building and Sustainable Infrastructure Credits: 3

This course provides a broad overview of what sustainability means to construction and our built environment. Specific green infrastructure rating systems of LEED and Envision will be discussed in detail to quantify the "greenness" of construction of buildings residential subdivisions, highways, roads, and airports. Upon completion of this course students will have a substantial background and understand the aspects needed for the LEED Green Associates and Envision ISI exams. Two major additional aspects of green building important to sustainable infrastructure include stormwater management using "green" techniques and methods to mitigate the urban heat island. The course will also discuss infrastructure project sustainability from a life cycle cost perspective and determining the life cycle inventory of various materials. Upon completion of the course, students will better understand what sustainability means and how it applies in the context of our built environment and have a good idea of how technology will impact our sustainable future.

CIV-ENGR 5567 Introduction to Construction Management Credits: 3

This course will introduce the students to basic construction management related topics including structure of the construction industry, construction drawings and specifications, estimating and bidding, construction contracts, bonds and insurance, planning and scheduling of construction operations, project management, computer techniques.

CIV-ENGR 5568 Construction Planning and Scheduling Credits: 3

This course is intended to provide an in-depth examination of the construction planning and scheduling process, as it relates to civil engineering projects. Topics will include planning and scheduling of construction operations by the critical path method, Network diagramming, scheduling computations, and time-cost trade-offs. Manpower and equipment leveling. Computer and noncomputer techniques.

Prerequisites: CIV-ENGR 467 or CIV-ENGR 5567.

CIV-ENGR 5569 Construction Methods and Equipment Credits: 3

Introduction to methods used to plan, construct and manage heavy civil projects. Topics will include development, project control, equipment productivity, earthmoving fundamentals, formwork design, and other issues in heavy civil projects.

Prerequisites: CIV-ENGR 467 or CIV-ENGR 5567.

CIV-ENGR 5570 Corrosion Engineering Credits: 3

This course will cover the physical interaction of metallic materials with their environments, called corrosion. Corrosion is an electrochemical process and the thermodynamics and kinetics of corrosion processes will be discussed. Students will be expected to identify different forms of corrosion and be able to select appropriate materials for their working environment to prevent corrosion related problems. Second half of the class will concentrate on corrosion of metals in concrete and prevention methods.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 5571 Advanced Portland Cement Concrete Credits: 3

This course will cover topics such as cement chemistry, concrete proportioning, aggregates, mineral and chemical admixtures, fresh and hardened properties of concrete, and durability of concrete. Design and proportioning of concrete mixtures for desired fresh and hardened properties will be emphasized. Specialty concrete types such as high strength/high performance concrete, lightweight concrete, pervious concrete, high volume fly ash concrete, and fiber reinforced concrete will also be covered.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 5573 Durability of Civil Engineering Materials Credits: 3

This course will explore the identification, causes of, and remediation of material-related durability deterioration in civil engineering projects. The primary focus will be on reinforced concrete, plain concrete, and soil for a variety of applications. Course content will be delivered primarily through laboratory activities and handouts. Lab activities will use advanced analysis techniques and help the students identify and measure deterioration mechanisms. Various non-destructive evaluation techniques will be discussed. Students have hands on experiences with samples production, data collection, and data analysis for all of the lab activities.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

Cross Listings: CIV-ENGR 473.

CIV-ENGR 5575 Seismic Design of Structures Credits: 3

Introduction to basic analysis and design principles for the seismic design of buildings (concrete, steel, wood). General seismic principles, codes and loads, static lateral force procedure, dynamic lateral force procedure, topics in rigidities of buildings.

Prerequisites: CIV-ENGR 323 (or CIV-ENGR 422WI), MEC-ENGR 285.

CIV-ENGR 5582 Advanced Traffic Engineering Credits: 3

This course covers the review of traffic flow characteristics, the field survey practices and studies, traffic signal designs, freeway operation, and the introduction to Intelligent Traffic Systems (ITS).

Prerequisites: CIV-ENGR 319.

CIV-ENGR 5584 Pavement Materials, Design, Maintenance, and Rehabilitation Credits: 3

This course will explore the identification, causes of, and remediation of material-related durability deterioration in civil engineering projects. The primary focus will be on reinforced concrete, plain concrete, and soil for a variety of applications. Course content will be delivered primarily through laboratory activities and handouts. Lab activities will use advanced analysis techniques and help the students identify and measure deterioration mechanisms. Various non-destructive evaluation techniques will be discussed. Students have hands on experiences with samples production, data collection, and data analysis for all of the lab activities.

Prerequisites: CIV-ENGR 378WI.

CIV-ENGR 5585 Principles of Railroad Engineering Credits: 3

The engineering analysis and design of railroad systems including the study of the dynamics of track/trains; wheel/rail interaction related to acceleration and braking; horizontal and vertical geometric design of railroads and rail-bed design, rail structures; freight and passenger operations; and, rail-highway interaction and safety.

CIV-ENGR 5599 Thesis Research Credits: 1-6

Independent investigation in the field of civil engineering to be presented in the form of a thesis.

CIV-ENGR 5602 Directed Reading in Civil Engineering Credits: 1-3

Faculty supervised readings course.

Prerequisites: Graduate standing.

CIV-ENGR 5607 Numerical Methods in Engineering Credits: 3

Classification and numerical solution of engineering problems—ordinary and partial differential equations, algebraic equations. Includes initial, boundary, eigen-# and characteristic-value problems.

Prerequisites: MATH 345.

CIV-ENGR 5622 Theory of Elasticity Credits: 3

Stress and strain at a point. General equations of elasticity. Plane stress, plain strain problems; torsion of prismatic bars. Energy methods.

CIV-ENGR 5623 Theory of Plates and Shells Credits: 3

Bending of plates with various loading and boundary conditions. Deformations, stresses in thin shells.

Prerequisites: CIV-ENGR 5622.

CIV-ENGR 5624 Theory of Elastic Stability Credits: 3

Buckling of columns, beams, rings, curved bars, thin plates, shells.

Prerequisites: CIV-ENGR 5622.

CIV-ENGR 5625 Advanced Prestressed Concrete Credits: 3

Design and behavior of prestressed concrete structures; material and system of pretensioned and post tensioned systems; prestress losses; flexure, shear, bond, deflections and partial prestress in determinate structures; indeterminate beams-introduction.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 5629 Adv. Design of Structures for Blast and Fire Credits: 3

General overview of Blast Design; risk assessment and design criteria; simplified Blast Effects Analysis; ground shock, material response; antiterrorism design considerations; weapons effects and mitigation; internal explosions; progressive collapse analysis; and introduction to Fire Design.

CIV-ENGR 5645 Water Quality Modeling Credits: 3

Derivation and application of models for describing oxygen budget, nutrient exchange, and biological productivity in streams, lakes and estuaries.

Prerequisites: CIV-ENGR 342.

CIV-ENGR 5646 Physiochemical Treatment Processes Credits: 3

Fundamental principles, analysis and modeling of physical and chemical processes for water and wastewater treatment.

Prerequisites: CIV-ENGR 342.

CIV-ENGR 5647 Biochemical Treatment Processes Credits: 3

Biochemical principles, kinetic models and energy considerations in the design of biological wastewater treatment processes.

Prerequisites: CIV-ENGR 342.

CIV-ENGR 5648 Environmental Engineering Practicum Credits: 3

Numerical water quality modeling of actual site data for wasteload allocation.

Prerequisites: CIV-ENGR 5645.

CIV-ENGR 5649 Design of Water and Wastewater Treatment Facilities Credits: 3

Development of design criteria and their application to the design of water and wastewater treatment facilities.

Prerequisites: CIV-ENGR 5646 or CIV-ENGR 5647.

CIV-ENGR 5651 Fundamentals of Fluid Mechanics Credits: 3

Fundamentals of fluid motion, lecture and laboratory. Instrumentation, technique and analysis for experimental studies in fluid mechanics.

CIV-ENGR 5655 Sediment Transport Credits: 3

The study of sediment transport in rivers: the relationship between sediment transport and the fundamentals of fluvial geomorphology. Computation of sediment transport and sediment transport modeling.

Prerequisites: CIV-ENGR 452 (or CIV-ENGR 5552).

CIV-ENGR 5656 Advanced Hydraulic Engineering Credits: 3

Rapidly varied flow and design of transition structures. Hydraulic design of spillways, reservoirs and related structures.

CIV-ENGR 5675 Advanced Seismic Design of Structures Credits: 3

Introduction to basic analysis and design principles for the seismic design of buildings (concrete, steel, wood). General seismic principles, codes and loads, static lateral force procedure, dynamic lateral force procedure, topics in rigidities of buildings.

Prerequisites: CIV-ENGR 323 (or CIV-ENGR 422WI), MEC-ENGR 285.

CIV-ENGR 5679 Dynamics of Structures Credits: 3

Study of the dynamic behavior of structures. Analysis of equivalent lumped parameter systems for the design of structures in a dynamic environment.

Prerequisites: CIV-ENGR 276 (or CIV-ENGR 421), MEC-ENGR 484 (or MATH 345, MEC-ENGR 285).

Cross Listings: MEC-ENGR 5679.

CIV-ENGR 5681 Traffic Flow Theory Credits: 3

This course covers the review of macroscopic and microscopic traffic flow characteristics, the traffic flow models, and the traffic simulation applications.

Prerequisites: CIV-ENGR 319.

CIV-ENGR 5682 Transportation Network Modeling Credits: 3

This course is about modeling, solving, and understanding network flow problems, especially in the transportation discipline. This course covers equilibrium traffic assignment, network design, fleet assignment, fleet routing, and crew scheduling.

Prerequisites: CIV-ENGR 319.

CIV-ENGR 5699 Research and Dissertation Credits: 1-9

Doctoral dissertation research.

Computer Science Courses

COMP-SCI 100 Computer Fundamentals and Applications Credits: 3

The course covers essential computer concepts and skills. The emphasis is on using the computer as a tool to enhance productivity. Topics include basic computer concepts such as what to look for when buying a computer and how to avoid hackers and viruses when operating one. Students will also learn how to create word processing, spreadsheet, database, and presentation documents using the Microsoft Office suite of applications. The course prepares students to succeed in both college and business by enabling them to write reports, analyze and chart data, prepare presentations and organize large data sets.

Prerequisites: MATH 110 (or higher) or ALEKS score of 51 (or higher); or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

COMP-SCI 101 Problem Solving and Programming I Credits: 3

Problem solving, algorithms, and program design. Use of structured programming, lists, control structures, recursion, objects and files in Python. Introduction to graphical interface programming. Coding, testing and debugging using a modern development environment.

Prerequisites: MATH 110 or MATH 120 (or higher) or ALEKS score of 51 (or higher); ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

Co-requisites: COMP-SCI 101L.

COMP-SCI 101L Problem Solving & Programming I Lab Credit: 1

Programming exercises and demonstrations to reinforce concepts learned in COMP-SCI 101 and provide additional practice in Python programming.

Prerequisites: MATH 110 or MATH 120 (or higher); ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

Co-requisites: COMP-SCI 101.

COMP-SCI 191 Discrete Structures I Credits: 3

Mathematical logic, sets, relations, functions, mathematical induction, algebraic structures with emphasis on computing applications.

Prerequisites: MATH 110 or MATH 120 (or higher) or ALEKS score of 51 (or higher); or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

COMP-SCI 201L Problem Solving and Programming II - Lab Credit: 1

Programming exercises and demonstrations to reinforce concepts learned in COMP-SCI 201R and provide additional practice in C++ programming.

Prerequisites: COMP-SCI 101.

Co-requisites: COMP-SCI 191 and COMP-SCI 201R.

COMP-SCI 201R Problem Solving and Programming II Credits: 3

Problem solving and programming using classes and objects. Algorithm efficiency, abstract data types, searching and sorting, templates, pointers, linked lists, stacks and queues implemented in C++.

Prerequisites: COMP-SCI 101.

Co-requisites: COMP-SCI 191 and COMP-SCI 201L.

COMP-SCI 281R Introduction to Computer Architecture and Organization Credits: 3

Digital Logic and Data Representation, process architecture and instruction sequencing, memory hierarchy and bus-interfaces and functional organization.

Prerequisites: COMP-SCI 101, COMP-SCI 191.

COMP-SCI 291 Discrete Structures II Credits: 3

Recurrence relations and their use in the analysis of algorithms. Graphs, trees, and network flow models. Introduction to Finite state machines, grammars, and automata.

Prerequisites: COMP-SCI 191.

COMP-SCI 303 Data Structures Credits: 3

Linear and hierarchical data structures, including stacks, queues, lists, trees, priority queues, advanced tree structures, hashing tables, dictionaries and disjoint-set. Abstractions and strategies for efficient implementations will be discussed. Linear and hierarchical algorithms will be studied as well as recursion and various searching and sorting algorithms. Programming concepts include Object Orientation, concurrency and parallel programming. Several in-depth projects in C++ will be required.

Prerequisites: COMP-SCI 191, COMP-SCI 201R, and COMP-SCI 201L.

COMP-SCI 304WI Ethics and Professionalism Credits: 3

Societal and ethical obligations of computer science, information technology, and electrical/computer engineering practice. Topics include obligations of professional practice, electronic privacy, intellectual property, ethical issues in networking, computer security, computer reliability, and whistle-blowing.

Prerequisites: Departmental consent.

COMP-SCI 371 Database Design, Implementation and Validation Credits: 3

This course discusses in detail all aspects of database management systems. It covers in detail database design, implementation, and validation. In addition to these, it briefly covers implementation, tuning, database security, and implementation. The course is suitable for undergraduates and professionals alike.

Prerequisites: COMP-SCI 303.

COMP-SCI 394R Applied Probability Credits: 3

Basic concepts of probability theory. Counting and measuring. Probability, conditional probability and independence. Discrete, continuous, joint random variables. Functions of random variables. Sums of independent random variables and transform methods. Random number generation and random event generation. Law of large numbers, central limit theorem, inequalities. Their applications to computer science and electrical and computer engineering areas are stressed.

Prerequisites: COMP-SCI 201R and COMP-SCI 201L (or E&C-ENGR 216), MATH 220, and STAT 235 (or E&C-ENGR 241).

COMP-SCI 404 Introduction to Algorithms and Complexity Credits: 3

A rigorous review of asymptotic analysis techniques and algorithms: from design strategy (such as greedy, divide-and-conquer, and dynamic programming) to problem areas (such as searching, sorting, shortest path, spanning trees, transitive closures, and other graph algorithms, string algorithms) arriving at classical algorithms with supporting data structures for efficient implementation. Throughout, the asymptotic complexity is studied in worst case, best case, and average case for time and/or space, using appropriate analysis techniques (recurrence relations, amortization). Introduction to the basic concepts of complexity theory and NP-complete theory.

Prerequisites: COMP-SCI 291 and COMP-SCI 303.

COMP-SCI 420 Introductory Networking and Applications Credits: 3

This introductory course examines the systems aspects of the different LAN/MAN/WAN models, including topics such as protocols, network operating systems, applications, management and wireless communication systems. It also examines how the different models are interconnected using bridges and routers.

Prerequisites: COMP-SCI 303.

COMP-SCI 421A Foundations of Data Networks Credits: 3

This introductory course examines the analytical aspects of data communications and computer networking. Topics cover protocol concepts and performance analysis that arise in physical, data link layer, MAC sub layer, and network layer.

Prerequisites: COMP-SCI 291, COMP-SCI 303, COMP-SCI 394R.

COMP-SCI 423 Client/Server Programming and Applications Credits: 3

Fundamentals of Client/Server programming using socket interface; features of network programming including connection oriented and connectionless communication in multiple environments (Windows, UNIX, and Java); other client/server mechanisms, such as RPC and RMI) and formal object environments designed to facilitate network programming (CORBA, COM and Beans).

Prerequisites: COMP-SCI 303, COMP-SCI 431.

COMP-SCI 424 Software Methods and Tools Credits: 3

This course covers a number of software methods and tools that are widely used in industry. These methods include architecture patterns and styles, software frameworks, unit testing, and version control. The covered software tools include Microsoft Project, IBM Rational Systems Modeler, Eclipse Plug-ins, JUnit, Subversion, and GIT. The course emphasizes practice. Students will use these methods and tools to develop a software system from the initial planning to final deployment.

COMP-SCI 431 Introduction to Operating Systems Credits: 3

This course covers concurrency and control of asynchronous processes, deadlocks, memory management, processor and disk scheduling, x86 assembly language, parallel processing, security, protection, and file system organization in operating systems.

Prerequisites: COMP-SCI 303, COMP-SCI 281R.

COMP-SCI 441 Programming Languages: Design and Implementation Credits: 3

This course covers programming language paradigms (object-oriented programming, functional programming, declarative programming, and scripting) and design tradeoffs in terms of binding, visibility, scope, lifetime, type-checking, concurrency/parallelism, and abstraction. It also covers programming language specification, grammar, lexical analysis, exception handling, and runtime considerations.

Prerequisites: COMP-SCI 303.

COMP-SCI 449 Foundations of Software Engineering Credits: 3

The course introduces concepts of software engineering (e.g. definitions, context) and the software development process (i.e. life cycle). Students will get a solid foundation in agile methodology, software requirements, exceptions and assertions, verification and validation, software models and modeling, and user interface design. Various software architectures will be discussed.

Prerequisites: COMP-SCI 303.

COMP-SCI 451R Software Engineering Capstone Credits: 3

The course will focus on the requirements and project planning and managing of medium sized projects with deliverables of each phase of the software life cycle. Additional studies of system integration and architecture, software modeling, requirements specifications, configuration management, verification, validation, software evolution and quality and finally measurement, estimation and economics of the software process.

Prerequisites: COMP-SCI 303, COMP-SCI 449.

COMP-SCI 456 Human Computer Interface Credits: 3

Design of human-computer interfaces considering the psychological and physical abilities of the user. User interface design from a functional and ergonomic perspective. Contents organization, visual organization, navigation. Use of graphical user interface (GUI) and the development of high quality user interfaces.

Prerequisites: COMP-SCI 449.

COMP-SCI 457 Software Architecture: Requirements & Design Credits: 3

Introduction to requirements and design engineering with emphasis on organization and presentation of system requirements and designs for customers, users and engineers; validation of requirements and design with needs of system customer; examination of requirement and design changes during the lifetime of a system; transformation of informal ideas into formal detailed descriptions; examination of the different stages in the design process including architectural design, interface design and data structure design, database design, program and transaction design; examination of domain modeling criteria and examination of design quality attributes; non-functional attributes and project resource allocation.

Prerequisites: COMP-SCI 303.

COMP-SCI 458 Software Testing and Verification Credits: 3

Introduction to principles and techniques of software testing and verification for quality assurance in software development processes.

Prerequisites: COMP-SCI 303.

COMP-SCI 461 Introduction to Artificial Intelligence Credits: 3

This course provides an overview of the field of artificial intelligence. Topics include guided and unguided search, adversarial search, generation and use of heuristics, logic programming, probabilistic reasoning, and neural networks. Application areas studied include game playing, automated proofs, expert systems, and data mining. Recommended preparation: One or more of COMP-SCI 394R, COMP-SCI 404, or an advanced programming elective.

Prerequisites: COMP-SCI 303.

COMP-SCI 465R Introduction to Statistical Learning Credits: 3

This course provides a practical introduction to analytical techniques used in data science and prepares students for advanced courses in machine learning. Topics covered include multivariate distributions, information theory, linear algebra (eigenanalysis), supervised/unsupervised learning, classification/regression, linear/non-linear learning, introduction to Bayesian learning (Bayes rule, prior, posterior, likelihood), parametric/non-parametric estimation.

Prerequisites: COMP-SCI 394R.

COMP-SCI 470 Introduction to Database Management Systems Credits: 3

This course covers database architecture, data independence, schema, Entity-Relationship (ER) and relational database modeling, relational algebra and calculus, SQL, file organization, relational database design, physical database organization, query processing and optimization, transaction structure and execution, concurrency control mechanisms, database recovery, and database security.

Prerequisites: COMP-SCI 303.

Co-requisites: COMP-SCI 431.

COMP-SCI 479 Introduction to Computer Vision Credits: 3

Image is an essential form of information representation and communication in modern society. This course focuses on topics of computer vision, teaching computers how to understand images. Introductory topics include image formation, color and texture features, homograph, key points detection, aggregation, subspace methods in image modeling, and deep learning based image segmentation and classification, with applications in photography, media and entertainment, education, defense and medicine. The course is project based and emphasis hands on experiences for students to solve real world problems.

Prerequisites: E&C-ENGR 484.

COMP-SCI 490 Special Topics Credits: 3

Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

Prerequisites: Junior standing.

COMP-SCI 490CR Special Topics Credits: 1-3

Special topics in Computer Science.

COMP-SCI 490R Special Topics Credits: 1-3

Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

COMP-SCI 491 Internship Credits: 6

Students may participate in structured internships under the joint supervision of an employer and a faculty member. The student must carry out significant professional responsibilities that also have academic merit. The number of credit hours is based on the quality of the academic experience. Available for credit/no credit only and students must be in good standing with at least 18 credit hours of CS/IT counting towards the degree.

Registration by consent number only: petition forms for CS/IT491 Internships are available in the office of CSEE Division and on the web.

Prerequisites: Junior standing, Departmental consent.

COMP-SCI 497 Directed Readings Credits: 1-3

Readings in an area selected by an undergraduate student in consultation with a faculty member. Arrangements must be made prior to registration.

Prerequisites: Departmental consent.

COMP-SCI 498 Research Seminar Credits: 1-3

Undergraduate research based on intensive readings from the current research literature under the direction of a faculty member. Arrangements must be made prior to registration.

Prerequisites: Departmental consent.

COMP-SCI 499 Undergraduate Research Credits: 1-3

Completion of project, including a final written report, under the direction of a faculty member. A prospectus must be accepted prior to registration.

Prerequisites: Departmental consent.

COMP-SCI 5101 Discrete Structures Review for Graduate Students Credits: 1-3

A review of mathematical logic, sets, relations, functions, mathematical induction, and algebraic structures with emphasis on computing applications. Recurrence relations and their use in the analysis of algorithms. Graphs, trees, and network flow models. Introduction to Finite state machines, grammars, and automata. Students must have completed College Algebra before taking this course.

COMP-SCI 5102 Operating Systems Review for Graduate Students Credits: 1-3

This course covers concurrency and control of asynchronous processes, deadlocks, memory management, processor and disk scheduling, parallel processing, and file system organization in operating systems.

Prerequisites: Data Structures, Computer Architecture.

COMP-SCI 5103 Advanced Data Structures and Analysis of Algorithms Review for Graduate Students Credits: 1-3

A review of linear and hierarchical data structures, including stacks, queues, lists, trees, priority queues, advanced tree structures, hashing tables, dictionaries and disjoint-sets. Asymptotic analysis techniques and algorithms: from design strategy (such as greedy, divide-and-conquer, and dynamic programming) to problem areas (such as searching, sorting, shortest path, spanning trees, transitive closures, graph algorithms, and string algorithms) arriving at classical algorithms with efficient implementation. Introduction to the basic concepts of complexity theory and NP-complete theory. Students must have taken courses in Linear Algebra, Discrete Structures, Data Structures, and Applied Probability before taking this course.

COMP-SCI 5514 Optical Fiber Communications Credits: 3

Fiber optic cable and its characteristics, optical sources and transmitters, optical detectors and receivers, optical components such as couplers and connectors, WDM and OFDM techniques, modulation and transmission of information over optical fibers, design of optical networks, single and multihop fiber LANs, optical carrier systems.

Prerequisites: COMP-SCI 411.

COMP-SCI 5525 Cloud Computing Credits: 3

Cloud computing systems operate in a very large scale, and are impacting the economics and the assumptions behind computing significantly. This special topics course provides a comprehensive overview of the key technical concepts and issues behind cloud computing systems such as compute, storage and network resource virtualization and management. We will cover a range of topics of cloud computing including: Cloud system architectures and taxonomy, Computing virtualization techniques, Virtual machine resource management, Data center networking issues, Big data transfer protocols and management, Large scale distributed file system examples (Google File System), Cloud programming.

Prerequisites: CSEE 5110, COMP-SCI 431.

COMP-SCI 5531 Advanced Operating Systems Credits: 3

Components of an operating system, scheduling/routing mechanisms, process control blocks, design and test various operating system components.

Prerequisites: COMP-SCI 431.

COMP-SCI 5540 Principles of Big Data Management Credits: 3

This course will introduce the essential characteristics of Big Data and why it demands rethinking how we store, process, and manage massive amounts of structured and unstructured data. It will cover the core technical challenges in Big Data management i.e., the storage, retrieval, and analysis of Big Data. It will emphasize on fundamental concepts, analytical skills, critical thinking, and software skills necessary for solving real-world Big Data problems. Tools such as Apache Hadoop, Pig, Hive, HBase, and Apache Spark will be covered. Extensive reading of research papers and in-class presentations will be heavily emphasized in this class.

Prerequisites: COMP-SCI 431 and COMP-SCI 470.

COMP-SCI 5542 Big Data Analytics and Applications Credits: 3

Big Data analytics focus on analyzing large amounts of data to find useful information and to make use of the information for better business decisions. This course introduces students to the practice and potential of big data analytics and applications. In this course, students will have hands-on experience with Big Data technologies (Hadoop and its ecosystems) and tools (Cloudera, RMahout, HBase) for the analysis of large data sets across clustered systems. Students will learn how to develop highly interactive applications for business intelligence.

Prerequisites: COMP-SCI 451.

COMP-SCI 5543 Real-time Big Data Analytics Credits: 3

This course teaches students fundamental theory and practice in the field of big data analytics and real time distributed systems for real time big data applications. In this course, students will have hands-on experience for the development of real-time applications with various tools such as Twitter's Storm, Apache Flume, Apache Kafka for real time analysis of stream data such as twitter messages and Instagram images.

Prerequisites: COMP-SCI 451.

COMP-SCI 5551 Advanced Software Engineering Credits: 3

Current concepts in software architecture and design, comparative analysis for design, object-oriented software design, software quality criteria for evaluation of software design. Introduction to metrics, project management and managerial ethics.

Prerequisites: COMP-SCI 451R.

COMP-SCI 5552A Formal Software Specification Credits: 3

Formal modeling including specification and deviation of abstract data types, completeness issues in the design of data types and data structures, implementation of data structures from a formal data type specification, verification of abstract to concrete data mapping.

Prerequisites: COMP-SCI 291, COMP-SCI 303.

COMP-SCI 5553 Software Architecture and Design Credits: 3

The course introduces a number of basic concepts and enabling technologies of software architecture, including architecture styles, architecture description languages, architecture-implementation mapping, and product line architectures. It also covers some advanced topics, such as the REST architecture style and Web Services. Students will read research papers, analyze the existing results, write critiques, give presentations, and exercise the research results with real examples. In addition, students will have an opportunity to work in groups and study the architecture of some real software systems.

Prerequisites: COMP-SCI 451R.

COMP-SCI 5555 Software Methods and Tools Credits: 3

Software methods and tools are extensively used in current software production to improve software productivity and quality. In this course, we are going to learn a number of popular software methods and tools being used in industry. These methods include object-oriented design and analysis (e.g. UML, design patterns), architecture styles, code generation, and unit testing. The covered software tools include Microsoft Project, IBM Rational Systems Developer, Eclipse Plug-ins, Emacs, JUnit, Subversion, and GIT. The course emphasizes practice, and students will be using these methods and tools to develop a software system, from the initial planning to the final deployment.

COMP-SCI 5560 Knowledge Discovery and Management Credits: 3

This course teaches students fundamental theory and practice in the field of knowledge discovery and management and also provides them with hands-on experience through application development.

Prerequisites: COMP-SCI 5551, COMP-SCI 461.

COMP-SCI 5561 Advanced Artificial Intelligence Credits: 3

AI systems and their languages, implementations and applications, case studies of various expert systems, current research topics in AI, logic programming using PROLOG.

Prerequisites: COMP-SCI 461.

COMP-SCI 5565 Introduction to Statistical Learning Credits: 3

Introduction to Machine Learning; Multivariate Distributions; Information Theory; Linear Algebra (Eigenanalysis); Supervised/Unsupervised Learning, Classification/Regression; Linear/Non-linear Learning; Introduction to Bayesian Learning (Bayes rule, Prior, Posterior, Maximum Likelihood); Parametric/Non-parametric Estimation. Recommended preparation: MATH 300; Familiarity with MATLAB.

Prerequisites: COMP-SCI 394R.

COMP-SCI 5566 Introduction to Bioinformatics Credits: 3

This course introduces students to the field of Bioinformatics with a focus on understanding the motivation and computer science behind existing Bioinformatic resources, as well as learning the skills to design and implement new ideas.

Prerequisites: COMP-SCI 303, a course or background in Biology (Genomics or Meta Models preferred).

COMP-SCI 5567 Machine Learning for Data Scientists Credits: 3

This course teaches the theoretical basis of methods for learning from data, illustrated by examples of applications to several domains. Recommended preparation: COMP-SCI 5565.

Prerequisites: COMP-SCI 303, COMP-SCI 394R.

COMP-SCI 5568 Fundamentals of Probabilistic Graphical Models Credits: 3

Many real world systems are probabilistic in nature. Probability theory gives us the basic tools for modeling many real world systems, allowing us to understand complex behavior. Probabilistic graphical models allow us to model complex probabilistic relationships using graphs. This framework, which spans methods such as Bayesian networks and Markov networks, allows us to manipulate complex probability distributions that often involve hundreds or even many thousands of variables. These methods have been used for an enormous range of applications, which include: web search, turbo coding, robot navigation, image identification, epidemic identification in complex networks, medical diagnosis and speech recognition. Recommended preparation: COMP-SCI 5565.

Prerequisites: COMP-SCI 303, COMP-SCI 394R.

COMP-SCI 5570 Architecture of Database Management Systems Credits: 3

Covers in detail, architecture of centralized database systems, database processing, management of concurrent transactions, query processing, query optimization, data models, database recovery, datawarehousing, workflow, World Wide Web and Database performance, and reviews the architecture of some commercial centralized database systems.

Prerequisites: COMP-SCI 431, COMP-SCI 470.

COMP-SCI 5572 Mobile Computing Credits: 3

This course covers in detail the architecture of mobile and wireless network. It discusses and develops relevant concepts and algorithms for building mobile database systems (MDS), which is necessary for managing information on the air and E-commerce.

Prerequisites: COMP-SCI 5570.

COMP-SCI 5573 Information Security and Assurance Credits: 3

This course deals with information security and assurance and covers the concepts necessary to secure the cyberspace. It introduces security models, assurance policies, security policies and procedures, and technology. It enables students to understand the need for information assurance, identify security vulnerabilities, and devise security solutions that meaningfully raise the level of confidence in computer systems. It teaches students how to design secured database and computer systems.

Prerequisites: COMP-SCI 470.

COMP-SCI 5574 Large Scale Semistructured Data Management Credits: 3

This course will cover topics related to managing large scale semistructured data modeled using the Extensible Markup Language XML and the Resource Description Framework (RDF). This will include storing XML (e.g. natively, using a relational database), indexing XML (e.g. numbering schemes, structural indexes, sequencing paradigms), XML query processing algorithms (e.g. join-based, subsequence-based), RDF DATA STORAGE (e.g. triple stores, graph stores), RDF indexing and SPARQL query processing algorithms. The course will also cover emerging many core processor architectures (e.g. Intel Single-chip Cloud Computer) and the opportunities they provide for building next-generation semistructured data management solutions. Extensive reading of research papers and in-class presentations will be a core part of this class. Grades will be based on in-class presentations of research papers, exams, and a research project (to be done in groups).

Prerequisites: COMP-SCI 470.

COMP-SCI 5581 Parallel Computer Architecture I Credits: 3

Parallelism in computer architecture, pipelined processors, array processors and multi-processor systems, algorithms for SISD, SIMD, MISD and MIMD organizations, vectorization, pipelining algorithms.

COMP-SCI 5582 Computer Vision Credits: 3

The image is an essential form of information representation and communication in modern society. This course focuses on topics of computer vision, teaching computer how to understand images. Topics include image formation, color and texture features, key points detection, aggregation, subspace methods in image modeling, and deep learning image classification, with many applications in photography, media and entertainment, education, defense and medicine.

COMP-SCI 5590 Special Topics Credits: 1-6

Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

COMP-SCI 5590AW Special Topics Credits: 1-3**COMP-SCI 5590BD Special Topics Credits: 1-3****COMP-SCI 5590CC Special Topics In Computer Science Credits: 1-3****COMP-SCI 5590CI Special Topics Credits: 1-3****COMP-SCI 5590CN Special Topics Credits: 1-3****COMP-SCI 5590HI Special Topics Credits: 1-3****COMP-SCI 5590MT Special Topics Credits: 1-3****COMP-SCI 5590NN Special Topics Credits: 1-3**

Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

COMP-SCI 5590OS Special Topics Credits: 1-3

COMP-SCI 5590PB Special Topics Credits: 1-3
Special Topics

COMP-SCI 5590PG Special Topics In Computer Science Credits: 1-3

COMP-SCI 5590SA Special Topics In Computer Science Credits: 1-3

COMP-SCI 5590WW Special Topics Credits: 1-3

COMP-SCI 5590WX Special Topics Credits: 1-3

COMP-SCI 5590XX Special Topics Credits: 1-3

COMP-SCI 5590YL Special Topics Credits: 1-3

COMP-SCI 5592 Design and Analysis of Algorithms Credits: 3

Combinatorial analysis, searching and sorting, shortest path algorithms, spanning trees, search and traversal techniques, backtracking, branch and bound, heuristics, algebraic simplification and transformation.

Prerequisites: COMP-SCI 303 and COMP-SCI 404.

COMP-SCI 5596A Computer Security I: Cryptology Credits: 3

Study of theory, and algorithmic techniques, of the fields of number theory and cryptology, as they are applied in the general area of computer and network security.

Prerequisites: COMP-SCI 291.

COMP-SCI 5596B Computer Security II: Applications Credits: 3

Application of the algorithmic techniques learned in COMP-SCI 5596A to provide suitable security countermeasures to the variety of security threats across the spectrum of computing.

Prerequisites: COMP-SCI 5596A.

COMP-SCI 5597 Directed Readings Credits: 1-3

Readings in an area selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

COMP-SCI 5598 Research Seminar Credits: 1-3

Graduate research based on intensive readings from the current research literature under the direction of a faculty member. Arrangements must be made prior to registration.

COMP-SCI 5599 Research and Thesis Credits: 1-6

A project investigation leading to a thesis, or written report under the direction of a faculty member. A prospectus must be accepted prior to registration.

COMP-SCI 5690 Advanced Special Topics Credits: 1-3

A lecture course presenting advanced research level topics. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

Prerequisites: Ph.D. Candidacy.

COMP-SCI 5690ND Advanced Special Topics Credits: 1-3

COMP-SCI 5697 Directed Readings Credits: 1-3

Readings in an area selected by the doctoral student in consultation with a doctoral faculty member. Arrangements must be made prior to registration.

COMP-SCI 5698 Advanced Research Seminar Credits: 1-3

Advanced research by a group of doctoral students based on intensive readings from the current research literature under the direction of one or more doctoral faculty. Original research results of each student are exchanged by presentations and group discussion. Arrangements must be made prior to registration.

COMP-SCI 5699A Research And Dissertation Research In Computer Science Credits: 1-12

Doctoral research in computer science.

COMP-SCI 5899 Required Grad Enrollment Credit: 1

Computer Sci Electrical Engr Courses

CSEE 5110 Network Architecture I Credits: 3

This course provides an introduction to fundamental concepts and principles in the design and implementation of computer communication networks, their protocols, and architectures. Topics to be covered include: layering, and addressing, naming, routing, internetworking, Internet protocols, reliable transfer, congestion control, link control, multiple media access, and network measurement and management.

Prerequisites: COMP-SCI 421A, COMP-SCI 431.

CSEE 5111 Network Architecture II Credits: 3

In this course, advanced principles, protocols, and architectures of computer networks will be studied with specific emphasis on emerging technologies. The focus will be on the latest networking protocol designs with particular attention to the TCP/IP and application layers.

Prerequisites: CSEE 5110.

CSEE 5113 Network Routing Credits: 3

Algorithms, protocols and analysis for network routing. Routing in different networks such as circuit-switched networks, Internet, broadband networks, and transmission networks are covered.

Prerequisites: CSEE 5110, CSEE 5112.

CSEE 5590 Special Topics Credits: 1-3

This course is intended to allow faculty and visiting scholars to offer special courses in selected topics.

CSEE 5690 Advanced Special Topics Credits: 1-3

A lecture course presenting advanced research level topics. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

CSEE 5697 Directed Readings Credits: 1-3

Readings in an area selected by the doctoral student in consultation with a doctoral faculty member. Arrangements must be made prior to registration.

CSEE 5699 Research and Dissertation Research in Telecommunications and Computer Networking Credits: 1-12

Doctoral Research in Telecommunications and Computer Networking.

CSEE 5899 Required Graduate Enrollment Credit: 1

Required Graduate Enrollment.

Electrical Computer Engr Courses

E&C-ENGR 130 Engineering Graphics Credits: 3

Introduction to Engineering Graphics with the use of the Computer Aided Design tools AutoCAD and SolidWorks. Introduction to 2D design with AutoCAD and introduction to 3D design with SolidWorks. Also an introduction to electrical circuit diagrams. No previous 2D or 3D CAD experience is necessary to take this class.

E&C-ENGR 216 Engineering Computation Credits: 4

Development, analysis and synthesis of structured computer programs for solving engineering problems in the Python, MATLAB, and C languages. Introduction to algorithms and data structures.

Prerequisites: MATH 110 or MATH 120 (or higher) or ALEKS score of 51 (or higher); or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

E&C-ENGR 217 Engineering Computation Credits: 2

Students learn to develop, analyze and synthesize structured computer programs for solving engineering problems in the Python, MATLAB, and C languages. This course also provides an introduction to algorithms and data structures. This course is available by approval of the degree program committee if transfer credit has been approved for one of the listed programming languages.

Prerequisites: MATH 110 or MATH 120 (or higher) or ALEKS score of 51 (or higher); or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

E&C-ENGR 226 Logic Design Credits: 3

Design of combinational logic circuits, logic minimization techniques, design of sequential logic circuits, state machine design techniques, digital system design.

Co-requisites: E&C-ENGR 227.

E&C-ENGR 227 Logic Design Laboratory Credit: 1

Laboratory for E&C-ENGR 226. Experimental topics related to the design of combinational and sequential logic systems and small digital systems.

Co-requisites: E&C-ENGR 226.

E&C-ENGR 228 Introduction to Computer Design Credits: 3

This course covers computer organizations and fundamental computer design techniques. It also discusses design of computer data unit, control unit, input-output, microprogramming. Memory systems (RAM memory, Cache memory, interrupts, secondary memory) and direct memory access design is also discussed. Verilog HDL design is introduced and applied to small digital systems.

Prerequisites: E&C-ENGR 226 and E&C-ENGR 227.

Co-requisites: E&C-ENGR 229.

E&C-ENGR 229 Introduction to Computer Design Laboratory Credit: 1

This laboratory course covers experimental topics related to the design of digital computer systems and arithmetic circuits which students study in the E&C-ENGR 228.

Prerequisites: E&C-ENGR 226 and E&C-ENGR 227.

Co-requisites: E&C-ENGR 228.

E&C-ENGR 241 Applied Engineering Analysis I Credits: 3

Partial differentiation, multiple integrals, first and second order ordinary differential equations, partial fractions, and Laplace transform solution of Ordinary Differential Equations.

Prerequisites: MATH 220 or MATH 268 (with a grade of C or better).

E&C-ENGR 250 Engineering Mechanics and Thermodynamics Credits: 3

This course concentrates on practical concepts in mechanics and thermodynamics for EC-ENGR majors, such as the practical use of forces, moments, couples, centroids, and moment of inertia, friction, manipulating systems of rigid bodies in motion and applying conservation of energy to gases, liquids, and solids. Materials will also be addressed.

Prerequisites: MATH 220 or MATH 266; and PHYSICS 240 (both with a grade of C or better).

E&C-ENGR 276 Circuit Theory I Credits: 3

Kirchoff's circuit laws, Ohm's Law, nodal and mesh analyses, source transformations, superposition, Thevenin and Norton equivalents, transient analysis of 1st and 2nd order systems. AC circuit analysis, phasors, impedance, sinusoidal steady-state responses, operational amplifiers and PSpice.

Prerequisites: PHYSICS 250 and E&C-ENGR 241 (or MATH 345 as a pre or co-req) with a grade of C or better.

E&C-ENGR 277 Circuit Theory I Lab Credit: 1

Introduction to the use and limitations of basic instruments used in electrical testing and measurement. Experimental techniques and laboratory safety. Data gathering, interpretation and presentation. Preparation of laboratory reports. Experimental work supporting theoretical concepts developed in E&C-ENGR 276.

Co-requisites: E&C-ENGR 276.

E&C-ENGR 302 Electromagnetic Waves and Fields Credits: 3

Elements of vector calculus: curl, gradient and divergence differential operations; vector identities; integration of vectors Stokes and Gauss's theorems, laplacian; review of electrostatic and magnetostatic fields; boundary value problems; boundary conditions; time-harmonic fields and phasors; Maxwell's equations, Poynting vector; vector and scalar wave equations; electromagnetic wave propagation in free-space, lossy and lossless dielectrics and conductors; polarization; reflections at normal and oblique incidences; transmission line parameters; telegraphers equations; input impedance and VSWR; Smith Chart and impedance matching; transients on transmission lines.

Prerequisites: E&C-ENGR 341R, E&C-ENGR 376.

Co-requisites: E&C-ENGR 303.

E&C-ENGR 303 Electromagnetic Waves and Fields Lab Credit: 1

The goal of the lab is to complement and demonstrate the main concepts of transmission line and microwave theory using hands on experiments. The experiments will introduce students to microwave sources, components, and transmission lines. Moreover, the experiments will demonstrate the concepts of wave propagation, attenuation, power splitting, reflection, and standing waves. Moreover, students will design and conduct experiments to characterize unknown loads and antennas. Recommended preparation: MATLAB knowledge/proficiency.

Co-requisites: E&C-ENGR 302.

E&C-ENGR 330 Electronic Circuits Credits: 3

Application of operational amplifiers, semiconductor device physics, elementary analysis and design of analog electronic circuits that utilize diodes, BJT's, and MOSFET's in single and multistage amplifiers with passive loads and power amplifiers; DC biasing, small signal analysis and calculation of frequency responses. The use of CAD (Spice) in the analysis and design of electronic circuits.

Prerequisites: E&C-ENGR 276 and E&C-ENGR 334.

Co-requisites: E&C-ENGR 331.

E&C-ENGR 331 Electronic Circuits Laboratory Credit: 1

Laboratory experiments in the application of operational amplifiers, the analysis, design, and testing of single and multistage amplifiers with passive loads, and the measurement of frequency response. Recommended preparation: E&C-ENGR 276, E&C-ENGR 277.

Co-requisites: E&C-ENGR 330.

E&C-ENGR 334 Semiconductors and Devices Credits: 3

Junction theory, semiconductor diodes and models, bipolar transistors and models, field-effect transistors and models, selected electron devices and models.

Prerequisites: E&C-ENGR 341R, PHYSICS 250.

E&C-ENGR 341R Applied Engineering Analysis II Credits: 3

Complex numbers; Euler's formulas, analytic functions, Taylor and Laurent series; Cauchy residue theorem and application to evaluation of integrals; linear algebra, eigenvalue and eigenvectors; Fourier series and transforms.

Prerequisites: E&C-ENGR 241 (with a grade of C or better).

E&C-ENGR 358 Introduction to Control Systems Credits: 3

Study of feedback techniques, with applications to control systems. Includes modeling, applications of Bode plot, root locus, state-variable, and Nyquist methods.

Prerequisites: E&C-ENGR 376.

E&C-ENGR 376 Circuit Theory II Credits: 3

Power, transformers, three-phase circuits, two-port networks, the theory and application of Laplace Transforms.

Prerequisites: E&C-ENGR 276.

Co-requisites: E&C-ENGR 377.

E&C-ENGR 377 Circuit Theory II Lab Credit: 1

Continuation of E&C-ENGR 277 introducing the use of additional instruments used in electrical testing and measurements. Statistical data evaluation methods. Experimental work supporting concepts developed in E&C-ENGR 376.

Prerequisites: E&C-ENGR 277.

Co-requisites: E&C-ENGR 376.

E&C-ENGR 380 Signals and Systems Credits: 3

Continuous and discrete-time signals and systems, frequency response, Fourier analysis of discrete and continuous signals and systems and use of z, Fourier, Discrete Fourier, and Fast Fourier Transforms.

Prerequisites: E&C-ENGR 341R.

Co-requisites: E&C-ENGR 381.

E&C-ENGR 381 Signals and Systems Lab Credit: 1

Computer Laboratory for E&C-ENGR 380. Various signal processing software programs (MATLAB and DSP) are used to investigate properties and applications of continuous and discrete time signals and systems.

Co-requisites: E&C-ENGR 380.

E&C-ENGR 400 Problems in Electrical and Computer Engineering Credits: 1-4

Analytic or experimental problems pertaining to electrical or computer engineering.

Prerequisites: Departmental consent.

E&C-ENGR 401 Topics In Electrical And Computer Engineering Credits: 1-4

Topics covering current and new technical developments in electrical or computer engineering.

Prerequisites: Senior standing.

E&C-ENGR 401PQ Topics in Electrical Engineering Credits: 1-4

Topics covering current and new technical developments in electrical or computer engineering.

Prerequisites: Senior standing.

E&C-ENGR 402 Senior Design I Credits: 2

First capstone design course in electrical and computer engineering. Provides and accounts for laboratory, library, research and other work needed for the development of the project. Stresses oral presentations.

Prerequisites: E&C-ENGR 330 and E&C-ENGR 420 or E&C-ENGR 466.

E&C-ENGR 403 Senior Design II Credit: 1

Second capstone design course in electrical and computer engineering. Project management, professional practice, ethical and engineering economic considerations and development of written and oral presentation skills. Provides laboratory experience in prototyping, fabrication, and troubleshooting of the design project. Stresses written and oral presentation.

Prerequisites: E&C-ENGR 402.

E&C-ENGR 412 Principles of RF/Microwave Engineering Credits: 3

General aspects of TE, TM and TEM mode propagation in waveguides; circular waveguides; optical waveguides; wave propagation on dielectric backed conductors; wire antennas; equivalence principle and aperture antennas; antenna impedance and mutual coupling in arrays; array beamforming; scattering matrix representations; impedance matching; resonators; filters, couplers and power-dividers; microstriplines and striplines; r.f. propagation in wireless and radar systems; conformal mapping techniques and applications (optional). Recommended preparation: MATLAB proficiency.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380, E&C-ENGR 381.

E&C-ENGR 414 Microwave Engineering for Wireless Systems Credits: 3

Microwave networks; s-, z-, y- and abcd matrices; signal flow graphs; circular waveguides; stripline microstrip characteristics; impedance transformers; power dividers and directional couplers; microwave filters; microwave resonators; active microwave circuits.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380, MATLAB proficiency.

E&C-ENGR 415 Microwave Engineering for Wireless Systems Lab Credit: 1

Design performance simulation of microwave filters and active microwave circuits; comparative analysis of impedance transformers; use of CAD tools in microwave circuit design.

Prerequisites: E&C-ENGR 414.

E&C-ENGR 416 Neural and Adaptive Systems Credits: 3

A hands-on introduction to the theory and applications of neurocomputing. Includes classification, function approximation, supervised and unsupervised learning, time series analysis, and adaptive filtering using different feed-forward and recurrent artificial neural networks.

Prerequisites: COMP-SCI 394R, E&C-ENGR 341R.

E&C-ENGR 418 Introduction to Radar Systems Credits: 3

Radar equation; MT, Pulsed Doppler and Tracking Radars; detection of and information from radar signals; radar antennas; transmitters and receivers; radar propagation and clutter.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380, E&C-ENGR 381.

E&C-ENGR 420 Advanced Engineering Computation Credits: 2

Programming and computational analysis principles and techniques for various problems in embedded programming, applied computation, and signal processing.

Prerequisites: E&C-ENGR 216.

E&C-ENGR 426 Microcomputer Architecture and Interfacing Credits: 3

Advanced microprocessor architecture and programming; interfacing and programming of peripherals. Parallel and serial communication, interrupts, direct memory access, coprocessors.

Prerequisites: E&C-ENGR 226.

E&C-ENGR 427 Microcomputer Laboratory Credit: 1

Laboratory for E&C-ENGR 426. Microprocessor hardware and software involving interfacing of peripherals to 8-bit and 16-bit microprocessor. Simple D/A conversion, music composition, and various programmable controllers.

Prerequisites: E&C-ENGR 227.

Co-requisites: E&C-ENGR 426.

E&C-ENGR 428R Embedded Systems Credits: 3

This course examines the hardware/software aspects associated with developing microcontroller-based computer systems. The students learn about the architecture and assembly language for popular microcontrollers and how to take advantage of a variety of input/output options that include binary ports, A/D and D/A converters, communication ports, and interfacing techniques for various applications.

Prerequisites: E&C-ENGR 426, E&C-ENGR 427.

Co-requisites: E&C-ENGR 429.

E&C-ENGR 429 Embedded Systems Laboratory Credit: 1

The laboratory introduces the students to a variety of challenging design projects using microcontroller interfacing techniques to develop real world applications, such as digital thermometer and digital pressure monitoring systems. Students must produce an individual design project.

Prerequisites: E&C-ENGR 426, E&C-ENGR 427.

Co-requisites: E&C-ENGR 428R.

E&C-ENGR 436 Power Electronics I Credits: 3

Power electronic device characteristics, important circuit and component concepts, phase controlled rectifiers, line communicated inverters and AC phase control. Includes laboratory projects.

E&C-ENGR 442 Introduction to VLSI Design Credits: 3

The goal of this course is to familiarize students with the design fundamentals and layout of Very Large Scale Integrated (VLSI) Circuits. The primary focus of this course is complementary MOSFET (CMOS) based digital integrated circuits design and analysis. However, the topics regarding transistor, interconnect, and circuit implementation are relevant to digital, analog and mixed-signal integrated circuits. This course is designed to be a comprehensive foundation for advanced micro- and nano-electronics courses. To familiarize the students with the realities of design complexities they will get exposure to commercial CAD tools in a separate lab co-requisite class. Recommended preparation: Basic Electronics.

Prerequisites: E&C-ENGR 330.

E&C-ENGR 443 Introduction to VLSI Design Laboratory Credits: 3

The goal of this course is to teach basic design concepts and implementation issues of digital integrated circuits. Various methods of designing and optimizing very large scale integrated (VLSI) circuits will be introduced in the lab projects. To familiarize students with the realities of integrated circuit design and layout, they will get exposure to industry-standard computer aided design (CAD) and simulation tools for VLSI circuits and systems. The students will be using these CAD tools in the following levels – schematic, layout, parasitic extraction, and circuit simulation.

Co-requisites: E&C-ENGR 330.

E&C-ENGR 454 Robotic Control and Intelligence Credits: 3

Introduces robotics; robot system characteristics; robot motive power systems; geometric structure of robots; sensors and feedback; control applications and algorithms; data acquisition and output actuation functions; robots and Artificial Intelligence; microprocessor applications in robotics.

Prerequisites: E&C-ENGR 226 (or E&C-ENGR 426), E&C-ENGR 358.

E&C-ENGR 455 Instrumentation and Control Credits: 3

The instrumentation and control of industrial processes and systems, introduction to Programmable Logic Controllers, and simulation modeling of various systems.

Prerequisites: E&C-ENGR 358.

E&C-ENGR 457 Fundamentals of Solar Photovoltaic Cells Credits: 3

The science and engineering of solar cell/solar photovoltaic (PV) spans several disciplines namely physics, chemistry, electronic and electrical engineering. Even though solar cell related researches are carried out in those traditional disciplines but it is not widely taught as a comprehensive course. This course highlights the fundamental science and engineering of solar PV devices, solar energy conversion as well as solar cell manufacturing issues. It covers from basic to modern solar PV devices, including typical solar cell materials, basic device physics, ideal and non-ideal models, device parameters and design, and device fabrication.

Prerequisites: E&C-ENGR 330 or E&C-ENGR 334.

E&C-ENGR 458 Automatic Control System Design Credits: 3

Techniques for feedback system design analysis: compensator design examples, state variable methods, non-linear systems, and sampled-data control systems.

Prerequisites: E&C-ENGR 380, E&C-ENGR 358.

E&C-ENGR 459 Introduction to Photovoltaic Systems Credits: 3

The course presents an updated background of world energy production and consumption, a summary of the solar spectrum, how to locate the sun, and how to optimize the capture of its energy, as well as the various components that are used in PV systems. Also studied are why certain photovoltaic (PV) designs are used in certain ways, as well as how the design process is implemented. Economic and environmental issues involved in PV design criteria are discussed along with the most recently available technology, design, and installation practices.

E&C-ENGR 460 Introduction to Power Systems Credits: 3

Magnetic circuitry in general and in machinery; DC machine theory, operation, applications, transformer circuits, synchronous machine theory, operation applications, basic principles of energy conversion, introduction to power electronics, and basic principles of power transmission and control.

Prerequisites: E&C-ENGR 376.

E&C-ENGR 463 Advanced Sustainable Energy Systems Engineering Credits: 3

Sustainable Energy Systems Engineering focuses on understanding the theory and application of emerging energy technologies, including solar, wind, biomass, oceanic, geothermal, hydropower, fuel cell (hydrogen), nuclear, and other more exotic energy sources. A premise of the course is that a sustainable energy technology must both be technically feasible and economically viable. Renewable energy sources will be highlighted with a focus on projections for a sustainable energy future. Graduate students will be assigned an additional project to work.

Prerequisites: E&C-ENGR 466.

E&C-ENGR 466 Power Systems I Credits: 3

Electric power system fundamentals, rotating machines in general, synchronous, induction and DC machines, methods of power system analysis and design, modeling of power systems components such as transmission lines, transformers and generators, and analysis of steady state operation of power system under balanced conditions.

Prerequisites: E&C-ENGR 376.

E&C-ENGR 467 Power Systems II Credits: 3

Power system matrices. Power flow analysis. Gauss-Seidel and Newton-Raphson techniques. Fast-decoupled load flow. Economic dispatch. Voltage control system. Power system control.

Prerequisites: E&C-ENGR 358, E&C-ENGR 466.

E&C-ENGR 468 Electric Power Distribution Systems Credits: 3

Operation and design of utility and industrial distribution systems including distribution system planning; load characteristics; application of distribution transformers; design of subtransmission lines, distribution substations, primary systems, secondary systems; application of capacitors; voltage regulation and reliability.

Prerequisites: E&C-ENGR 466.

E&C-ENGR 474 Introduction to Communication Systems Credits: 3

Introduction to principles and fundamentals of communication systems. Signal representation and analysis, Fourier transform and applications, probability and random variables, analog and digital modulation techniques.

Prerequisites: COMP-SCI 394R, E&C-ENGR 380.

E&C-ENGR 477 Introduction to Wireless Networking Credits: 3

Principles of the design and analysis of wireless networks. Study of medium access control, administration routing and adaptation to the complexities of the wireless environment. Investigation of networking issues in the IEEE 802.11 family of standards, IEEE 802.15 (Bluetooth), Long Term Evolution, cellular, satellite, ad hoc, and sensor networks.

Prerequisites: COMP-SCI 394R.

E&C-ENGR 480 Digital Signal Processing Credits: 3

Concepts, analytic tools, design techniques used in computer processing of signals: signal representation, sampling, discrete-time system analysis, recursive/non-recursive filters, design/implementation of digital filters.

Prerequisites: E&C-ENGR 380.

E&C-ENGR 484 Digital Image Processing Credits: 3

Fundamentals of digital image processing hardware and software, including digital image acquisition, display, compression, transforms and segmentation. Recommended preparation: Experience in a high-level programming language.

Prerequisites: E&C-ENGR 380.

E&C-ENGR 486 Pattern Recognition Credits: 3

Pattern recognition techniques of applications such as automatic recognition for speech, visual inspection systems, clinical medicine, automatic photographic recognition systems and advanced automation systems.

Prerequisites: E&C-ENGR 380.

E&C-ENGR 491 Internship Credits: 6

Students may participate in structured internships under the joint supervision of an employer and a faculty member. The student must carry out significant professional responsibilities that also have academic merit. The number of credit hours is based on the quality of the academic experience. Available for credit/nocredit only and students must be in good standing with at least 18 credit hours of EC-ENGR courses counting towards the degree. Registration by consent number only: petition forms for E&C-ENGR 491 internships are available in the office of CSEE Division and on the web.

Prerequisites: At least 18 hours of EC-ENGR courses toward the degree.

E&C-ENGR 497 Directed Readings Credits: 1-4

Readings in an area selected by an undergraduate student in consultation with a faculty member. Arrangements must be made prior to registration.

Prerequisites: Departmental consent.

E&C-ENGR 499 Undergraduate Research Credits: 1-3

Completion of a project, including a final written report, under the direction of a faculty member. A prospectus must be accepted prior to registration.

Prerequisites: Departmental consent.

E&C-ENGR 5316 Artificial Neural and Adaptive Systems Credits: 3

This graduate course is a hands-on introduction to theory and applications of neurocomputing, including: classification, function approximation, supervised and unsupervised learning, time series analysis, and adaptive filtering using different feed-forward and recurrent artificial neural networks.

Prerequisites: E&C-ENGR 341R (or COMP-SCI 5590CI).

E&C-ENGR 5318 Dynamical Systems and Complex Networks Credits: 3

An overview of classical dynamical systems, and its application in different fields such as Electrical Engineering (nonlinear circuits), Network Sciences, Epidemiology, and Ecology will be discussed. Phenomena such as chaos, bifurcation, and limit cycles will be examined. This course will also introduce and develop the mathematical theory of Complex Networks with applications to network-driven phenomena in Um Internet, search engines, social networks, the World Wide Web, information and biological networks; spectral graph theory; models of networks including random graphs, preferential attachment models, and the small-world models.

E&C-ENGR 5501AP Special Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 5501NN Special Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 5512 Microwave Remote Sensing Credits: 3

Basic principles of remote sensing including scattering, absorption, transmission, and reflection of microwave energy. Basic radiative transfer theory. Microwave remote sensing systems including altimeters, scatterometers, radiometers, synthetic-aperture systems. Principle applications of remote sensing systems including imaging, atmospheric sounding, oceanographic monitoring, ice-sheet dynamics, etc.

Prerequisites: E&C-ENGR 414.

E&C-ENGR 5513 Advanced Principles of RF/Microwave Engineering Credits: 3

General aspects of TE, TM and TEM mode propagation in waveguides; circular waveguides; optical waveguides; wave propagation on dielectric backed conductors; wire antennas equivalence principle and aperture antennas; antenna impedance and mutual coupling in arrays; array beamforming; scattering matrix representations; impedance matching; resonators; filters, couplers and power-dividers; microstriplines and striplines; r.f. propagation in wireless and radar systems; conformal mapping techniques and applications (optional). Recommended preparation: Knowledge in Engineering Computation, Technical Writing Skills.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380, E&C-ENGR 381.

E&C-ENGR 5516 Computer Networks Credits: 3

Concepts and goals of computer networking, structure of computer networks, OSI model and layers, network control, analysis, design and management, data communication techniques including fiber optics, WAN, MAN and LAN architecture and protocols, internetworking, case studies and hand-on studying the performance by analytic modeling and computer simulation.

E&C-ENGR 5518 Advanced Radar Systems & Techniques Credits: 3

Radar equation; MTI, Pulsed Doppler and Tracking Radars; Detection of and information from Radar Signals; Radar Antennas, Transmitters and Receivers; Radar Propagation and clutter.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380.

E&C-ENGR 5528 Advanced Embedded Systems Credits: 3

This course examines the hardware/software aspects associated with developing microcontroller-based computer systems. The students learn about the architecture and assembly language for popular microcontrollers and how to take advantage of a variety of input/output options that include binary ports, A/D and D/A converters, communication ports, and interfacing techniques for various applications. Graduate students are required to do Embedded Systems lab experiments.

Prerequisites: E&C-ENGR 426, E&C-ENGR 427.

E&C-ENGR 5530 Digital Electronics Credits: 3

Electronic hardware aspects of digital systems. Includes state-of-the-art information on integrated-circuit logic devices and their applications.

E&C-ENGR 5532 Biomedical Instrumentation Credits: 3

Biomedical objectives, physical and engineering principles; optimal equipment design and actual performance of biomedical instrumentation; considers practical instrumentation problem solutions and unsolved problems.

Prerequisites: E&C-ENGR 330.

E&C-ENGR 5533 Analog Integrated Circuit Design Credits: 3

This course will cover the analysis and design of analog and mixed signal integrated circuits, with an emphasis on design principles for realizing state-of-the-art analog circuits. The course will provide the critical concepts by giving physical and intuitive explanations in addition to the quantitative analysis of important analog building block circuits. First-order hand calculations and extensive computer simulations are utilized for performance evaluation and circuit design. Students will be required to complete a final project which will involve the design at the layout level of an analog circuit. Successful designs will be fabricated through the MOSIS Educational Service.

Prerequisites: E&C-ENGR 276, E&C-ENGR 330.

E&C-ENGR 5534 Computer Arithmetic Credits: 3

Computer arithmetic is a sub field of digital computer organization. It deals with the hardware realization of arithmetic functions to support various computer architectures as well as with arithmetic algorithms for firmware/software implementation. A major thrust of digital computer arithmetic is the design of hardware algorithms and circuits to enhance the speed of various numeric operations. Verilog HDL is used as tool to simulate the algorithms and circuits.

Prerequisites: E&C-ENGR 226, E&C-ENGR 5535.

E&C-ENGR 5535 Hdl-Based Digital Systems Design Credits: 3

This course covers hardware design techniques using a Hardware Description Language (HDL). It also discusses several digital system design methodologies, including structural specifications of hardware, HDL-based simulations and testbenches. Courses focus on the synthesis methodologies for use-defined primitives (UPD), data types, operators, Verilog constructs multiplexed datapaths, buses, bus drivers, FSMs, assignments, case, functions, tasks, named events and rapid prototyping techniques with Verlog HDL, ASICs and FPGAs.

Prerequisites: E&C-ENGR 226.

E&C-ENGR 5536 Power Electronics II Credits: 3

Circuit concepts and analysis techniques for transistor switching regulators, thyristor choppers, transistor inverters, self-commutated thyristor inverters and cycloconverters.

Prerequisites: E&C-ENGR 436.

E&C-ENGR 5537 Mixed-Signal Integrated Circuit Design Credits: 3

Modern integrated circuit design often requires the integration of analog and digital circuits on the same chip. This integration provides numerous advantages over purely analog or digital approaches. This course will cover the analysis and design of mixed-signal integrated circuits and will address the challenges of having both analog and digital circuits on the same substrate. Important mixed-signal circuits such as data converters and filters will be studied in detail.

Prerequisites: E&C-ENGR 5533.

E&C-ENGR 5542 Introduction to VLSI Design Credits: 3

With a focus on CMOS Digital technology this course covers the basic concepts of integrated circuits, various methods of designing VLSI circuits, and techniques to analyze performance metrics (speed, area, power and noise). Clocking, interconnect and scaling issues of integrated circuit will also be discussed. It will cover device, interconnect and circuit level implementation issues of both logic and memory circuits. To familiarize students with the realities of design complexities and layout environment they will get exposure to VLSI CAD tools in the following levels - schematic, layout, extraction and circuit simulation through the labs and projects.

E&C-ENGR 5556 Advanced Instrumentation and Control Credits: 3

The instrumentation and control of industrial processes and systems. Introduction to Programmable Logic Controllers. Simulation modeling of various systems.

Prerequisites: E&C-ENGR 358 (or MEC-ENGR 415).

E&C-ENGR 5557 Fundamentals of Solar Photovoltaic Cells Credits: 3

The science and engineering of solar cell/solar photovoltaic (PV) spans several disciplines namely physics, chemistry, electronic and electrical engineering. Even though solar cell related researches are carried out in those traditional disciplines but it is not widely taught as a comprehensive course. This course highlights the fundamental science and engineering of solar PV devices, solar energy conversion as well as solar cell manufacturing issues. It covers from basic to modern solar PV devices, including typical solar cell materials, basic device physics, ideal and non-ideal models, device parameters and design, and device fabrication.

E&C-ENGR 5558 Automatic Control System Design Credits: 3

Techniques for feedback system design and analysis; computational aids, compensator design and examples, state variable methods, non-linear systems, and sampled-data control systems.

Prerequisites: E&C-ENGR 226, E&C-ENGR 358.

E&C-ENGR 5559 Introduction to Photovoltaic Systems Credits: 3

The course presents an updated background of world energy production and consumption, a summary of the solar spectrum, how to locate the sun and how to optimize the capture of its energy, as well as the various components that are used in PV systems. Some section of the course has also been added to explain why certain photovoltaic (PV) designs are done in certain ways, as well as how the design process is implemented. Economic and environmental issues as PV design criteria are discussed along with the most recently available technology and design and installation practice.

E&C-ENGR 5560 Electric Power Distribution Systems Credits: 3

Operation and design of utility and industrial distribution systems including distribution system planning; load characteristics; application of distribution transformers; design of subtransmission lines, distribution substations, primary systems, secondary systems, Smart Grid; application of capacitors; voltage regulation and reliability.

Prerequisites: E&C-ENGR 466.

E&C-ENGR 5563 Sustainable Energy System Engineering Credits: 3

This course focuses on understanding the theory and application of emerging energy technologies, including solar, wind, biomass, oceanic, geothermal, hydropower, fuel cell (hydrogen), nuclear, and other more exotic energy sources. A premise of the course is that a sustainable energy technology must both be technically feasible and economically viable. We consequently investigate the above energy technologies and the technological promise, progress, and application of each energy source, as well as its economic opportunities and challenges. Renewable energy sources will be highlighted with a focus on projections for a sustainable energy future.

E&C-ENGR 5565 Auxiliary Electric System Design Credits: 3

This course provides design, operation, contingency analysis and black start requirements of an Auxiliary Electric System (AES) for a coal fired power plant using industry standards (IEEE-666, NEMA MG-1, ANSI C57 and C37 as well as relevant IEC).

Prerequisites: E&C-ENGR 466 or Department Approval.

E&C-ENGR 5567 Power Systems II Credits: 3

This course covers power system matrices, power flow analysis, Gauss-Seidel and Newton-Raphson techniques, fast-decoupled load flow, economic dispatch, transient stability and operation, and power system control.

Prerequisites: E&C-ENGR 358, E&C-ENGR 466.

E&C-ENGR 5568 Economics of Power Systems Credits: 3

Transmission loss formula coefficients, incremental costs and losses, economic scheduling of generation, and applications.

Prerequisites: E&C-ENGR 466, E&C-ENGR 467.

E&C-ENGR 5569 Reliability of Electric Power Systems Credits: 3

Development and use of mathematical models for the calculation and estimation of various measures of reliability in electric power systems, Reliability restoration times and cost assessment of generation, transmission, distribution and composite systems are analyzed.

Prerequisites: COMP-SCI 394R.

E&C-ENGR 5570 Principles of Digital Communication Systems Credits: 3

Principles of random processes, information sources and source coding, modulation and demodulation, block and convolutional error control coding, and equalization.

Prerequisites: COMP-SCI 394R, E&C-ENGR 380.

E&C-ENGR 5572 Antennas & Propagation For Wireless Systems Credits: 3

This course introduces the mathematical aspects of the basic antenna parameters such as vector potential, gain, directivity, impedance, radiation patterns, and develops a comprehensive theory of antenna arrays including the effects of mutual coupling. In-depth modeling studies for wire, aperture and microstrip antennas, is presented; diffraction of plane electromagnetic (TE and TM) waves by perfectly conducting half-planes and wedges- applications to site-specific propagation path modeling in wireless systems.

Prerequisites: E&C-ENGR 341R, E&C-ENGR 412.

E&C-ENGR 5573 Advanced Electric Power Lab Credits: 3

Advanced applications of concepts experienced in Generating Plants, Substations and Power Plants of fundamentals and concepts of power systems to practical power plan and industrial applications. Operational limitations of all components of power system equipment. Single and Three Phase Circuits, Generators/Alternators, Transformers, Motors, and specialty items (Coronal mass Ejection, Ferroresonance, System Protection).

Prerequisites: E&C-ENGR 466 and Consent of the Department.

E&C-ENGR 5577 Wireless Communications Credits: 3

Principles of the design and analysis of wireless communications, Study of propagation mechanisms, statistical characterization of wireless channels, diversity and MIMO, spread spectrum and CDMA, Orthogonal Frequency Division Multiplexing (OFDM).

Prerequisites: COMP-SCI 394R.

E&C-ENGR 5578 Multimedia Communication Credits: 3

Visual communication is dominating the Internet and mobile networks. This class covers topics on video signal processing, modeling, compression, and communication. Includes information theory foundations on source coding, lossless coding schemes, video coding framework, as well as the current status of video coding standards and multimedia communication systems.

E&C-ENGR 5579 Digital Signal Processing in Telecommunications Credits: 3

Applications of digital signal processing in telecommunications systems; oversampling and quantization, Delta-Sigma modulation, linear predictive speech coding, adaptive filtering, echo canceller, adaptive receivers and equalizers for wireless communication, digital cellular, CDMA.

Prerequisites: E&C-ENGR 474, E&C-ENGR 480.

E&C-ENGR 5580 Digital Signal Processing Credits: 3

Analysis and representation of discrete-time signals and systems including a discussion of discrete-time convolution, difference equations, the z-transform and the discrete Fourier transform. Similarities with and distinctions between discrete-time and continuous-time signals and systems. Digital network structures for implementation of both recursive (infinite impulse response) and nonrecursive (finite impulse response) digital filters. FFT (Fast Fourier Transform) algorithm for computation of the discrete Fourier transform. Graduate students will be expected to successfully complete a number of additional projects as compared with E&C-ENGR 480.

Prerequisites: E&C-ENGR 380.

E&C-ENGR 5582 Computer Vision Credits: 3

The image is an essential form of information representation and communication in modern society. This course focuses on topics of computer vision, teaching computer how to understand images. Topics include image formation, color and texture features, key points detection, aggregation, subspace methods in image modeling, and deep learning image classification, with many applications in photography, media and entertainment, education, defense and medicine.

E&C-ENGR 5584 Advanced Digital Image Processing Credits: 3

Fundamentals of applied grayscale digital image processing, image sensing and acquisition and quantization, basic set and discrete convolution operations with images, intensity transformations and spatial domain filtering via convolutional masks (smoothing, Laplacian and gradient masks), frequency domain filtering via the two-dimensional discrete transform, two-dimensional sampling and Nyquist theory, frequency domain filtering using lowpass/highpass, rectangular, round, Gaussian and Butterworth filters, image restoration using noise filtering via mean order-statistic and adaptive filters, bandpass, band reject and notch filters, Weiner filters, image deblurring filters, computed aided tomography (i.e. CAT scans), morphological image processing and image segmentation.

Prerequisites: E&C-ENGR 380 and prior experience with MATLAB.

E&C-ENGR 5586 Pattern Recognition Credits: 3

Decision functions, distance measures, minimum distance classifiers, hard clustering methods, fuzzy clustering methods, statistical pattern recognition methods, Bayesian classifiers, error probabilities, estimation of density functions, perceptrons, least-mean-square algorithms, feature selection, dimensionality reduction and syntactic pattern recognition.

Prerequisites: COMP-SCI 394R (or STAT 436), a course in high-level programming language.

E&C-ENGR 5588 Communication Theory I Credits: 3

Generalized communication systems, signal processing, signals as random processes, optimum receivers.

Prerequisites: COMP-SCI 394R, a statistics course.

E&C-ENGR 5590 Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590AC Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590AD Special Topics in Electrical and Computer Engineering Credits: 1-4
Special Topics in Electrical and Computer Engineering

E&C-ENGR 5590AE Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590AN Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590AR Special Topics in Electrical and Computer Engineering Credits: 1-4
Special Topics in Electrical and Computer Engineering

E&C-ENGR 5590AS Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590AV Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590AW Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590B Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590BB Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590BE Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590BI Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590BP Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590C Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590CA Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590CD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590CI Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590CL Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590CN Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590CS Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590CT Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590DC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590DE Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590DS Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590EN Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590ER Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590ES Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590ET Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590FC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590HF Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590IC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590IE Special Topics Credits: 1-4

E&C-ENGR 5590IN Special Topics In Electrical And Computer Engineering Credits: 1-4

Special Topics In Electrical And Computer Engineering

E&C-ENGR 5590IP Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590IR Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590MC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590ML Special Topics In Electrical And Computer Engineering Credits: 1-4
Special Topics In Electrical And Computer Engineering

E&C-ENGR 5590MS Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590MW Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590NA Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590NG Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590NM Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590NN Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590NR Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590NT Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590ON Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590OT Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590PB Special Topics In Electrical And Computer Engineering Credits: 1-4
Special Topics In Electrical And Computer Engineering

E&C-ENGR 5590PD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PG Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PL Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PL2 Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PL3 Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PQ Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PR Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PS Special Topics in Electrical and Computer Engineering Credits: 1-4
Special Topics in Electrical and Computer Engineering.

E&C-ENGR 5590PV Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590RD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590RE Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590RF Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590SC Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590SD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590SI Special Topics In Electrical And Computer Engineering Credits: 1-4
Special Topics In Electrical And Computer Engineering

E&C-ENGR 5590SL Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590SP Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590T Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590TC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590VL Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590WC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590WW Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590WX Special Topics Credits: 1-3

E&C-ENGR 5590XX Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5597 Directed Readings Credits: 1-3

Readings in an electrical and computer engineering areas selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5598 Research Seminar Credits: 1-3

Graduate research and/or readings in an electrical and computer engineering area selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5599 Research Credits: 1-6

Independent investigation in field of electrical engineering to be presented in the form of a thesis.

E&C-ENGR 5600 Problems Credits: 2-5

Supervised investigation in electrical engineering to be presented in form of report.

E&C-ENGR 5606 Electromagnetic Scattering and Antenna Theory Credits: 3

Dyadic analysis; integral equations and Green's functions; field theorems-uniqueness, induction equivalence, reciprocity; image and Babinet's Principles; applications to antennas; method of stationary phase and applications to aperture antennas; array antennas and mutual coupling analysis; method of moments; asymptotic techniques and applications to EM scattering from wedges, cylinders, and spheres; RF propagation path loss modeling and conformal antennas.

Prerequisites: E&C-ENGR 412.

E&C-ENGR 5616 Parallel and Distributed Processing Credits: 3

Covers the fundamental issues involved in designing and writing programs for simultaneous execution. Semaphores and monitor constructs are covered to provide a basis for critical section programming. Expansion of these concepts provide a basis for the analysis and design of control systems for multiprocessor devices and computer networks.

Prerequisites: A systems programming course.

E&C-ENGR 5617 Neural Network Based Computing System Credits: 3

The course will consider computing systems based on neural networks and learning models, along with implementations and applications of such systems.

E&C-ENGR 5618 Artificial Intelligence Credits: 3

Concepts, theories, and models pertaining to neural nets, pattern recognition, learning systems, and programmed problem solving.

E&C-ENGR 5619 Theory of Automata Credits: 3

Sequential machines: Turing machines; deterministic and stochastic automata; applications of automata.

E&C-ENGR 5624 Digital Software Systems Design Credits: 3

Characteristics and parameters of various software subsystem including assemblers, compilers, utility programs, special programming packages, interpreters, and operating systems; and principles of organization into efficient systems.

E&C-ENGR 5633 Nanoelectronics II: Nanoscale Integration & Manufacturing Credits: 3

This course is continuation of Nanoscale Devices and circuits course offered in Fall 2016. In this course students will learn theory about semiconductor processing, and their applications. Limitations of existing process techniques will be discussed, and advances in both physical implementation and circuit/integration techniques will be introduced. Some example of topics that will be covered are: optical lithography, EUV lithography, nanoimprint, implantation, manufacturing aware circuit design, etc. The laboratory work will include modeling and simulation with state-of-the-art semiconductor processing and device simulation tools such as: SRIM, Sentaurus TCAD Process, Sentaurus TCAD Device, etc. Research intensive course.

Co-requisites: E&C-ENGR 5542.

E&C-ENGR 5635 Vlsi Systems Design Credits: 3

Course discuss design of the MOSFETs (nFETs and pFETs), and high speed CMOS cascades in VLSI. It also covers the design of various arithmetic circuits, different fast adders, memories, and chip-level physical designs requirements in the VLSI subsystems are also the focus of this course. It uses Verilog HDL/VHDL as a tool to design VLSI systems.

Prerequisites: E&C-ENGR 5535 (or knowledge of VHDL).

E&C-ENGR 5642 Advanced VLSI Design Credits: 3

Course focuses on the issues and challenges of high performance VLSI circuits and systems. The course will be based on papers published in accredited journals and conference proceedings. The goals of this course: (1) Familiarize students with the current and emerging trends, issues and design alternatives of deep submicron and nanoscale IC technologies; (2) Help students acquire the knowledge and skills required for graduate study and research, and professional careers in IC industry; and (3) Teach students how to collect and survey technical materials, develop new research ideas, write research papers, and present technical contents in front of an audience.

E&C-ENGR 5644 Liapunov and Related Nonlinear Methods in Automatic Control Credits: 3

A study of nonlinear methods in automatic control including phase plane analysis, describing function techniques, basic definitions and theorems of Liapunov, methods of generating Liapunov functions, applications of Liapunov's methods, and Popov's methods.

E&C-ENGR 5645 Optimal Control Theory Credits: 3

Analysis and design of dynamic systems using optimal control theory parameter optimization, dynamic optimization, computational methods, differential games.

E&C-ENGR 5646 Stochastic Optimal Estimation and Control Credits: 3

Surveys random process theory; stochastic control and optimization; estimation and filtering based on Kalman-Bucy techniques; stochastic stability; adaptive and learning control systems.

E&C-ENGR 5647 Emerging Interdisciplinary Research in Nanotechnology Credits: 3

This cross-disciplinary course will focus on nanoscale materials, devices and circuit technologies, and its applications in the next generation computing, communication, electronics, biomedical, energy and environment sectors. The course will familiarize students with recent technological progresses and potential socio-economic impacts in the broader fields of nanotechnology. This will be a high level graduate course for students from diverse academic backgrounds. Instructor's prior approval is recommended.

E&C-ENGR 5660 Power-Systems Stability Credits: 3

Performance of synchronous machines under transient conditions, power system stability, system fault computations using symmetrical components; computer solutions of power system problems.

E&C-ENGR 5661 Solid State Energy Conversion Credits: 3

Solid state direct energy conversion; and design of thermoelectric generators and heat pumps.

E&C-ENGR 5662 Power Electronic Drives Credits: 3

Advanced study of dc and ac motor drives controlled by power electronic methods, including phase controlled rectifier de chopper, cycloconverter, variable frequency inverters.

Prerequisites: E&C-ENGR 5536.

E&C-ENGR 5664 Lightning and Switching Surges in Power Systems Credits: 3

Overvoltage, switching surge and lightning effects of a power system. Use of grounding and lightning arresters. Effects of surges off and on machines.

Prerequisites: E&C-ENGR 466 (or equivalent), E&C-ENGR 467 (or equivalent).

E&C-ENGR 5668 Advanced Computer Methods in Power System Analysis Credits: 3

Power system matrices. Sparse matrix methods. Advanced load flow analysis techniques and concepts. Contingency analysis. State estimation.

Prerequisites: E&C-ENGR 466, strong background in FORTRAN or C.

E&C-ENGR 5670 Direct Current Power Systems Credits: 3

Characteristic and performance analysis of DC transmission lines and associated conversion systems.

E&C-ENGR 5672 Power Systems Relaying Credits: 3

Theory of relaying systems for power system protection, improvement of power system stability. Relay coordination; performance of relays during transient swings and out-of-step conditions.

Prerequisites: E&C-ENGR 466.

E&C-ENGR 5674 Machine Intelligence Credits: 3

Formal languages in relation to natural language processing; formal languages, graphs, and image processing; formal logic and automated theorem proving; natural language processing; aspects of problem solving and heuristic programming.

E&C-ENGR 5675 Introduction to the Modeling and Management of Uncertainty Credits: 3

Theoretical and practical issues in the modeling and management of uncertainty. Topics include probabilistic uncertainty, belief theory and fuzzy set theory. Applications to computer vision, pattern recognition and expert systems.

E&C-ENGR 5676 Advanced Electric Circuit Analysis Credits: 3

Specialized study of mathematical analysis as applied to solutions of circuit networks with fixed and variable parameters.

E&C-ENGR 5677 Network Synthesis Credits: 3

Surveys linear active and nonreciprocal circuit elements, reliability conditions, methods for synthesizing active networks, and practical applications.

Prerequisites: E&C-ENGR 5676.

E&C-ENGR 5680 Digital and Sample-Data Systems Credits: 3

Introduces sampling and quantization, design of digital and sample-data systems, digital filters, adaptive sampling and quantization.

Prerequisites: E&C-ENGR 480.

E&C-ENGR 5681 Applications Of Transforms Credits: 3

Applications of Laplace and other transform methods of solution of circuit and field problems.

E&C-ENGR 5682 Coding Theory II Credits: 3

Further study of error-correcting codes; ring and cyclic codes, linear switching circuits, burst error codes, codes for arithmetic units, etc.

Prerequisites: E&C-ENGR 5579.

E&C-ENGR 5688 Communication Theory II Credits: 3

Probability theory of analog and digital communication in the presence of random process noise. Encoding systems, detection systems, optimum receivers.

E&C-ENGR 5690 Advanced Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5690EM Advanced Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5690ET Advanced Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5690ND Special Topics in Electrical and Computer Engineering Credits: 1-3

E&C-ENGR 5697 Advanced Directed Readings Credits: 1-5

Advanced readings in an electrical and computer engineering area selected by the graduate student in consultation with a faculty member.

Arrangements must be made prior to registration.

E&C-ENGR 5698 Advanced Research Seminar Credits: 1-5

Advanced Graduate research and/or readings in an electrical and computer engineering area selected by the doctoral student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5699 Dissertation Research Credits: 1-9

Doctoral Dissertation

Information Technology Courses

INFO-TEC 222 Multimedia Production and Concepts Credits: 3

Multimedia production and concepts will give an overview of multimedia technology and communication theory needed to deliver information and to produce interactive presentations for the web, portable media, and for in-person presentations and demos. The course offers exposure to software, hardware, other multimedia technologies, authoring and copyright matters.

Prerequisites: COMP-SCI 101.

INFO-TEC 321 Introduction to Computing Resources Administration Credits: 3

This introductory course is designed to give an overview of a wide variety of technical, interpersonal, documentation, and managerial skills needed to become an effective systems administrator.

Prerequisites: COMP-SCI 201R.

INFO-TEC 426 Practical Network Security Credits: 3

This course examines common threats to computer network security and discusses various techniques to mitigate those threats. The course material is supplemented with lab assignments that implement network security tools and use them to build a small secure network. It discusses information hiding, traffic monitoring and control, intrusion detection, and security policy. Note: NOT FOR GRADUATE CREDIT.

Prerequisites: COMP-SCI 420.

INFO-TEC 429 Introduction to Cybersecurity Credits: 3

This course introduces students to cybersecurity and its domains. The course will cover topics such as cryptography, software development security, access control, security architecture, security operations, disaster recovery, and physical and environmental security.

Prerequisites: INFO-TEC 321.

INFO-TEC 490 Special Topics Credits: 1-3

Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

Prerequisites: Departmental consent.

INFO-TEC 490DC Introduction to Data Compression Credits: 3

This course provides an introduction to information theory, first-order entropy; lossless methods such as Huffman coding, arithmetic coding, and dictionary methods; and lossy and transform coding including image, audio, and video formats. The emphasis in this course is on algorithmic understanding and applications rather than derivation from first principles. Not for graduate credit.

Prerequisites: MATH 210, COMP-SCI 303, or equivalent.

INFO-TEC 491 Internship Credits: 1-6

Students may participate in structured internships under the joint supervision of an employer and a faculty member. The student must carry out significant professional responsibilities that also have academic merit. The number of credit hours is based on the quality of the academic experience. Available for credit/no credit only, and students must be in good standing with a least 18 credit hours of CS/IT counting towards the degree.

Prerequisites: Departmental consent.

Mechanical Engineering Courses

MEC-ENGR 130 Engineering Graphics Credits: 3

Introduction to Engineering Graphics with the use of the Computer Aided Design tools AutoCAD and SolidWorks. Introduction to 2D design with AutoCAD includes: basic features, layer control, geometric constructions, orthographic projections, dimensioning and notes, tolerancing, section views, and working drawings. Introduction to 3D design with SolidWorks includes: part modeling, revolved features, sweeps, lofts, assembly modeling and engineering drawings. No previous 2D or 3D CAD experience is necessary to take this class.

Prerequisites: School of Computing and Engineering Student.

MEC-ENGR 131 Engineering Graphics-3D design Credit: 1

Introduction to Engineering Graphics using the 3D Computer Aided Design tool SolidWorks. Introduction to 3D design with SolidWorks includes: part modeling, revolved features, sweeps, lofts, assembly modeling, and engineering drawings. Some previous 2D AutoCAD experience is required to take this class. NOTE: This class starts halfway through the semester by joining in with MEC-ENGR 130 when they finish AutoCAD and begin SolidWorks.

Prerequisites: Departmental consent.

MEC-ENGR 219 Computer Programming for Engineers Credits: 3

Analysis and synthesis of structured computer algorithms for solving engineering problems using high level programming tools such as Excel, Matlab, Fortran and/or C++.

Prerequisites: MATH 266 (preferred) or MATH 220.

MEC-ENGR 270 Engineering Analysis I Credits: 3

This is an applied course with emphasis on physics and engineering applications. Topics include engineering applications using conics, parametric equations, polar coordinates, vectors, solid analytic geometry, vector valued functions, multi-variable functions, partial derivatives (including applications), multiple integration, vector calculus including Green's Theorem, Curl and Divergence, line and surface integrals and Stoke's Theorem.

Prerequisites: MATH 268.

MEC-ENGR 272 Engineering Analysis Credits: 3

An applied course using differential equations in solutions to engineering problems. Topics include applications in first-order differential equations, linear higher-order equations, Laplace transform, Series solutions of linear ODEs (Taylor, Power, and Fourier), Numerical solutions, introduction to systems of differential equations.

Prerequisites: MATH 268 or MATH 220.

MEC-ENGR 285 Engineering Dynamics Credits: 3

Fundamentals of engineering dynamics, including kinematics and kinetics of particles and rigid bodies. Analysis based on forces and accelerations as well as energy and momentum methods.

Prerequisites: CIV-ENGR 275.

MEC-ENGR 299 Engineering Thermodynamics Credits: 3

Fluid properties, work and heat, first law, second law, entropy, applications to vapor and ideal gas processes.

Prerequisites: MATH 268 (preferred) or MATH 220; and PHYSICS 250.

MEC-ENGR 306 Computer-Aided Engineering Credits: 3

Principles, analysis and application of numerical methods for the solution of engineering problems. Computer implementation.

Prerequisites: MEC-ENGR 272 and E&C-ENGR 216.

MEC-ENGR 324 Engineering Materials Credits: 3

The nature of the structure of engineering materials. The relationship of material structure to the physical properties. Mechanical behavior of engineering materials.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 276.

MEC-ENGR 324L Engineering Materials Lab Credit: 1

Introduction to the laboratory techniques used in studying the physical and mechanical properties of engineering materials. The material testing in this course is primarily of metallic materials. Physical and mechanical property variations as a result of various processing techniques are studied. Recommended preparation: Machine Shop Safety.

Co-requisites: MEC-ENGR 324.

MEC-ENGR 351 Fluid Mechanics Credits: 3

Concepts of the statics and dynamics of fluids, with emphasis on principles of continuity, momentum and energy. Boundary layers, dimensional analysis and drag are covered briefly. Thorough treatment of pipe flow.

Prerequisites: MEC-ENGR 272 or MATH 345 and CIV-ENGR 275.

MEC-ENGR 352 Mechanical Instruments Lab Credits: 2

Students will investigate random and systematic errors, and their effects on measurement uncertainty. Students will be introduced to various instrumentation equipment used in measuring displacement, velocity, acceleration, force, strain, fluid pressure, fluid velocity, fluid flow rate, and temperature.

Prerequisites: CIV-ENGR 276.

MEC-ENGR 353 Heat Transfer and Fluid Mechanics Lab Credits: 2

The course emphasis is on experiments related to thermodynamics, heat transfer, and fluid mechanics. Proper experimental methods, data and uncertainty analysis related to thermal and fluids measurements are discussed.

Prerequisites: MEC-ENGR 351.

Co-requisites: MEC-ENGR 399.

MEC-ENGR 356 Mechanical Component Design Credits: 3

Introduction to mechanical engineering design and its impact on human history, principles of design with ductile and brittle materials for static and dynamic loading, classical and reliability-based factors of safety, fracture mechanics in design, application to the design of selected machine components.

Prerequisites: CIV-ENGR 276.

MEC-ENGR 360 Applied Thermodynamics Credits: 3

Gas and vapor mixtures, cycles, availability, imperfect gases, thermodynamic relations, combustion, chemical equilibrium, power systems and design projects. Effects of design choices on the earth and living systems.

Prerequisites: MEC-ENGR 299.

MEC-ENGR 380 Manufacturing Methods Credits: 3

Introduction to manufacturing processes with emphasis on those aspects most relevant to methods, problems in force analysis, and practicum and experimentation in machine tool applications.

Prerequisites: MEC-ENGR 324.

Co-requisites: MEC-ENGR 324L.

MEC-ENGR 385 System Dynamics Credits: 3

Kinematics of mechanical systems. Introduction to the modeling and analysis of dynamic mechanical systems. Computer analysis.

Prerequisites: MEC-ENGR 272, MEC-ENGR 285.

MEC-ENGR 399 Heat and Mass Transfer Credits: 3

Fundamentals of conduction, convection, and radiation heat transfer. Use of nondimensional parameters. Theory of heat exchangers. Mass transfer.

Prerequisites: MATH 250 or MEC-ENGR 270; and MEC-ENGR 299, MEC-ENGR 351.

MEC-ENGR 400 Problems Credits: 1-6

Special design, experimental and analytical problems in mechanical engineering.

Prerequisites: Departmental consent.

MEC-ENGR 401CD Topics in Mechanical Engineering -- Applied CFD Credits: 3

The fundamentals of computational fluid mechanics. Introduction to the governing equations and boundary conditions of viscous fluid flows, turbulence and its modelling, and how to solve a fluid flow problem using commercially available CFD software.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 401T Topics in Mechanical Engineering Credits: 3

This course covers the application of Newton's laws and thermodynamics to analysis of fluid flow in turbomachinery.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 407 Advanced Dynamics and Modeling Credits: 3

Fundamental principles of advanced rigid body dynamics with applications. Special mathematical techniques including Lagrangian and Hamiltonian methods.

Prerequisites: MEC-ENGR 285 and MEC-ENGR 306.

MEC-ENGR 411 Introduction to Biomechanics Credits: 3

This course is to provide students with an introduction to the engineering principles of biomechanics.

Prerequisites: MEC-ENGR 219 or E&C-ENGR 216; or MEC-ENGR 285.

Co-requisites: MATH 300 or CIV-ENGR 319.

MEC-ENGR 412 Biodynamics Credits: 3

Introduction to musculoskeletal biomechanics including: computational biomechanics, movement simulation, motor control and musculoskeletal tissues. Recommended preparation: MEC-ENGR 411.

MEC-ENGR 413 Experimental Biomechanics of Human Motion Credits: 3

The purpose of this course is to provide an opportunity for students to gain a hands-on, in-depth understanding of the experimental measurement and analysis techniques used to quantify the biomechanics of human motion.

Prerequisites: MEC-ENGR 411.

MEC-ENGR 414 Material Science for Advanced Applications Credits: 3

Study of the physical and mechanical metallurgy of alloy systems of interest in engineering applications.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 415 Control Systems Theory Credits: 3

Introduction to feedback control theory for linear dynamic systems. Topics include root locus analysis, frequency response analysis, and controller design.

Prerequisites: MEC-ENGR 385.

MEC-ENGR 416 Biomedical Device Design Credits: 3

Project based course which exposes students to the entire design process from problem definition to prototype validation for biomedical device applications. Projects in the course are sponsored by real clients from the local biomedical industry, medical clinicians, and/or research labs. The course will cover the following main components: Problem Definition, Concept Generation and Evaluation, Detailed Design, Prototyping and Testing, Project Management, Regulations and Standards, and Technical Communication. **Prerequisites:** Senior standing.

MEC-ENGR 420 Human Powered Vehicle Design Lab Credits: 3

Introduction to the science of human powered vehicles (HPV) providing the background necessary for the design of such vehicles. Students will learn and utilize engineering design practices and apply them toward the creation of an aerodynamic, highly engineered land based HPV.

Prerequisites: MATE111A Machine Shop Safety, Consent of instructor.

MEC-ENGR 424 Non-Metallic Engineering Materials Credits: 3

Structures, properties and applications of ceramics, glasses, cermets, polymers and composite materials.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 425 Failure Analysis Credits: 3

Organize and perform a failure investigation. In addition, the course will cover the general procedures for a failure investigation and various failure mechanisms such as ductile fracture, brittle fracture, fatigue, wear, corrosion and elevated temperature.

Prerequisites: MEC-ENGR 324, MEC-ENGR 380.

MEC-ENGR 426 Introduction to Manufacturing Management Credits: 3

The objective of this course is to expose the student to various manufacturing management tools and techniques. Focus is on both the technical tools used in manufacturing as well as on the management tools needed to implement change in the manufacturing environment. As part of this course, students will research a successful company and present an analysis of manufacturing tools and techniques used.

MEC-ENGR 440 Heating and Air Conditioning Credits: 3

General principles of thermodynamics, heat transfer, and fluid dynamics are used to calculate building loads, size equipment and ducts, and evaluate system performance in maximizing human comfort. Consideration of indoor air quality and human health.

Prerequisites: MEC-ENGR 360, MEC-ENGR 399.

MEC-ENGR 441 Intermediate Fluid Mechanics Credits: 3

Topics in potential and viscous flow theory, and computational fluid dynamics.

Prerequisites: MEC-ENGR 351.

MEC-ENGR 444 Composite Materials Credits: 3

A survey of composite materials used in engineering, emphasizing fiber-reinforced composites as well as laminate and particulate composites.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 451 Power Plant Design Credits: 3

Preliminary component and system design. Optimum design of boilers, steam turbines, condensers and cooling towers and their integration into a system to minimize production costs and impact on the environment.

Prerequisites: MEC-ENGR 360, MEC-ENGR 399.

MEC-ENGR 452 Advanced Mechanics of Materials Credits: 3

Shear center; unsymmetric bending; curved beams; beams on elastic foundations; thick-walled cylinders. Energy methods. Torsion of noncircular sections. Theories of failure. Plate theory.

Prerequisites: CIV-ENGR 276.

MEC-ENGR 454 Power Generation Systems Credits: 3

Fundamentals of the power industry in a format suitable for all engineering disciplines. Survey of electric power systems, including fossil and nuclear steam cycles, combustion turbines, combines cycles, and renewable such as solar and wind. Introduction to major machinery components, systems, controls, and an overview of fuels, emissions, and emission control technologies.

Prerequisites: MEC-ENGR 299.

MEC-ENGR 455 Digital Control of Mechanical Systems Credits: 3

Introduction to digital control systems. Topics include Z-transforms, sampling, stability analysis, and digital controller design.

Prerequisites: MATH 345, MEC-ENGR 415.

MEC-ENGR 457 Mechatronic System Design Credits: 3

Theory and application of mechatronic systems through course instruction, laboratory activities, and student projects.

Co-requisites: MEC-ENGR 415.

MEC-ENGR 458 Modern Control Systems Credits: 3

Controller design for multiple-input/multiple-output systems; controllability and observability; stochastic control problems; regulators and tracking controllers; observers.

Prerequisites: MEC-ENGR 415.

MEC-ENGR 459 Robotics and Unmanned Systems Credits: 3

Students will develop, implement, and evaluate various path following (point mass, rigid body, and Dubin's) and trajectory generation (configuration spaces, roadmaps, cell decomposition, etc.) concepts on simulation and experimental platforms.

Prerequisites: MEC-ENGR 306, MEC-ENGR 457.

MEC-ENGR 460 Electromechanical Conversion Credits: 3

This course describes the operation and control of electro-mechanical devices such as motors transformers to mechanical civil engineering students, including an introduction to programmable logic controllers and variable speed drives.

Prerequisites: MEC-ENGR 220, MEC-ENGR 285.

MEC-ENGR 466 Applied Optimization and Decision Modeling Credits: 3

Introduction to mathematical programming techniques and applications. Linear and integer programming, transportation models, multiple objective and goal programming.

Prerequisites: MEC-ENGR 306.

MEC-ENGR 467 Fuel Cells and Renewable Energy Systems Credits: 3

This course will provide an overview of the fundamental phenomena that govern the design and operation of fuel cells. The thermodynamics of fuel cell systems will be explored including operation of ideal fuel cells and the physical and chemical phenomena that lead to losses within the fuel cell. The course will provide the methods and techniques required to analyze the performance of low, medium, and high temperature fuel cells within an overall energy system. The fueling of fuel cells from renewable resources will also be discussed.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 470 Experimental Design & Analysis Credits: 3

Presentation of concepts and methods of statistical analysis and the design of experiments. Concepts, techniques, interpretation, and use of results are stressed. Focus is on experimental strategy and objectives, and the application of the methods discussed, rather than the mechanics of derivation. Major sections include: a review of hypothesis testing and basic analysis of variance techniques; single factor experiments including 2k and 3k design, confounding, and Taguchi philosophy; nested and split plot designs; analysis of covariance and an introduction to response surface methods.

MEC-ENGR 484 Vibration Analysis Credits: 3

Vibration theory with application to mechanical systems.

Prerequisites: MEC-ENGR 306, MEC-ENGR 385.

MEC-ENGR 486 Applied Finite Element Analysis Credits: 3

The study of advanced simulation techniques for the solution to engineering problems. The use of Finite Element Method toward solving mechanical, structural, vibration and potential flow problems will be explored. The use of current commercial simulation tools will be used extensively.

Prerequisites: MEC-ENGR 306, MEC-ENGR 324, MEC-ENGR 385, MEC-ENGR 399.

MEC-ENGR 491 Internship Credits: 6

For International students who must register to cover off-campus employment which is approved as related to their degree by their departmental advisor and ISAO.

Prerequisites: Departmental consent.

MEC-ENGR 492 Mechanical Design Synthesis I Credits: 3

Introduction to and application of the Engineering Design Process including: product development, needs identification, benchmarking, information gathering, concept generation, creativity methods, concept selection, professional and ethical responsibilities, and computer-aided design and rapid prototyping applications. A comprehensive design project including 3D CAD models and functioning prototypes is required.

Prerequisites: MEC-ENGR 130 or MEC-ENGR 131; and departmental consent.

MEC-ENGR 493 Intermediate Dynamics Credits: 3

Theoretical discussion of kinematics and dynamics of rigid bodies in three-dimensional space. General theory of rotating coordinate frames, Euler's angles, Euler's equations of motion, angular momentum, work-energy principles, and Kane's method.

Prerequisites: MEC-ENGR 285.

MEC-ENGR 494 Robotic System Identification Credits: 3

Students will develop, implement, and evaluate various system identification and parameter estimation techniques. Students will quantify estimation accuracy through both theoretical and experimental exercises.

Prerequisites: MEC-ENGR 285, MEC-ENGR 306, MEC-ENGR 352.

MEC-ENGR 496WI Mechanical Design Synthesis Credits: 3

Modern design theories and methodologies, with emphasis on the initial stages of the design process. Effect of design choices on the earth and living systems. Principles of embodiment design and life-cycle considerations. A comprehensive group design project is required. The course satisfies the Writing Intensive requirement.

Prerequisites: ANCH 309 or MEC-ENGR 492; MEC-ENGR 356.

MEC-ENGR 5500 Problems Credits: 1-6

Supervised investigation in mechanical engineering to be presented in the form of a report.

MEC-ENGR 5501 Advanced Topics In Mechanical Engineering Credits: 3**MEC-ENGR 5501AD Advanced Topics in Mechanical Engineering Credits: 3**

Advanced Topics in Mechanical Engineering

MEC-ENGR 5501CD Advanced Topics in Mechanical Engineering Credits: 3

Advanced Topics in Mechanical Engineering

MEC-ENGR 5501MS Advanced Topics in Mechanical Engineering Credits: 3**MEC-ENGR 5501SM Advanced Topics in Mechanical Engineering Credits: 2**

This course is for high school science teachers who have attended the ASM International Second Year Teachers Camp and have demonstrated the use of camp material in the classroom.

MEC-ENGR 5501TC Advanced Topics in Mechanical Engineering Credits: 2

This course is for high school science teachers who have attended the ASM International Teachers camp and have demonstrated the use of camp material in the classroom.

MEC-ENGR 5505 Imaging Techniques in Materials Science Credits: 3

Introduction to imaging techniques, including x-rays, neutron beams, electron beams and acoustic energy, to study material properties and structure.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 5507 Advanced Dynamics and Modeling Credits: 3

Fundamental principles of advance rigid body dynamics with applications. Special mathematical techniques including Lagrangian and Hamiltonian methods.

MEC-ENGR 5511 Introduction to Biomechanics Credits: 3

This course is to provide students with an introduction to the engineering principles of biomechanics.

MEC-ENGR 5512 Biodynamics Credits: 3

Introduction to musculoskeletal biomechanics including: computational biomechanics, movement simulation, motor control and musculoskeletal tissues.

Prerequisites: MEC-ENGR 5511.

MEC-ENGR 5513 Experimental Biomechanics of Human Motion Credits: 3

The purpose of this course is to provide an opportunity for students to gain a hands-on, in-depth understanding of the experimental measurement and analysis techniques used to quantify the biomechanics of human motion.

Prerequisites: MEC-ENGR 5511.

MEC-ENGR 5514 Material Science for Advanced Application Credits: 3

Study of the physical and mechanical metallurgy of alloy systems of interest in engineering applications.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 5516 Biomedical Device Design Credits: 3

Project based course which exposes students to the entire design process from problem definition to prototype validation for biomedical device applications. Projects in the course are sponsored by real clients from the local biomedical industry, medical clinicians, and/or research labs. The course will cover the following main components: Problem Definition, Concept Generation and Evaluation, Detailed Design, Prototyping and Testing, Project Management, Regulations and Standards, and Technical Communication.

MEC-ENGR 5525 Failure Analysis Credits: 3

Organize and perform a failure investigation. In addition, the course will cover the general procedures for a failure investigation and various failure mechanisms such as ductile fracture, brittle fracture, fatigue, wear, corrosion and elevated temperature.

Prerequisites: MEC-ENGR 324, MEC-ENGR 380.

MEC-ENGR 5526 Introduction to Manufacturing Management Credits: 3

The objective of this course is to expose the student to various manufacturing management tools and techniques. Focus is on both the technical tools used in manufacturing as well as on the management tools needed to implement change in the manufacturing environment. As part of this course, students will research a successful company and present an analysis of manufacturing tools and techniques used.

MEC-ENGR 5533 Advanced Thermodynamics Credits: 3

Statistical methods of evaluating thermodynamic properties. Elements of quantum mechanics, statistical mechanics and kinetic theory applied to topics of engineering thermodynamics.

Prerequisites: MEC-ENGR 360, MEC-ENGR 399.

MEC-ENGR 5542 Introduction to Computational Fluid Dynamics and Heat Transfer Credits: 3

Introduction to the principles and development of the finite-difference approximations to the governing differential equations of viscous and inviscid fluid flow, as well as heat transfer. Introduction to discretization methods and the calculation of flow fields, convection, diffusion and conduction.

Prerequisites: MEC-ENGR 399, MEC-ENGR 441.

MEC-ENGR 5543 Industrial Refrigeration Credits: 3

Introduction to and analysis of the thermodynamic cycles and equipment used in Industrial Refrigeration. Applications of Industrial Refrigeration are also discussed.

Prerequisites: MEC-ENGR 299.

MEC-ENGR 5547 Contracts and Law for Engineers Credits: 3

This course covers a broad range of substantive legal topics giving the student a grounding in the legal implications of certain situations that they may encounter during their careers. The course includes coverage of basic contract law, environmental regulations and compliance, construction law, antitrust law, intellectual property law, civil procedure, employment law, business entities (corporate law) product liability and criminal law and procedure. The objective of the course is to provide students with a fundamental understanding of the wide range of federal and state laws governing behavior in our complicated and rule of law driven society.

MEC-ENGR 5549 Environmental Compliance, Auditing & Permitting Credits: 3

This course provides a high level overview of the most important statutes that have been enacted to protect the environment. The course covers regulation of hazardous waste, the Clean Air and Clean Water Acts, the Resource Conservation and Recovery Act, the All Appropriate Inquiry Rule and the law addressing sites contaminated with hazardous substances and the technology options employed to remediate those sites. In addition, the course provides coverage of environmental audits and emergency planning for extremely hazardous substances, the regulation of underground storage tanks, safe drinking water and the National Environmental Policy Act among other statutes.

Prerequisites: CIV-ENGR 211, MEC-ENGR 285.

MEC-ENGR 5554 Power Generation Systems Credits: 3

Fundamentals of the power industry in a format suitable for all engineering disciplines. Survey of electric power systems, including fossil and nuclear steam cycles, combustion turbines, combines cycles, and renewable such as solar and wind. Introduction to major machinery components, systems, controls, and an overview of fuels, emissions, and emission control technologies.

Prerequisites: MEC-ENGR 299.

MEC-ENGR 5557 Mechatronics System Design Credits: 3

Theory and application of mechatronic systems through course instruction, laboratory activities, and student projects.

Prerequisites: MEC-ENGR 352 and MEC-ENGR 415.

MEC-ENGR 5558 Intermediate Dynamics Credits: 3

Development of kinematics and dynamics of rigid bodies in three-dimensional space including: general theory of rotating coordinate frames, Eulers angles, Eulers equations of motion, angular momentum, work-energy principles, and Kane's method for creation and simulation of dynamic models.

Prerequisites: MEC-ENGR 285.

MEC-ENGR 5559 Robotics and Unmanned Systems Credits: 3

Students will develop, implement, and evaluate various path following (point mass, rigid body, and Dubin's) and trajectory generation (configuration spaces, roadmaps, cell decomposition, etc.) concepts on simulation and experimental platforms.

Prerequisites: MEC-ENGR 306, MEC-ENGR 457.

MEC-ENGR 5563 Engineer in Society - Construction Law Credits: 3

This course introduces professional, ethical, and legal concepts of the professional practice of engineering, and the role of the consulting engineer, specifically in the A/E/C industry during the design, procurement, and construction processes. A conceptual framework is developed for understanding the industry standard agreements (AIA, EJCDC, ConCensus) and the various participants roles and duties in project execution. The engineer's "professional standard of care" is examined and revisited throughout the semester, specifically what it means to be a "Professional Engineer". Emphasis is placed on project and contract management and the applicable law. Skills are developed in finding online resources of law, legal, and practice advice relevant to the practice of engineering and the construction industry

MEC-ENGR 5565 Project Finance Credits: 3

This class introduces students to the financial concepts faced by engineers in the businesses in which they work and for the projects to which they are assigned. Throughout the course students are reminded of the impact of two key variables – money and time – on their work. While not attempting to turn good engineers into mediocre accountants, the course includes a strong emphasis on managerial accounting. Students will learn how to read and apply financial statements and how to use these same financial concepts in developing pro formas to evaluate and support major capital investments. The effect of time on the value of money, appropriate discount factors, and the internal rate of return will be explored in the class. Students will learn to combine these financial factors with electronic spreadsheets to evaluate business opportunities and practices. All students will be required to develop a comprehensive financial model to evaluate/justify a real world capital project.

MEC-ENGR 5567 Fuel Cells and Renewable Energy Systems Credits: 3

This course will provide an overview of the fundamental phenomena that govern the design and operation of fuel cells. The thermodynamics of fuel cell systems will be explored including operation of ideal fuel cells and the physical and chemical phenomena that lead to losses within the fuel cell. The course will provide the methods and techniques required to analyze the performance of low, medium, and high temperature fuel cells within an overall energy system. The fueling of fuel cells from renewable resources will also be discussed.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 5568 Introduction to Nuclear Engineering Credits: 3

This course provides an overview of nuclear engineering for non-nuclear engineers. The course deals primarily with nuclear reactors including topics dealing with nuclear and reactor physics, reactor kinetics and controls and radiation environment. The general reactor types are covered in some detail with other topics dealing with licensing, waste management, quality assurance, balance of plant systems (turbine island), and significant nuclear accidents are also covered. Recent design innovations including small modular reactors and fusion are discussed.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 5570 Experimental Design & Analysis Credits: 3

Presentation of concepts and methods of statistical analysis and the design of experiments. Concepts, techniques, interpretation, and use of results are stressed. Focus is on experimental strategy and objectives, and the application of the methods discussed, rather than the mechanics of derivation. Major sections include: a review of hypothesis testing and basic analysis of variance techniques; single factor experiments including 2k and 3k design, confounding, and Taguchi philosophy; nested and split plot designs; analysis of covariance and an introduction to response surface methods.

MEC-ENGR 5572 Advanced Statistics Credits: 3

The objective of this course is to review the concepts and methods of undergraduate first course in statistical analysis and extend the student's understanding to cover topics typically covered in a second course in applied engineering statistics. Concepts, techniques, interpretation, and use of results are stressed. Focus is on the application of the methods discussed, rather than the mechanics of derivation.

Prerequisites: CIV-ENGR 319.

MEC-ENGR 5574 Linear Programming for Engineering Optimization Credits: 3

This course will cover techniques and applications of engineering optimization using linear programming techniques. The main topics will be the simplex algorithm, sensitivity analysis, duality, network models, and integer programming. Main applications will include transportation, shipments, and utility planning. Stochastic models, game theory, non-linear programming, and heuristic optimization techniques will be briefly mentioned, but not explored in detail. At the conclusion of the course the student should be able to formulate and solve optimization problems in several areas of engineering.

Prerequisites: MEC-ENGR 306.

MEC-ENGR 5586 Applied Finite Element Analysis Credits: 3

The study of advanced simulation techniques for the solution to engineering problems. The use of Finite Element Method toward solving mechanical, structural, vibration and potential flow problems will be explored. The use of current commercial simulation tools will be used extensively.

Prerequisites: CIV-ENGR 275, MATH 5517, MEC-ENGR 130.

MEC-ENGR 5594 Robotic System Identification Credits: 3

Students will develop, implement, and evaluate various system identification and parameter estimation techniques. Students will quantify estimation accuracy through both theoretical and experimental exercises. **Prerequisites:** MEC-ENGR 285, MEC-ENGR 306, MEC-ENGR 352.

MEC-ENGR 5595 Microscale Heat Transfer Credits: 3

Review of existing models. Concept of thermal lagging and the second-law admissibility. Applications to low temperatures, thermal processing of thin-film devices; amorphous materials; advanced composites.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 5599 Research Credits: 1-99

Independent investigation in field of mechanical engineering to be presented as a thesis.

MEC-ENGR 5601 Doctoral Topics In Mechanical Engineering Credits: 3**MEC-ENGR 5603 Directed Readings in Mechanical Engineering Credits: 1-3**

Faculty supervised readings course.

Prerequisites: Graduate standing.

MEC-ENGR 5610 Seminar Credit: 1

Review recent investigations, projects of major importance in mechanical engineering.

MEC-ENGR 5616 Theory of Plasticity Credits: 3

Plastic yield conditions and stress-strain relations. Behavior of elastic-perfectly plastic members. Plain strain in plastic members.

Prerequisites: MEC-ENGR 5621, MEC-ENGR 5622.

MEC-ENGR 5618 Multibody System Dynamics Credits: 3

Fundamental principles of advanced rigid body dynamics with applications. Special mathematical techniques including Lagrangian and Hamiltonian methods.

Prerequisites: MEC-ENGR 285.

MEC-ENGR 5621 Continuum Mechanics Credits: 3

Introductory course in the mechanics of continuous media. Basic concepts of stress, strain, constitutive relationships; conservation laws are treated using Cartesian tensor notation. Examples from both solid and fluid mechanics investigated.

Prerequisites: CIV-ENGR 276, MATH 345, MEC-ENGR 351.

MEC-ENGR 5622 Theory of Elasticity Credits: 3

Stress and strain at a point. General equations of elasticity. Plane stress, plain strain problems; torsion of prismatic bars. Energy methods.

Prerequisites: MEC-ENGR 5621.

MEC-ENGR 5623 Theory Of Plates And Shells Credits: 3

Bending of plates with various loading and boundary conditions. Deformations, stresses in thin shells.

Prerequisites: MEC-ENGR 5621.

MEC-ENGR 5624 Theory of Elastic Stability Credits: 3

Buckling of columns, beams, rings, curved bars, thin plates, shells.

Prerequisites: MEC-ENGR 5621.

MEC-ENGR 5627 Dynamics of Machinery Credits: 3

Dynamic balancing or rotating and reciprocating components of turbo-machinery and internal combustion engines. Gas torque analysis, vibration stress analysis and equivalent systems. Numerical and graphical techniques.

Prerequisites: MEC-ENGR 484.

MEC-ENGR 5630 Boundary Layer Theory Credits: 3

Fluid motion at high Reynolds Number. Derivation of Navier-Stokes equations and boundary layer equations. Methods of solution. Transition to turbulent flow. Completely developed turbulent flow.

Prerequisites: MEC-ENGR 441.

MEC-ENGR 5636 Heat Transfer-Convection Credits: 3

Concepts including fluid dynamics, conservation laws, thermal boundary layer theory, forced convection in laminar and turbulent flows, and free convection will be developed and applied.

Prerequisites: MEC-ENGR 399

MEC-ENGR 5637 Heat Transfer-Radiation Credits: 3

Advanced study of engineering radiation heat transfer. Concepts of electromagnetic theory. Development of thermal radiation laws from thermodynamic laws. Analysis of grey and non-grey systems with intervening gases. Study of recent literature.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 5639 Introduction to Two Phase Flow Credits: 3

The fundamental principles of two-phase flow with applications to a variety of homogeneous mixture as well as separated liquid-liquid, gas-solid, liquid-solid, and gas-liquid flow problems, including steady or transient, laminar or turbulent conditions.

Prerequisites: MEC-ENGR 441.

MEC-ENGR 5643 Industrial Refrigeration Credits: 3

Introduction to and analysis of the thermodynamic cycles and equipment used in Industrial Refrigeration. Applications of Industrial Refrigeration are also discussed.

MEC-ENGR 5660 Combustion Credits: 3

Study of advanced topics in flames and combustion. Detonation and deflagrations, supersonic combustion, air pollution.

Prerequisites: MEC-ENGR 441.

MEC-ENGR 5679 Dynamics of Structures Credits: 3

Study of the dynamic behavior of structures. Analysis of equivalent lumped parameter systems for the design of structures in a dynamic environment.

Prerequisites: CIV-ENGR 276 (or CIV-ENGR 421), MEC-ENGR 484 (or MATH 345, MEC-ENGR 285).

MEC-ENGR 5685 Advanced Vibration Analysis Credits: 3

Advanced topics in vibration theory and its application to Mechanical systems. Topics include vibration analysis of multi-degree of freedom, distributed and nonlinear systems, random vibration analysis, and vibration control.

Prerequisites: MEC-ENGR 484.

MEC-ENGR 5699 Research And Dissertation Credits: 1-9

Doctoral dissertation research.

Civil Engineering and Mechanical Engineering Department

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Professors Emeriti:

Deborah OBannon, Donald R. Smith, William E. Stewart, Jr.

Education Program Coordinator:

Liz Muleski

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Educational Objectives (PEOs)

The Civil Engineering program educational objectives (PEOs) support the missions of the institution and SCE. The PEOs are published on the SCE website (<http://sce.umkc.edu/about/accreditation/>).

The Civil Engineering Program at UMKC expects the graduates within a few years of graduation to attain the following:

- Graduates are successfully employed in an engineering or related field or accepted into a graduate program.
- Graduates apply the necessary problem-solving, design, and application skills for successful careers in Civil Engineering.
- Graduates utilize their educational foundation and communication skills to effectively lead, work, and communicate in diverse career paths.
- Graduates succeed in the complex social, business, and technical environment in which their engineering contributions will be utilized.

The Mechanical Engineering program educational objectives (PEOs) support the missions of the institution and SCE. The PEOs are published on the SCE website (<http://sce.umkc.edu/about/accreditation/>).

The Mechanical Engineering Program at UMKC expects the graduates within a few years of graduation to attain the following:

- Graduates are successfully employed in an engineering or related field or accepted into a graduate program.
- Graduates apply the necessary problem-solving, design, and application skills for successful careers in Mechanical Engineering.
- Graduates utilize their educational foundation and communication skills to effectively lead, work, and communicate in diverse career paths.
- Graduates succeed in the complex social, business, and technical environment in which their engineering contributions will be utilized.

Scholarships

A list of scholarships and financial aid is available on the Financial Aid webpage at <http://www.sfa.umkc.edu/>. Application information regarding these scholarships is available from the SS&C Student Services Center. Engineering students are also eligible to apply for SCE Scholarships (<http://sce.umkc.edu/resources/affordability/>). Information regarding these scholarships may also be obtained from the Student Services Center.

Advising and Registration

The civil and mechanical engineering programs assign a faculty or staff member to be the student's academic advisor throughout the duration of their study. Students may request a change of advisor assignment. Students are required to meet with their advisor every semester prior to registration for the following semester. The advisor guides the student in selecting courses that are necessary for completion of degree requirements, and answers questions regarding elective course programs and options. During the advising period, the advisor determines whether the student is meeting degree requirements by reviewing the program advisement form. Any exceptions to the normal procedure must be approved by written petition.

Program Activities

Students enjoy many group activities outside the classroom. They participate in regional and national competitions, design and erect bridges and concrete canoes, and participate in Engineers' Week activities. They have been winning their share of awards and have had fun doing it.

The School of Computing and Engineering has a number of societies open to all engineering students. These include the SCE Student Council, and the student chapters of the American Society of Civil Engineers (ASCE), the Missouri Society of Professional Engineers (MSPE), the National Society of Black Engineers (NSBE), the Society of Women Engineers (SWE) and the Structural Engineering Association of Kansas and Missouri (SEAKM). In these organizations, students have an opportunity to develop their career through association with other civil engineering students, the faculty, and active members of the profession. The chapters hold monthly meetings, field trips and other activities such as competing in the steel bridge and concrete canoe competitions. Membership is open to all engineering students.

Several national engineering honorary societies have also been established to recognize academic excellence. Tau Beta Pi is for all engineering majors. Assembly of Civil Engineering Scholars (ACES) is an honorary society for civil engineering students.

Undergraduate

Undergraduate Degrees:

- Bachelor of Science in Civil Engineering
- Bachelor of Science in Mechanical Engineering

Admissions

High school students planning to apply to the School of Computing & Engineering are strongly encouraged to take a college preparatory program that emphasizes mathematics, science and communication skills.

First-time college student applicants to the undergraduate program in information technology will be admitted if they obtain:

1. An ACT mathematics score of at least 25 and
2. An ACT composite score of at least 24

First-time college student applicants who do not meet the above criteria but do meet UMKC general admission requirements will have their applications reviewed by a committee for admission. Applicants who are not admitted to SCE but do meet UMKC general admission requirements may be admitted to University College.

Students without the prerequisite preparation must take the needed coursework before enrolling in courses required for the bachelor's degree. Students seeking re-admission must have been in good academic standing when last enrolled. Otherwise, re-admission requires a formal review by the undergraduate program committee.

Transfer applicants must have at least 24 credits of transferable college credit, an overall 2.0 GPA on a 4.0 scale in all coursework, which includes repeated coursework, attempted at previous institutions. Transfer applicants without a 2.0 or higher college GPA must submit a petition for admission.

International Transfer Credit

Unless the international institution is recognized by ABET, only sophomore level (200 level) or below coursework may be transferred by petition and review of the academic committee. Final acceptance of transfer credit by petition requires completion of one academic year of probation. Any identified deficiencies during that probation period will, on the review of the academic committee, require remedial coursework.

Visiting Student Admission

Visiting students who wish to take undergraduate civil or mechanical engineering coursework will be required to show proof of having met prerequisites to the course desired to be taken with a grade of "C" or better. Registration requires permission from the department.

Academic Regulations for Civil and Mechanical Engineering

Transfer of General Education Credits

Students Transferring from Other Missouri Institutions with a Certified 42-Hour General Education Core Curriculum

Students transferring into an undergraduate engineering program with a certified 42-hour block of general education credit from another Missouri institution typically would be required to complete additional degree specific coursework for baccalaureate degrees depending on the different degree programs pursued. A student should consult with an academic advisor to obtain the specific details.

Minimum Grade Requirement

A grade of "C" (2.0) or better must be earned in all major course required in the civil or mechanical engineering degree programs.

Audits

A student cannot take a course for audit and later expect to take the same course for credit in the degree program. For that reason, students must not audit any courses required in their program, unless credit has already been established. To audit an elective course, written consent from both the student's advisor and the instructor of the course is required. After the first week of classes, a student cannot change from credit to audit or audit to credit.

Petitions

To receive an exception from stated departmental guidelines or curriculum, the student must file a petition with the academic advisor. For transfer credit taken at another institution that is not articulated, a student may need to submit a petition to receive transfer credit. If the petition is denied by the CME Academic Appeals Committee, the student may appeal the decision to the Dean of the School of Computing & Engineering.

Withdrawals

A student may withdraw from a course without academic assessment by completing a Drop/Add form before the deadline given on the UMKC Registration and Records website.

Academic Standing

The University tries to assure that students progress satisfactorily toward their goals and receive clear warning when they do not. To this end, engineering adheres to a clear policy, but provides for exceptions in unusual cases. The interest of the student is paramount.

A student is in good academic standing when term and cumulative grade-point averages (GPA) from the University of Missouri system are 2.0 or higher in courses necessary for an engineering degree. Students will be placed on academic probation if, when in good academic standing, they earn a term GPA of less than 2.0 but greater than 1.0. Students may also be placed on academic probation at the time of initial admission or readmission because they do not fully meet the minimum standards. Students earning a term GPA of less than 1.0, or a term GPA of less than 2.0 while on academic probation become ineligible for continuation of studies. The academic standing statements found at the top of semester grade reports are defined as follows:

- Now In Good Standing - Term and cumulative GPA greater than 2.0.
- Now On Probation - Term or cumulative GPA less than 2.0.
- Academically Ineligible - Term GPA less than 1.0 or two consecutive semesters with term or cumulative GPA less than 2.0.

When a student becomes academically ineligible, the student is not allowed to continue academic studies. Any pre-registration of course work will be canceled. In order to continue academic studies, the student must appeal to the Civil and Mechanical Engineering Department in writing.

Now in Good Standing

A student whose term and cumulative grade-point averages (GPA) from the University of Missouri system are 2.0 or higher in courses necessary for an engineering degree, is in good academic standing. A term is defined as a fall semester, spring semester or summer session.

Now on Probation

A student will be placed on academic probation if, when in good academic standing, the student earns a term GPA of less than 2.0 but greater than 1.0. A student may also be placed on academic probation at the time of initial admission or readmission because the student does not fully meet the minimum requirements.

Probationary Term

After being placed on academic probation, the student's next semester of enrollment (the probationary term) must result in the completion of at least 12 hours of course work necessary for an engineering degree. A student will be returned to good standing if, at the end of the probationary term, the student's term and cumulative GPAs are 2.0 or higher in courses necessary for an engineering degree.

Academically Ineligible

A student will become academically ineligible if any of the following apply:

- The student receives a term GPA of less than 1.0.
- The student receives a term GPA of less than 2.0 for the probationary term.
- The student receives a cumulative GPA of less than 2.0 for the probationary term.
- The student fails to complete at least 12 hours of course work necessary for an engineering degree during the probationary term.

Satisfactory Academic Progress

Students will be expected to maintain continuous satisfactory academic progress and can be removed from the civil or mechanical engineering program after evaluation by the Civil and Mechanical Engineering Academic Committee if it finds that satisfactory academic progress is not being made (see CME Student Handbook for details).

Academic Appeals

If a student has become academically ineligible, the student may be allowed to continue academic studies, provided that the student successfully appeals to the Academic Appeals Committee. The primary concern of the Appeals Committee is the likelihood of the student's future success. Accordingly, any appeal should include causes for the student's past poor performance and reasons for expecting better performance in the future. When the Appeals Committee allows a student to re-enroll, it may set conditions such as courses to be taken, minimum grades, total hours, etc. to which the student must adhere.

If a student has become academically ineligible and wishes to enroll on a part-time basis, the student must appeal to the Academic Appeals Committee and document the reasons for part-time enrollment. Such documentation might include a written doctor's statement for medical reasons or a written employer's statement for work reasons. If work is given as the reason for part-time enrollment, the following guidelines shall apply:

Work Hours/Week	Minimum Credit Hours
40+	3
30+	6
20+	9
0-19	12

Application for Graduation

Students should apply for graduation when they register for their final semester's course work. Requirements for graduation include the following:

1. Thirty (30) hours must be taken at the University of Missouri-Kansas City.
2. The overall grade-point average in all enrollments in all University of Missouri course work must be at least 2.0.
3. The grade-point average in the last enrollment in all engineering course work (CE, ECE, ME) must be at least 2.0.

A grade-point average deficiency may be removed by repeating a course or by taking additional courses that qualify as eligible electives in the curriculum.

Students are required to take the HEighten Exam, which is a general education test, before they can graduate. This test is administered by the UMKC Office of Testing Services (816) 235-5820 and may be taken any time after the student has completed a total of 90 credit hours from any institution. The object of this test is to assess the effectiveness of university course work and the score is not part of the student's permanent record.

Students are also required to complete a department exit interview in the last semester that they are enrolled.

Graduate

- Graduate Programs
 - Engineering and Construction Project Management Certificate (p. 1299)
 - Master of Science in Civil Engineering
 - Doctoral Studies in Civil Engineering
 - Graduate Courses in Civil Engineering (CIV-ENGR)
- Civil Engineering Specialty Areas
- Mechanical Engineering
 - Career Opportunities in Mechanical Engineering
 - Program Description in Mechanical Engineering

- Graduate Programs
 - Master of Science in Mechanical Engineering
 - Doctoral Studies in Mechanical Engineering
 - Mechanical Engineering Specialty Areas

Admissions

Engineering and Construction Project Management Certificate

The Engineering and Construction Project Management Certificate is a 12 credit hour graduate certificate offered through the School of Computing & Engineering at the University of Missouri-Kansas City. The certificate is especially appropriate for post-baccalaureate working professionals in the Kansas City area who wish to pursue further studies in engineering project management, specifically in construction management. The certificate consists of 9 credit hours of required courses and 3 credit hours of an elective course at the 5500-level or above. Students must maintain 3.0 graduate grade point average (GPA) while enrolled.

Admission Requirements

Either a baccalaureate degree in engineering or a baccalaureate degree in another field combined with construction-related work experience is required. A grade point average (GPA) of at least 3.0 in the last 60 credit hours of undergraduate coursework is required. Pre-program requirements may be specified in case the Bachelor's degree is not in civil or mechanical engineering. The following documents are required for admission consideration:

- Application for admission
- Official transcripts of all college coursework

In addition, a statement of purpose is required for admission.

CONDITIONAL admission may be granted when minimum GPA requirements are not met; however, other indicators promise applicant's success in the program.

After admission, the student is required to meet with a faculty advisor.

Master's Program in Civil or Mechanical Engineering

The UMKC Civil & Mechanical Engineering Master's Programs offer graduate students the opportunity to get a state-of-the-art education in dynamic, challenging and professionally significant specialty areas.

Degrees Offered

- Master of Science in Civil Engineering (MSCE)
- Master of Science in Mechanical Engineering (MSME)

Assistantships

The school has numerous assistantship positions available each semester. Typically, awards are for quarter-time or half-time support and may include tuition fee waivers.

Admission Requirements

A baccalaureate degree in civil or mechanical engineering or related disciplines with a grade point average (GPA) of at least 3.0 in the last 60 hours of undergraduate engineering coursework is required. Pre-program requirements may be specified in case the Bachelor's degree is in a discipline different to which the candidate is applying.

The following documents are required for admission consideration:

- Application for admission
- Official transcripts of all college coursework
- TOEFL or IELTS scores are required for international students without prior U.S. degrees. The minimum required score is 79 (TOEFL) or 6.0 (IELTS). *English language proficiency requirements may be waived for applicants with a baccalaureate degree from an ABET-accredited program.*
- Official results of the Graduate Record Exam (GRE) are required for all applicants. A cumulative score of at least 302 (verbal + quantitative) and a minimum of 158 on the quantitative portion of the examination is required. *GRE requirements may be waived for applicants with a baccalaureate degree from an ABET-accredited program who have passed the Fundamentals of Engineering (FE) exam.*

In addition, three letters of recommendation from professors at previous institutions or mentors at work are highly encouraged.

CONDITIONAL admission may be granted when the minimum GPA and GRE requirements are not met; however, other indicators promise applicant's success in the program. To be fully admitted as a "Regular Master's Degree Seeking" student, the candidate must obtain a grade of "B" or better in the

first nine-hours of coursework; submit a satisfactory GRE score or an FE certificate, as specified above, within the first semester of their program; and complete any other conditions.

Doctoral Program in Civil or Mechanical Engineering

For the Doctoral Program in Civil or Mechanical Engineering, admission information can be found at the School of Graduate Studies website under the link for prospective students: <http://sgs.umkc.edu> (<http://sgs.umkc.edu/>). The telephone number is (816) 235-1111.

UMKC offers an Interdisciplinary Ph.D. (IPHD) program which consists of two disciplines:

- Primary Discipline
- Co-Discipline

Students in civil or mechanical engineering are encouraged to choose *Engineering* as the Primary Discipline. Admission requirements and Co-Discipline options can be found at the School of Graduate Studies website under the link for *Engineering*.

Graduate Academic Regulations

- With permission of the student's graduate advisor, up to six credit hours of transfer graduate coursework may be transferred from other non-University of Missouri institutions.
- With permission of the student's graduate advisor, up to 14 credit hours of transfer graduate coursework may be transferred from other University of Missouri institutions.
- However, at least 16 credit hours of graduate coursework must be taken at UMKC.

A graduate student must maintain a cumulative GPA of 3.0 for all graduate coursework taken during the course of graduate studies. Should the cumulative GPA fall below 3.0, the student will be placed on probation. A student on probation must bring the cumulative GPA to a 3.0 by the end of the next semester or face possible dismissal. Students should apply for graduation when they register for their final semester of coursework. All students must complete and file with the Department Office both the UMKC Application for Graduation form and the Departmental Program of Study form. Students selecting the *project* or *thesis* option must also file a Departmental Report of the Master's Examining Committee form. Students selecting the *thesis* option must file a Master's Thesis Report form and have their thesis approved by the UMKC Graduate School.

Transfer of Graduate Credits

- With permission of the student's graduate advisor, up to six credit hours of transfer graduate coursework may be transferred from other non-University of Missouri institutions.
- With permission of the student's graduate advisor, up to 14 credit hours of transfer graduate coursework may be transferred from other University of Missouri institutions.
- However, at least 16 credit hours of graduate coursework must be taken at UMKC.

Academic Standing

A graduate student must maintain a cumulative GPA of 3.0 for all graduate coursework taken during the course of graduate studies. Should the cumulative GPA fall below 3.0, the student will be placed on probation. A student on probation must bring the cumulative GPA to a 3.0 by the end of the next semester or face possible dismissal.

Application for Graduation

Students should apply for graduation when they register for their final semester of coursework. All students must complete and file with the Department Office both the UMKC Application for Graduation form and the Departmental Program of Study form. Students selecting the *project* or *thesis* option must also file a Departmental Report of the Master's Examining Committee form. Students selecting the *thesis* option must file a Master's Thesis Report form and have their thesis approved by the UMKC Graduate School.

Civil Engineering Courses

CIV-ENGR 111 First Year Cornerstone Credit: 1

An exploration of the diverse emphasis specific career opportunities of Civil Engineers, with a goal of providing students the needed fundamental skills, knowledge and resources for identifying the most appropriate career path(s) consistent with the student's interests, skills, and objectives.

CIV-ENGR 113 Engineering Measurements Credit: 1

This course provides a fundamental introduction to the elements of surveying. Basics including terminology, coordinate systems, equipment, legal descriptions, and calculations will be taught in the classroom. Field laboratory sessions will introduce the students to setting up basic equipment, running a level loop, and laying out a site based on plan designs.

CIV-ENGR 190 Special Topics Credits: 1-3

Selected introductory topics in the area of computing. May be repeated for credit when topic varies.

CIV-ENGR 275 Engineering Statics Credits: 3

Fundamentals of statics; static equilibrium; internal forces; introduction to elements of mechanics of elastic materials, and properties of areas.

Prerequisites: PHYSICS 240.

CIV-ENGR 276 Strength Of Materials Credits: 3

The course introduces and emphasizes the concepts and analysis methods for stress and strain, torsion, bending and shear stresses in beams, combined stresses, and deflection theory using a calculus based methodology. Introduction to buckling and energy methods may be included.

Prerequisites: CIV-ENGR 275.

CIV-ENGR 318 GIS for Engineers Credits: 3

This course covers the fundamental concepts and methods for use of GIS software used to solve engineering applications and problems. The course uses module based practical learning to apply and integrate foundational knowledge, develop the skills required to model various types of imagery data, incorporate this data into projects for management and design, and provide the skills necessary for students to depict ideas and design graphically. A personal computer capable of running the software is required for the course. Non-engineering majors by instructor permission only.

Prerequisites: SCE Student.

CIV-ENGR 319 Engineering Computation and Statistics Credits: 3

A review of descriptive statistics, statistical distribution functions and application to engineering problems. Introduction to hypothesis testing, analysis of variance, correlation/regression and design of factorial experiments.

Prerequisites: MATH 268 or MATH 220.

CIV-ENGR 321 Structural Analysis Credits: 4

This course introduces the basic analysis and computer methods that are required to analyze basic structural elements and simple structures. Topics covered in this course include design loads, analysis of statically determinate beams, frames and trusses, shear and moment diagrams, influence diagrams, beam deflections, statically indeterminate structures (beams and frames), displacement methods, introduction to energy and matrix methods.

Prerequisites: CIV-ENGR 276.

CIV-ENGR 323 Structural Steel Design Credits: 3

Basic principles of structural steel design. Design of beams, axially loaded members, columns, and bolted and welded connections.

Prerequisites: CIV-ENGR 321.

CIV-ENGR 335 Soil Mechanics Credits: 3

Detailed study of physical and mechanical properties of soil governing its behavior as an engineering material. Machine Shop Safety is required prior to taking this class.

Prerequisites: CIV-ENGR 276, CHEM 211, CHEM 211L.

CIV-ENGR 342 Water and Wastewater Treatment Processes Credits: 3

Methods for determining and characterizing water quality, effects of pollution on streams and lakes, and an introduction to engineering systems for the distribution, collection and treatment of water and wastewater.

Prerequisites: CIV-ENGR 351 or MEC-ENGR 351; and CHEM 211 and CHEM 211L.

CIV-ENGR 351 Fluid Mechanics Credits: 3

Concepts of the statics and dynamics of fluids, with emphasis on principles of continuity, momentum and energy. Boundary layers, dimensional analysis and drag are covered briefly. Thorough treatment of pipe flow.

Prerequisites: CIV-ENGR 275.

Co-requisites: MATH 345 or MEC-ENGR 272.

CIV-ENGR 357 Engineering Hydraulics Credits: 3

Analysis and design of closed conduit systems for water supply; fundamentals of open channel flow; principles of pumping and hydropower generation; transients and control of surge pressures in pipelines.

Prerequisites: CIV-ENGR 351 or MEC-ENGR 351.

CIV-ENGR 378WI Civil Engineering Materials Credits: 3

This course provides students with a working knowledge of the design and performance of Asphaltic Concrete (AC) and Portland Cement Concrete (PCC) mixtures through understanding the properties and requirements of the component materials and their effects on subsequent performance. An understanding of the design, production process, construction, durability, and operations and maintenance will be provided. A significant portion of this course requires hands-on laboratory testing and analysis. Roadway and highway pavements will provide a primary context within which these concrete systems will be studied. Machine Shop Safety is required prior to taking this course.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 276.

CIV-ENGR 390 Engineering Coop/Internship Credits: 0

Students may participate in structured Engineering Coop/Internship under the supervision of employer. They must carry out significant professional responsibilities and whatever additional assignments are determined by the employer.

Prerequisites: Departmental consent.

CIV-ENGR 400 Problems Credits: 1-4

Directed investigation of civil engineering problems.

Prerequisites: Departmental consent.

CIV-ENGR 401ES Special Topics in Civil Engineering Credits: 3

Hydraulic conductivity measurements. Seepage analysis and control. Earth dam and embankment design. Computer applications.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 401HA Hydrologic Analysis and Design Credits: 3

Practical implementation of hydrologic and hydraulic system design in accordance with published design criteria and using methods and numerical modeling accepted by local, state, and national government agencies.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 401SD Special Topics In Civil Engineering Credits: 3

Study of soil behavior under cyclic and dynamic loading conditions. Foundation design for vibratory loadings. Introductory earthquake engineering including dynamic ground response for determination of dynamic soil properties. Evaluation of soil liquefaction potential during earthquakes by both laboratory and in situ field methods. Design consideration for embankments and earth retaining structures under seismic loading conditions. Construction blasting and vibration effects on underground systems.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 401SV Topics in Civil Engineering Credit: 1

This course provides a fundamental introduction to the elements of surveying. Basics including terminology, coordinate systems, equipment, legal descriptions, and calculations will be taught in the classroom. Field laboratory sessions will introduce the students to setting up basic equipment, running a level loop, and laying out a site based on plan designs.

CIV-ENGR 404 Project Management of Integrated Design and Construction Credits: 3

Provide a body of knowledge that includes the principles, knowledge areas, skills, and tools applicable to successful project management for the performance of integrated design and construction of capital projects, specifically as applicable to the post-award period. This post-award period is the time from the formal project award by the owner through project design and construction, testing, commissioning, close-out and completion of the project warranties.

CIV-ENGR 405 Capital Project Delivery Methods Credits: 3

Provide a body of knowledge that acquaints students with the capital project delivery methods in both public and private business sectors of the U.S design – construction industry. Project delivery means how a capital project comprising both design and construction is planned, procured, contracted and implemented by an owner to achieve desired objectives. Delivery methods discussed in this class include traditional design – bid- build, design – build, design-build plus added services such as operations and maintenance, CM @ Risk and other approaches. Roles and responsibilities of owners, owner consultants, and design and construction firms are presented and discussed.

CIV-ENGR 406 Construction Project Risk Management Credits: 3

Risk management skill sets are necessary tools for the successful project manager. Project Management Institute's (PMI) 6 steps of project risk management constitute the basis of the content, which includes an expanded knowledge of risk identification, qualitative and quantitative risk analysis, risk control, contract risks, and risk transfer options. Business and project risks such as client selection, project planning, and project execution, will be considered as well as legacy risks that remain with the business and participants beyond the project completion. Different risk management strategies will be discussed, including risk avoidance, risk mitigation, and risk transfer.

Prerequisites: Senior Standing.

CIV-ENGR 409 Fundamentals of Engineering Review Credit: 1

This course consists of a series of lectures and is intended as a review class for all the subjects included in the Fundamentals of Engineering exam. Classes specifically focus on the review of equations and formulas included in the reference handbook published by NCEES.

CIV-ENGR 411 Civil Engineering Systems Design I Credits: 2

Comprehensive and realistic design project using the systems approach. Design choices and their effect upon the environment. Design constraints include constructability, minimization of environmental impact and cost-effectiveness. Managerial and professional aspects of design practice.

Prerequisites: CIV-ENGR 467 and CIV-ENGR 497.

Co-requisites: CIV-ENGR 422WI and CIV-ENGR 432.

CIV-ENGR 412 Civil Engineering Systems Design II Credits: 3

Continuation of CIV-ENGR 411.

Prerequisites: CIV-ENGR 411 and departmental consent.

CIV-ENGR 415 Engineering Leadership and Ethics Credits: 3

Analysis of leadership, including 360-degree assessment of students' leadership. Discussion of leadership cases and application to engineering careers. Frequent analysis of engineering ethics cases using the NSPE Code.

CIV-ENGR 417 Advanced Structural Analysis Credits: 3

The course is designed as a continued study of structural analysis methods with emphases on indeterminate structures (trusses, beam/columns, and frames), advanced analysis methods, and introduction to nonlinear structural effects including geometric nonlinearity and inelasticity. Advanced structural analysis methods including force, displacement, matrix, energy, and limit analysis methods will be introduced and practiced. Both computer based and hands-on analysis will be involved.

Prerequisites: CIV-ENGR 321

CIV-ENGR 421 Matrix Methods of Structural Analysis Credits: 3

The basic components of this class are matrix theories and applied computer analysis methods using a computer-based structural analysis software. These include: (1) study of matrix formulation of direct stiffness method, virtual work principle and formulation of displacement-based frame elements, theories and significance of geometric and material nonlinearity; (2) Sap2000-based analysis of 2D/3D trusses and 2D/3D frames considering different loading and material/geometric nonlinearity.

Prerequisites: CIV-ENGR 321.

CIV-ENGR 422WI Reinforced Concrete Design Credits: 3

Basic principles of reinforced concrete design. Design of beams for flexure and shear; design of short and slender columns. Bond stress development. Footing design.

Prerequisites: CIV-ENGR 321.

CIV-ENGR 423 Advanced Structural Steel Design Credits: 3

Design of steel structures and bridges. Topics include composite beams, plate girder design, and moment resistant connections.

Prerequisites: CIV-ENGR 323.

CIV-ENGR 425 Prestressed Concrete Credits: 3

Design and behavior of prestressed concrete structures; material and system of pretensioned and post tensioned systems; prestress losses; flexure, shear, bond, deflections and partial prestress in determinate structures; indeterminate beams-introduction.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 427 Advanced Reinforced Concrete Design Credits: 3

Advanced topics in the design of footings, retaining walls, two-way floor slabs, torsion and continuous structures, shear friction, strut and tie design, precast design.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 429 Design of Structures for Blast and Fire Credits: 3

General overview of Blast Design; risk assessment and design criteria; simplifies Blast Effects Analysis; ground shock, material response; antiterrorism design considerations; weapons effects and mitigation; internal explosions; progressive collapse analysis; and introduction to Fire Design.

CIV-ENGR 431 Fundamentals of Geomaterial Characterization Credits: 3

A geomaterial is any construction material comprised primarily of soil. This course overviews state-of-the-art instrumental techniques for analysis of the physio-chemical properties of soils, aggregates, hydraulic concrete, and asphaltic concrete. Evaluation techniques will be applied to determining beneficial reuse opportunities for industrial by-product materials from the Kansas City region.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

CIV-ENGR 432 Foundation Engineering Credits: 3

Design of basic foundation structures, footings, retaining walls, pile foundations, dams.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 436 Advanced Soil Mechanics Credits: 3

Theoretical soil mechanics as applied to solution of specific engineering problems.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 442 Hydraulic Structures Credits: 3

A review of the history and hydraulic design procedures for a variety of hydraulic structures including spillways, water measurement structures, canal structures and energy dissipation structures.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 446 Limnology Credits: 3

Physical, biological and chemical issues important in surface fresh waters. Includes carbonate chemistry, algal assay and thermocline analysis.

Prerequisites: CHEM 211, MATH 345.

CIV-ENGR 447 Contracts and Law for Engineers Credits: 3

This course covers a broad range of substantive legal topics giving the student a grounding in the legal implications of certain situations that they may encounter during their careers. The course includes coverage of basic contract law, environmental regulations and compliance, construction law, antitrust law, intellectual property law, civil procedure, employment law, business entities (corporate law) product liability and criminal law and procedure. The objective of the course is to provide students with a fundamental understanding of the wide range of federal and state laws governing behavior in our complicated and rule of law driven society.

Prerequisites: Senior standing.

CIV-ENGR 449 Environmental Compliance, Auditing and Permitting Credits: 3

This course provides a high level overview of the most important statutes that have been enacted to protect the environment. The course covers regulation of hazardous waste, the Clean Air and Clean Water Acts, the Resource Conservation and Recovery Act, the All Appropriate Inquiry Rule and the law addressing sites contaminated with hazardous substances and the technology options employed to remediate those sites. In addition, the course provides coverage of environmental audits and emergency planning for extremely hazardous substances, the regulation of underground storage tanks, safe drinking water and the National Environmental Policy Act among other statutes.

Prerequisites: Senior standing.

CIV-ENGR 452 Hydraulics of Open Channels Credits: 3

This is a first course in the fundamentals of open channel (free surface) water flow. Over ninety-nine percent of all the water that is moved on the planet's surface is by free surface flow. Study of free surface flow is essential to the study of storm water drainage systems, flood control, water and wastewater treatment and the study of the form and processes of river evolution. This class provides the fundamental physical principles of free surface flow as a prelude to a significant number of other topics that pertain to engineering and geomorphic analysis.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 453 Hydraulics and Variability of Rivers Credits: 3

Introduction to the concepts of alluvial channel behavior, evolution and change due to natural and man-induced modifications to streams and watersheds. Numerous case studies of river behavior are studied from the perspective of hydraulics, geomorphology and sediment transport.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 454 River Stability and Scour Credits: 3

Bridge hydraulics, stream stability, scour at bridge piers and abutments, hydraulic modeling of floods, countermeasures for protection of bridge infrastructure.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 456 Urban Hydrology Credits: 3

Analysis of urban drainage systems in accordance with published municipal criteria. This course is an in-depth course for senior undergraduate students interested in the hydrological sciences and for graduate students specializing in water resources. Specifically this course will focus on the engineering procedures and techniques specified by municipalities to design and maintain efficient, safe, storm drainage systems. This course also focuses on the unique issues associated with estimating and designing for rainfall/runoff in urban metropolitan areas, including channel and reservoir routing of floods through stream channels, retention structures, culverts, and storm sewers.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 463 Construction Law Credits: 3

This course introduces professional, ethical, and legal concepts of the professional practice of engineering, and the role of the consulting engineer, specifically in the A/E/C industry during the design, procurement, and construction processes. A conceptual framework is developed for understanding the industry standard agreements (AIA, EJCDC, ConCensus) and the various participants roles and duties in project execution. The engineer's "professional standard of care" is examined and revisited throughout the semester, specifically what it means to be a "Professional Engineer". Emphasis is placed on project and contract management and the applicable law.

CIV-ENGR 466 Green Building and Sustainable Infrastructure Credits: 3

This class will discuss various green rating systems for buildings and infrastructure. Upon completion of this course students will be prepared for the LEED Green Associate Exam. The course will also discuss infrastructure project sustainability from a life cycle perspective. A semester project will involve stormwater management using "green" techniques and methods to mitigate the urban heat island. Upon completion of the course, students will better understand what sustainability means and how it applies in the context of our built environment and have a good idea of how technology will impact our sustainable future.

Prerequisites: Junior standing.

CIV-ENGR 467 Introduction to Construction Management Credits: 3

Structure of the construction industry; construction drawings and specifications; estimating and bidding; construction contracts, bonds and insurance; planning and scheduling of construction operations; project management; computer techniques.

CIV-ENGR 468 Construction Planning and Scheduling Credits: 3

This course is intended to provide an in-depth examination of the construction planning and scheduling process, as it relates to civil engineering projects. Topics will include planning and scheduling of construction operations by the critical path method, Network diagramming, scheduling computations, and time-cost trade-offs. Manpower and equipment leveling. Computer and noncomputer techniques.

Prerequisites: CIV-ENGR 467.

CIV-ENGR 469 Construction Methods and Equipment Credits: 3

Introduction to methods used to plan, construct, and manage heavy civil projects. Topics will include development, project control, equipment productivity, earthmoving fundamentals, formwork design, and other issues in heavy civil projects.

Prerequisite: CIV-ENGR 467.

CIV-ENGR 470 Corrosion Engineering Credits: 3

This course will cover the physical interaction of metallic materials with their environments, called corrosion. Corrosion is an electrochemical process and the thermodynamics and kinetics of corrosion processes will be discussed. Students will be expected to identify different forms of corrosion and be able to select appropriate materials for their working environment to prevent corrosion related problems. Second half of the class will concentrate on corrosion of metals in concrete and prevention methods.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 471 Advanced Portland Cement Concrete Credits: 3

This course will cover topics such as cement chemistry, concrete proportioning, aggregates, mineral and chemical admixtures, fresh and hardened properties of concrete, and durability of concrete. Design and proportioning of concrete mixtures for desired fresh and hardened properties will be emphasized. Specialty concrete types such as high strength/high performance concrete, lightweight concrete, pervious concrete, high volume fly ash concrete, and fiber reinforced concrete will also be covered.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 473 Durability of Civil Engineering Materials Credits: 3

This course will explore the identification, causes of, and remediation of material-related durability deterioration in civil engineering projects. The primary focus will be on reinforced concrete, plain concrete, and soil for a variety of applications. Course content will be delivered primarily through laboratory activities and handouts. Lab activities will use advanced analysis techniques and help the students identify and measure deterioration mechanisms. Various non-destructive evaluation techniques will be discussed. Students have hands on experiences with samples production, data collection, and data analysis for all of the lab activities.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

CIV-ENGR 475 Seismic Design of Structures Credits: 3

Introduction to basic analysis and design principles for the seismic design of buildings (concrete, steel, wood). General seismic principles, codes and loads, static lateral force procedure, dynamic lateral force procedure, topics in rigidities of buildings.

Prerequisites: CIV-ENGR 323 (or CIV-ENGR 422WI), and MEC-ENGR 285.

CIV-ENGR 484 Pavement Materials Design, Maintenance, and Rehabilitation Credits: 3

Traffic loading and volume, stress and deflection, characterization of pavement materials, design of flexible and rigid pavements, design of overlays, evaluation of pavement performance, maintenance techniques, and rehabilitation options.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

CIV-ENGR 487 Applied Finite Element Analysis Credits: 3

The study of advanced simulation techniques for the solution to engineering problems. The use of Finite Element Method toward solving mechanical, structural, vibration and potential flow problems will be explored. Current commercial simulation tools will be used extensively.

Prerequisites: MEC-ENGR 272 and MEC-ENGR 130.

CIV-ENGR 491 Internship Credits: 6

For International students who must register to cover off-campus employment which is approved as related to their degree by their departmental advisor and ISAO.

Prerequisites: Departmental consent.

CIV-ENGR 497 Engineering Hydrology Credits: 3

Fundamental concepts of hydrology in engineering; computation principles of runoff from rainfall; measurement of hydrologic quantities; quantitative and statistical estimation of design stream-flow magnitude and frequency; principles of unsteady routing of hydrographs.

Prerequisites: CIV-ENGR 319; and CIV-ENGR 351 or MEC-ENGR 351.

CIV-ENGR 5500 Problems Credits: 1-6

Supervised investigation in civil engineering to be presented in the form of a report.

Prerequisites: Graduate standing.

CIV-ENGR 5501 Advanced Topics in Civil Engineering Credits: 1-3

Current technical developments in civil engineering.

CIV-ENGR 5501AE Advanced Topics in Civil Engineering Credits: 1-3

CIV-ENGR 5504 Project Management of Integrated Design and Construction Credits: 3

Provide a body of knowledge that includes the principles, knowledge areas, skills, and tools applicable to successful project management for the performance of integrated design and construction of capital projects, specifically as applicable to the post-award period. This post-award period is the time from the formal Project award by the owner through Project design and construction, testing, commissioning, close-out and completion of the Project warranties.

CIV-ENGR 5505 Capital Project Delivery Methods Credits: 3

Provide a body of knowledge that acquaints students with the capital project delivery methods in both public and private business sectors of the U.S design – construction industry. Project delivery means how a capital project comprising both design and construction is planned, procured, contracted and implemented by an owner to achieve desired objectives. Delivery methods include traditional design – bid- build, design – build, design-build plus added services such as operations and maintenance, CM @ Risk and other approaches. Roles and responsibilities of owners, owner consultants, and design and construction firms are presented and discussed. Owner procurement approaches, project risk.

CIV-ENGR 5506 Construction Project Risk Management Credits: 3

Risk management skill sets are necessary tools for the successful project manager. Project Management Institute's (PMI) 6 steps of project risk management constitute the basis of the content, which includes an expanded knowledge of risk identification, qualitative and quantitative risk analysis, risk control, contract risks, and risk transfer options. Business and project risks such as client selection, project planning, and project execution, will be considered as well as legacy risks that remain with the business and participants beyond the project completion. Different risk management strategies will be discussed, including risk avoidance, risk mitigation, and risk transfer.

CIV-ENGR 5515 Engineering Leadership & Ethics Credits: 3

Analysis of leadership, including 360-degree assessment of students' leadership. Discussion of leadership cases and application to engineering careers. Frequent analysis of engineering ethics cases using the NSPE Code.

Prerequisites: Graduate status.

CIV-ENGR 5516 Advanced Engineering Mathematics Credits: 3

The class is a review of and introduction to advanced mathematical theories and methods for graduate students in Civil and Mechanical Engineering. The basic topics include 2nd-order ODE/PDEs, advanced linear algebra, continuous and discrete Fourier transform, advanced probability and statistics methods, and commonly numerical methods (e.g. linear and generalized linear regression, iterative methods, and maximum likelihood estimation. Successful completion of Calculus III and working knowledge of a mathematical software package (Matlab preferred) is recommended.

CIV-ENGR 5517 Advanced Structural Analysis Credits: 3

The course is designed as a continued study of structural analysis methods with emphases on indeterminate structures (trusses, beam/columns, and frames), advanced analysis methods, and introduction to nonlinear structural effects including geometric nonlinearity and inelasticity. Advanced structural analysis methods including force, displacement, matrix, energy, and limit analysis methods will be introduced and practiced. Both computer based and hands on analysis will be involved.

Prerequisites: Undergraduate coursework in structural analysis strongly recommended.

CIV-ENGR 5521 Matrix Methods of Structural Analysis Credits: 3

An introduction to the fundamentals of stiffness and flexibility methods for analysis of truss and frame structures. Application of the computer programs to three dimensional structures.

Prerequisites: CIV-ENGR 321.

CIV-ENGR 5523 Advanced Structural Steel Design Credits: 3

Design of steel building structures. Topics include composite deck and beam design, stability design, plastic design, plate girder design, simple and eccentric shear connections, and partial and fully restrained moment resistant connections.

Prerequisites: CIV-ENGR 323.

CIV-ENGR 5526 Prestressed Concrete Credits: 3

Design and behavior of prestressed concrete structures; material and system or pretensioned and post tensioned systems; prestress losses; flexure, shear, bond, deflections and partial prestress in determinate structures; indeterminate beams-introduction.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 5527 Advanced Reinforced Concrete Design Credits: 3

Advanced Topics in the design of footings, retaining walls two way floor slabs, torsion and continuous structures, shear friction, strut and tie design, precast design.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 5529 Advanced Design of Structures for Blast and Fire Credits: 3

General overview of Blast Design; risk assessment and design criteria; simplified Blast Effects Analysis; ground shock, material response; antiterrorism design considerations; weapons effects and mitigation; internal explosions; progressive collapse analysis; and introduction to Fire Design.

CIV-ENGR 5531 Fund of Geomaterial Characterization Credits: 3

A geomaterial is any construction material comprised primarily of soil. This course overviews state-of-the-art instrumental techniques for analysis of the physio-chemical properties of soils, aggregates, hydraulic concrete, and asphaltic concrete. Evaluation techniques will be applied to determining beneficial reuse opportunities for industrial by-product materials from the Kansas City region. Prerequisites are CE 335 Soil Mechanics and CE378 Civil Engineering Materials, or equivalent. 3 credit hours.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

CIV-ENGR 5532 Foundation Engineering Credits: 3

Design of basic foundation structures, footings, retaining walls, pile foundations, dams.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 5536 Advanced Soil Mechanics Credits: 3

Theoretical soil mechanics as applied to solution of specific engineering problems.

Prerequisites: CIV-ENGR 335.

CIV-ENGR 5542 Hydraulic Structures Credits: 3

A review of the history and hydraulic design procedures for a variety of hydraulic structures including spillways, water measurement structures, canal structures and energy dissipation structures.

Prerequisites: CIV-ENGR 452 (or CIV-ENGR 5552).

CIV-ENGR 5544 Unit Processes in Environmental Engineering Credits: 3

Typical chemical and physical relationships are applied to unit processes of water and wastewater. Troubleshooting for operation problems is emphasized.

Prerequisites: CIV-ENGR 342.

CIV-ENGR 5545 Environmental Engineering Microbiology Credits: 3

Theory and application of fundamental principles of microbiology, toxicology, ecology, and aquatic biology of the microorganisms of importance to environmental engineers.

Prerequisites: CE342.

CIV-ENGR 5546 Limnology Credits: 3

A survey of the physical, biological, and chemical issues important in surface fresh waters. Includes carbonate chemistry, algal assay and Thermocline analysis.

Prerequisites: CHEM 211, MATH 345.

CIV-ENGR 5547 Contracts and Law for Engineers Credits: 3

This course covers a broad range of substantive legal topics giving the student a grounding in the legal implications of certain situations that they may encounter during their careers. The course includes coverage of basic contract law, environmental regulations and compliance, construction law, antitrust law, intellectual property law, civil procedure, employment law, business entities (corporate law) product liability and criminal law and procedure. The objective of the course is to provide students with a fundamental understanding of the wide range of federal and state laws governing behavior in our complicated and rule of law driven society.

CIV-ENGR 5549 Environmental Compliance, Auditing, & Permitting Credits: 3

This course provides a high level overview of the most important statutes that have been enacted to protect the environment. The course covers regulation of hazardous waste, the Clean Air and Clean Water Acts, the Resource Conservation and Recovery Act, the All Appropriate Inquiry Rule and the law addressing sites contaminated with hazardous substances and the technology options employed to remediate those sites. In addition, the course provides coverage of environmental audits and emergency planning for extremely hazardous substances, the regulation of underground storage tanks, safe drinking water and the National Environmental Policy Act among other statutes.

CIV-ENGR 5552 Hydraulics of Open Channels Credits: 3

This is a first course in the fundamentals of open channel (free surface) water flow. Over ninety-nine percent of all the water that is moved on the planet's surface is by free surface flow. Study of free surface flow is essential to the study of storm water drainage systems, flood control, water and wastewater treatment and the study of the form and processes of river evolution. This class provides the fundamental physical principles of free surface flow as a prelude to a significant number of other topics that pertain to engineering and geomorphic analysis.

Prerequisites: CIV-ENGR 351.

CIV-ENGR 5553 Hydraulics and Variability of Rivers Credits: 3

This course introduced concepts of alluvial channel behavior, evolution and change due to natural and man-induced modifications to streams and watersheds. Numerous case studies of river behavior are studied from the perspective of hydraulics, geomorphology and sediment transport.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 5554 River Stability and Scour Credits: 3

Bridge hydraulics, stream stability, scour at bridge piers and abutments, hydraulic modeling of floods, countermeasures for protection of bridge infrastructure.

Prerequisites: CIV-ENGR 452 or CIV-ENGR 5552.

CIV-ENGR 5556 Urban Hydrology Credits: 3

Analysis of urban drainage systems in accordance with published municipal criteria. This course is an in-depth, follow on course for senior undergraduate students interested in the hydrological sciences and for graduate students specializing in water resources. Specifically this course will focus on the engineering procedures and techniques specified by municipalities to design and maintain efficient, safe, storm drainage systems. This course also focuses on the unique issues associated with estimating and designing for rainfall/runoff in urban metropolitan areas, including channel and reservoir routing of floods through stream channels, retention structures, culverts, and storm sewers.

Prerequisites: CIV-ENGR 357.

CIV-ENGR 5563 Construction Law Credits: 3

This course introduces professional, ethical, and legal concepts of the professional practice of engineering, and the role of the consulting engineer, specifically in the A/E/C industry during the design, procurement, and construction processes. A conceptual framework is developed for understanding the industry standard agreements (AIA, EJCDC, ConCensus) and the various participants roles and duties in project execution. The engineer's "professional standard of care" is examined and revisited throughout the semester, specifically what it means to be a "Professional Engineer". Emphasis is placed on project and contract management and the applicable law. Skills are developed in finding online resources of law, legal, and practice advice relevant to the practice of engineering and the construction industry

CIV-ENGR 5565 Project Finance Credits: 3

This class introduces students to the financial concepts faced by engineers in the businesses in which they work and for the projects to which they are assigned. Throughout the course students are reminded of the impact of two key variables – money and time – on their work. While not attempting to turn good engineers into mediocre accountants, the course includes a strong emphasis on managerial accounting. Students will learn how to read and apply financial statements and how to use these same financial concepts in developing pro formas to evaluate and support major capital investments. The effect of time on the value of money, appropriate discount factors, and the internal rate of return will be explored in the class. Students will learn to combine these financial factors with electronic spreadsheets to evaluate business opportunities and practices. All students will be required to develop a comprehensive financial model to evaluate/justify a real world capital project.

CIV-ENGR 5566 Green Building and Sustainable Infrastructure Credits: 3

This course provides a broad overview of what sustainability means to construction and our built environment. Specific green infrastructure rating systems of LEED and Envision will be discussed in detail to quantify the "greenness" of construction of buildings residential subdivisions, highways, roads, and airports. Upon completion of this course students will have a substantial background and understand the aspects needed for the LEED Green Associates and Envision ISI exams. Two major additional aspects of green building important to sustainable infrastructure include stormwater management using "green" techniques and methods to mitigate the urban heat island. The course will also discuss infrastructure project sustainability from a life cycle cost perspective and determining the life cycle inventory of various materials. Upon completion of the course, students will better understand what sustainability means and how it applies in the context of our built environment and have a good idea of how technology will impact our sustainable future.

CIV-ENGR 5567 Introduction to Construction Management Credits: 3

This course will introduce the students to basic construction management related topics including structure of the construction industry, construction drawings and specifications, estimating and bidding, construction contracts, bonds and insurance, planning and scheduling of construction operations, project management, computer techniques.

CIV-ENGR 5568 Construction Planning and Scheduling Credits: 3

This course is intended to provide an in-depth examination of the construction planning and scheduling process, as it relates to civil engineering projects. Topics will include planning and scheduling of construction operations by the critical path method, Network diagramming, scheduling computations, and time-cost trade-offs. Manpower and equipment leveling. Computer and noncomputer techniques.

Prerequisites: CIV-ENGR 467 or CIV-ENGR 5567.

CIV-ENGR 5569 Construction Methods and Equipment Credits: 3

Introduction to methods used to plan, construct and manage heavy civil projects. Topics will include development, project control, equipment productivity, earthmoving fundamentals, formwork design, and other issues in heavy civil projects.

Prerequisites: CIV-ENGR 467 or CIV-ENGR 5567.

CIV-ENGR 5570 Corrosion Engineering Credits: 3

This course will cover the physical interaction of metallic materials with their environments, called corrosion. Corrosion is an electrochemical process and the thermodynamics and kinetics of corrosion processes will be discussed. Students will be expected to identify different forms of corrosion and be able to select appropriate materials for their working environment to prevent corrosion related problems. Second half of the class will concentrate on corrosion of metals in concrete and prevention methods.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 5571 Advanced Portland Cement Concrete Credits: 3

This course will cover topics such as cement chemistry, concrete proportioning, aggregates, mineral and chemical admixtures, fresh and hardened properties of concrete, and durability of concrete. Design and proportioning of concrete mixtures for desired fresh and hardened properties will be emphasized. Specialty concrete types such as high strength/high performance concrete, lightweight concrete, pervious concrete, high volume fly ash concrete, and fiber reinforced concrete will also be covered.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 5573 Durability of Civil Engineering Materials Credits: 3

This course will explore the identification, causes of, and remediation of material-related durability deterioration in civil engineering projects. The primary focus will be on reinforced concrete, plain concrete, and soil for a variety of applications. Course content will be delivered primarily through laboratory activities and handouts. Lab activities will use advanced analysis techniques and help the students identify and measure deterioration mechanisms. Various non-destructive evaluation techniques will be discussed. Students have hands on experiences with samples production, data collection, and data analysis for all of the lab activities.

Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

Cross Listings: CIV-ENGR 473.

CIV-ENGR 5575 Seismic Design of Structures Credits: 3

Introduction to basic analysis and design principles for the seismic design of buildings (concrete, steel, wood). General seismic principles, codes and loads, static lateral force procedure, dynamic lateral force procedure, topics in rigidities of buildings.

Prerequisites: CIV-ENGR 323 (or CIV-ENGR 422WI), MEC-ENGR 285.

CIV-ENGR 5582 Advanced Traffic Engineering Credits: 3

This course covers the review of traffic flow characteristics, the field survey practices and studies, traffic signal designs, freeway operation, and the introduction to Intelligent Traffic Systems (ITS).

Prerequisites: CIV-ENGR 319.

CIV-ENGR 5584 Pavement Materials, Design, Maintenance, and Rehabilitation Credits: 3

This course will explore the identification, causes of, and remediation of material-related durability deterioration in civil engineering projects. The primary focus will be on reinforced concrete, plain concrete, and soil for a variety of applications. Course content will be delivered primarily through laboratory activities and handouts. Lab activities will use advanced analysis techniques and help the students identify and measure deterioration mechanisms. Various non-destructive evaluation techniques will be discussed. Students have hands on experiences with samples production, data collection, and data analysis for all of the lab activities.

Prerequisites: CIV-ENGR 378WI.

CIV-ENGR 5585 Principles of Railroad Engineering Credits: 3

The engineering analysis and design of railroad systems including the study of the dynamics of track/trains; wheel/rail interaction related to acceleration and braking; horizontal and vertical geometric design of railroads and rail-bed design, rail structures; freight and passenger operations; and, rail-highway interaction and safety.

CIV-ENGR 5599 Thesis Research Credits: 1-6

Independent investigation in the field of civil engineering to be presented in the form of a thesis.

CIV-ENGR 5602 Directed Reading in Civil Engineering Credits: 1-3

Faculty supervised readings course.

Prerequisites: Graduate standing.

CIV-ENGR 5607 Numerical Methods in Engineering Credits: 3

Classification and numerical solution of engineering problems—ordinary and partial differential equations, algebraic equations. Includes initial, boundary, eigen-# and characteristic-value problems.

Prerequisites: MATH 345.

CIV-ENGR 5622 Theory of Elasticity Credits: 3

Stress and strain at a point. General equations of elasticity. Plane stress, plain strain problems; torsion of prismatic bars. Energy methods.

CIV-ENGR 5623 Theory of Plates and Shells Credits: 3

Bending of plates with various loading and boundary conditions. Deformations, stresses in thin shells.

Prerequisites: CIV-ENGR 5622.

CIV-ENGR 5624 Theory of Elastic Stability Credits: 3

Buckling of columns, beams, rings, curved bars, thin plates, shells.

Prerequisites: CIV-ENGR 5622.

CIV-ENGR 5625 Advanced Prestressed Concrete Credits: 3

Design and behavior of prestressed concrete structures; material and system of pretensioned and post tensioned systems; prestress losses; flexure, shear, bond, deflections and partial prestress in determinate structures; indeterminate beams-introduction.

Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 5629 Adv. Design of Structures for Blast and Fire Credits: 3

General overview of Blast Design; risk assessment and design criteria; simplified Blast Effects Analysis; ground shock, material response; antiterrorism design considerations; weapons effects and mitigation; internal explosions; progressive collapse analysis; and introduction to Fire Design.

CIV-ENGR 5645 Water Quality Modeling Credits: 3

Derivation and application of models for describing oxygen budget, nutrient exchange, and biological productivity in streams, lakes and estuaries.

Prerequisites: CIV-ENGR 342.

CIV-ENGR 5646 Physiochemical Treatment Processes Credits: 3

Fundamental principles, analysis and modeling of physical and chemical processes for water and wastewater treatment.

Prerequisites: CIV-ENGR 342.

CIV-ENGR 5647 Biochemical Treatment Processes Credits: 3

Biochemical principles, kinetic models and energy considerations in the design of biological wastewater treatment processes.

Prerequisites: CIV-ENGR 342.

CIV-ENGR 5648 Environmental Engineering Practicum Credits: 3

Numerical water quality modeling of actual site data for wasteload allocation.

Prerequisites: CIV-ENGR 5645.

CIV-ENGR 5649 Design of Water and Wastewater Treatment Facilities Credits: 3

Development of design criteria and their application to the design of water and wastewater treatment facilities.

Prerequisites: CIV-ENGR 5646 or CIV-ENGR 5647.

CIV-ENGR 5651 Fundamentals of Fluid Mechanics Credits: 3

Fundamentals of fluid motion, lecture and laboratory. Instrumentation, technique and analysis for experimental studies in fluid mechanics.

CIV-ENGR 5655 Sediment Transport Credits: 3

The study of sediment transport in rivers: the relationship between sediment transport and the fundamentals of fluvial geomorphology. Computation of sediment transport and sediment transport modeling.

Prerequisites: CIV-ENGR 452 (or CIV-ENGR 5552).

CIV-ENGR 5656 Advanced Hydraulic Engineering Credits: 3

Rapidly varied flow and design of transition structures. Hydraulic design of spillways, reservoirs and related structures.

CIV-ENGR 5675 Advanced Seismic Design of Structures Credits: 3

Introduction to basic analysis and design principles for the seismic design of buildings (concrete, steel, wood). General seismic principles, codes and loads, static lateral force procedure, dynamic lateral force procedure, topics in rigidities of buildings.

Prerequisites: CIV-ENGR 323 (or CIV-ENGR 422WI), MEC-ENGR 285.

CIV-ENGR 5679 Dynamics of Structures Credits: 3

Study of the dynamic behavior of structures. Analysis of equivalent lumped parameter systems for the design of structures in a dynamic environment.

Prerequisites: CIV-ENGR 276 (or CIV-ENGR 421), MEC-ENGR 484 (or MATH 345, MEC-ENGR 285).

Cross Listings: MEC-ENGR 5679.

CIV-ENGR 5681 Traffic Flow Theory Credits: 3

This course covers the review of macroscopic and microscopic traffic flow characteristics, the traffic flow models, and the traffic simulation applications.

Prerequisites: CIV-ENGR 319.

CIV-ENGR 5682 Transportation Network Modeling Credits: 3

This course is about modeling, solving, and understanding network flow problems, especially in the transportation discipline. This course covers equilibrium traffic assignment, network design, fleet assignment, fleet routing, and crew scheduling.

Prerequisites: CIV-ENGR 319.

CIV-ENGR 5699 Research and Dissertation Credits: 1-9

Doctoral dissertation research.

Mechanical Engineering Courses

MEC-ENGR 130 Engineering Graphics Credits: 3

Introduction to Engineering Graphics with the use of the Computer Aided Design tools AutoCAD and SolidWorks. Introduction to 2D design with AutoCAD includes: basic features, layer control, geometric constructions, orthographic projections, dimensioning and notes, tolerancing, section views, and working drawings. Introduction to 3D design with SolidWorks includes: part modeling, revolved features, sweeps, lofts, assembly modeling and engineering drawings. No previous 2D or 3D CAD experience is necessary to take this class.

Prerequisites: School of Computing and Engineering Student.

MEC-ENGR 131 Engineering Graphics-3D design Credit: 1

Introduction to Engineering Graphics using the 3D Computer Aided Design tool SolidWorks. Introduction to 3D design with SolidWorks includes: part modeling, revolved features, sweeps, lofts, assembly modeling, and engineering drawings. Some previous 2D AutoCAD experience is required to take this class. NOTE: This class starts halfway through the semester by joining in with MEC-ENGR 130 when they finish AutoCAD and begin SolidWorks.

Prerequisites: Departmental consent.

MEC-ENGR 219 Computer Programming for Engineers Credits: 3

Analysis and synthesis of structured computer algorithms for solving engineering problems using high level programming tools such as Excel, Matlab, Fortran and/or C++.

Prerequisites: MATH 266 (preferred) or MATH 220.

MEC-ENGR 270 Engineering Analysis I Credits: 3

This is an applied course with emphasis on physics and engineering applications. Topics include engineering applications using conics, parametric equations, polar coordinates, vectors, solid analytic geometry, vector valued functions, multi-variable functions, partial derivatives (including applications), multiple integration, vector calculus including Green's Theorem, Curl and Divergence, line and surface integrals and Stoke's Theorem.

Prerequisites: MATH 268.

MEC-ENGR 272 Engineering Analysis Credits: 3

An applied course using differential equations in solutions to engineering problems. Topics include applications in first-order differential equations, linear higher-order equations, Laplace transform, Series solutions of linear ODEs (Taylor, Power, and Fourier), Numerical solutions, introduction to systems of differential equations.

Prerequisites: MATH 268 or MATH 220.

MEC-ENGR 285 Engineering Dynamics Credits: 3

Fundamentals of engineering dynamics, including kinematics and kinetics of particles and rigid bodies. Analysis based on forces and accelerations as well as energy and momentum methods.

Prerequisites: CIV-ENGR 275.

MEC-ENGR 299 Engineering Thermodynamics Credits: 3

Fluid properties, work and heat, first law, second law, entropy, applications to vapor and ideal gas processes.

Prerequisites: MATH 268 (preferred) or MATH 220; and PHYSICS 250.

MEC-ENGR 306 Computer-Aided Engineering Credits: 3

Principles, analysis and application of numerical methods for the solution of engineering problems. Computer implementation.

Prerequisites: MEC-ENGR 272 and E&C-ENGR 216.

MEC-ENGR 324 Engineering Materials Credits: 3

The nature of the structure of engineering materials. The relationship of material structure to the physical properties. Mechanical behavior of engineering materials.

Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 276.

MEC-ENGR 324L Engineering Materials Lab Credit: 1

Introduction to the laboratory techniques used in studying the physical and mechanical properties of engineering materials. The material testing in this course is primarily of metallic materials. Physical and mechanical property variations as a result of various processing techniques are studied. Recommended preparation: Machine Shop Safety.

Co-requisites: MEC-ENGR 324.

MEC-ENGR 351 Fluid Mechanics Credits: 3

Concepts of the statics and dynamics of fluids, with emphasis on principles of continuity, momentum and energy. Boundary layers, dimensional analysis and drag are covered briefly. Thorough treatment of pipe flow.

Prerequisites: MEC-ENGR 272 or MATH 345 and CIV-ENGR 275.

MEC-ENGR 352 Mechanical Instruments Lab Credits: 2

Students will investigate random and systematic errors, and their effects on measurement uncertainty. Students will be introduced to various instrumentation equipment used in measuring displacement, velocity, acceleration, force, strain, fluid pressure, fluid velocity, fluid flow rate, and temperature.

Prerequisites: CIV-ENGR 276.

MEC-ENGR 353 Heat Transfer and Fluid Mechanics Lab Credits: 2

The course emphasis is on experiments related to thermodynamics, heat transfer, and fluid mechanics. Proper experimental methods, data and uncertainty analysis related to thermal and fluids measurements are discussed.

Prerequisites: MEC-ENGR 351.

Co-requisites: MEC-ENGR 399.

MEC-ENGR 356 Mechanical Component Design Credits: 3

Introduction to mechanical engineering design and its impact on human history, principles of design with ductile and brittle materials for static and dynamic loading, classical and reliability-based factors of safety, fracture mechanics in design, application to the design of selected machine components.

Prerequisites: CIV-ENGR 276.

MEC-ENGR 360 Applied Thermodynamics Credits: 3

Gas and vapor mixtures, cycles, availability, imperfect gases, thermodynamic relations, combustion, chemical equilibrium, power systems and design projects. Effects of design choices on the earth and living systems.

Prerequisites: MEC-ENGR 299.

MEC-ENGR 380 Manufacturing Methods Credits: 3

Introduction to manufacturing processes with emphasis on those aspects most relevant to methods, problems in force analysis, and practicum and experimentation in machine tool applications.

Prerequisites: MEC-ENGR 324.

Co-requisites: MEC-ENGR 324L.

MEC-ENGR 385 System Dynamics Credits: 3

Kinematics of mechanical systems. Introduction to the modeling and analysis of dynamic mechanical systems. Computer analysis.

Prerequisites: MEC-ENGR 272, MEC-ENGR 285.

MEC-ENGR 399 Heat and Mass Transfer Credits: 3

Fundamentals of conduction, convection, and radiation heat transfer. Use of nondimensional parameters. Theory of heat exchangers. Mass transfer.

Prerequisites: MATH 250 or MEC-ENGR 270; and MEC-ENGR 299, MEC-ENGR 351.

MEC-ENGR 400 Problems Credits: 1-6

Special design, experimental and analytical problems in mechanical engineering.

Prerequisites: Departmental consent.

MEC-ENGR 401CD Topics in Mechanical Engineering – Applied CFD Credits: 3

The fundamentals of computational fluid mechanics. Introduction to the governing equations and boundary conditions of viscous fluid flows, turbulence and its modelling, and how to solve a fluid flow problem using commercially available CFD software.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 401T Topics in Mechanical Engineering Credits: 3

This course covers the application of Newton's laws and thermodynamics to analysis of fluid flow in turbomachinery.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 407 Advanced Dynamics and Modeling Credits: 3

Fundamental principles of advanced rigid body dynamics with applications. Special mathematical techniques including Lagrangian and Hamiltonian methods.

Prerequisites: MEC-ENGR 285 and MEC-ENGR 306.

MEC-ENGR 411 Introduction to Biomechanics Credits: 3

This course is to provide students with an introduction to the engineering principles of biomechanics.

Prerequisites: MEC-ENGR 219 or E&C-ENGR 216; or MEC-ENGR 285.

Co-requisites: MATH 300 or CIV-ENGR 319.

MEC-ENGR 412 Biodynamics Credits: 3

Introduction to musculoskeletal biomechanics including: computational biomechanics, movement simulation, motor control and musculoskeletal tissues. Recommended preparation: MEC-ENGR 411.

MEC-ENGR 413 Experimental Biomechanics of Human Motion Credits: 3

The purpose of this course is to provide an opportunity for students to gain a hands-on, in-depth understanding of the experimental measurement and analysis techniques used to quantify the biomechanics of human motion.

Prerequisites: MEC-ENGR 411.

MEC-ENGR 414 Material Science for Advanced Applications Credits: 3

Study of the physical and mechanical metallurgy of alloy systems of interest in engineering applications.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 415 Control Systems Theory Credits: 3

Introduction to feedback control theory for linear dynamic systems. Topics include root locus analysis, frequency response analysis, and controller design.

Prerequisites: MEC-ENGR 385.

MEC-ENGR 416 Biomedical Device Design Credits: 3

Project based course which exposes students to the entire design process from problem definition to prototype validation for biomedical device applications. Projects in the course are sponsored by real clients from the local biomedical industry, medical clinicians, and/or research labs. The course will cover the following main components: Problem Definition, Concept Generation and Evaluation, Detailed Design, Prototyping and Testing, Project Management, Regulations and Standards, and Technical Communication. **Prerequisites:** Senior standing.

MEC-ENGR 420 Human Powered Vehicle Design Lab Credits: 3

Introduction to the science of human powered vehicles (HPV) providing the background necessary for the design of such vehicles. Students will learn and utilize engineering design practices and apply them toward the creation of an aerodynamic, highly engineered land based HPV.

Prerequisites: MATE111A Machine Shop Safety, Consent of instructor.

MEC-ENGR 424 Non-Metallic Engineering Materials Credits: 3

Structures, properties and applications of ceramics, glasses, cermets, polymers and composite materials.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 425 Failure Analysis Credits: 3

Organize and perform a failure investigation. In addition, the course will cover the general procedures for a failure investigation and various failure mechanisms such as ductile fracture, brittle fracture, fatigue, wear, corrosion and elevated temperature.

Prerequisites: MEC-ENGR 324, MEC-ENGR 380.

MEC-ENGR 426 Introduction to Manufacturing Management Credits: 3

The objective of this course is to expose the student to various manufacturing management tools and techniques. Focus is on both the technical tools used in manufacturing as well as on the management tools needed to implement change in the manufacturing environment. As part of this course, students will research a successful company and present an analysis of manufacturing tools and techniques used.

MEC-ENGR 440 Heating and Air Conditioning Credits: 3

General principles of thermodynamics, heat transfer, and fluid dynamics are used to calculate building loads, size equipment and ducts, and evaluate system performance in maximizing human comfort. Consideration of indoor air quality and human health.

Prerequisites: MEC-ENGR 360, MEC-ENGR 399.

MEC-ENGR 441 Intermediate Fluid Mechanics Credits: 3

Topics in potential and viscous flow theory, and computational fluid dynamics.

Prerequisites: MEC-ENGR 351.

MEC-ENGR 444 Composite Materials Credits: 3

A survey of composite materials used in engineering, emphasizing fiber-reinforced composites as well as laminate and particulate composites.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 451 Power Plant Design Credits: 3

Preliminary component and system design. Optimum design of boilers, steam turbines, condensers and cooling towers and their integration into a system to minimize production costs and impact on the environment.

Prerequisites: MEC-ENGR 360, MEC-ENGR 399.

MEC-ENGR 452 Advanced Mechanics of Materials Credits: 3

Shear center; unsymmetric bending; curved beams; beams on elastic foundations; thick-walled cylinders. Energy methods. Torsion of noncircular sections. Theories of failure. Plate theory.

Prerequisites: CIV-ENGR 276.

MEC-ENGR 454 Power Generation Systems Credits: 3

Fundamentals of the power industry in a format suitable for all engineering disciplines. Survey of electric power systems, including fossil and nuclear steam cycles, combustion turbines, combines cycles, and renewable such as solar and wind. Introduction to major machinery components, systems, controls, and an overview of fuels, emissions, and emission control technologies.

Prerequisites: MEC-ENGR 299.

MEC-ENGR 455 Digital Control of Mechanical Systems Credits: 3

Introduction to digital control systems. Topics include Z-transforms, sampling, stability analysis, and digital controller design.

Prerequisites: MATH 345, MEC-ENGR 415.

MEC-ENGR 457 Mechatronic System Design Credits: 3

Theory and application of mechatronic systems through course instruction, laboratory activities, and student projects.

Co-requisites: MEC-ENGR 415.

MEC-ENGR 458 Modern Control Systems Credits: 3

Controller design for multiple-input/multiple-output systems; controllability and observability; stochastic control problems; regulators and tracking controllers; observers.

Prerequisites: MEC-ENGR 415.

MEC-ENGR 459 Robotics and Unmanned Systems Credits: 3

Students will develop, implement, and evaluate various path following (point mass, rigid body, and Dubin's) and trajectory generation (configuration spaces, roadmaps, cell decomposition, etc.) concepts on simulation and experimental platforms.

Prerequisites: MEC-ENGR 306, MEC-ENGR 457.

MEC-ENGR 460 Electromechanical Conversion Credits: 3

This course describes the operation and control of electro-mechanical devices such as motors transformers to mechanical civil engineering students, including an introduction to programmable logic controllers and variable speed drives.

Prerequisites: MEC-ENGR 220, MEC-ENGR 285.

MEC-ENGR 466 Applied Optimization and Decision Modeling Credits: 3

Introduction to mathematical programming techniques and applications. Linear and integer programming, transportation models, multiple objective and goal programming.

Prerequisites: MEC-ENGR 306.

MEC-ENGR 467 Fuel Cells and Renewable Energy Systems Credits: 3

This course will provide an overview of the fundamental phenomena that govern the design and operation of fuel cells. The thermodynamics of fuel cell systems will be explored including operation of ideal fuel cells and the physical and chemical phenomena that lead to losses within the fuel cell. The course will provide the methods and techniques required to analyze the performance of low, medium, and high temperature fuel cells within an overall energy system. The fueling of fuel cells from renewable resources will also be discussed.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 470 Experimental Design & Analysis Credits: 3

Presentation of concepts and methods of statistical analysis and the design of experiments. Concepts, techniques, interpretation, and use of results are stressed. Focus is on experimental strategy and objectives, and the application of the methods discussed, rather than the mechanics of derivation. Major sections include: a review of hypothesis testing and basic analysis of variance techniques; single factor experiments including 2k and 3k design, confounding, and Taguchi philosophy; nested and split plot designs; analysis of covariance and an introduction to response surface methods.

MEC-ENGR 484 Vibration Analysis Credits: 3

Vibration theory with application to mechanical systems.

Prerequisites: MEC-ENGR 306, MEC-ENGR 385.

MEC-ENGR 486 Applied Finite Element Analysis Credits: 3

The study of advanced simulation techniques for the solution to engineering problems. The use of Finite Element Method toward solving mechanical, structural, vibration and potential flow problems will be explored. The use of current commercial simulation tools will be used extensively.

Prerequisites: MEC-ENGR 306, MEC-ENGR 324, MEC-ENGR 385, MEC-ENGR 399.

MEC-ENGR 491 Internship Credits: 6

For International students who must register to cover off-campus employment which is approved as related to their degree by their departmental advisor and ISAO.

Prerequisites: Departmental consent.

MEC-ENGR 492 Mechanical Design Synthesis I Credits: 3

Introduction to and application of the Engineering Design Process including: product development, needs identification, benchmarking, information gathering, concept generation, creativity methods, concept selection, professional and ethical responsibilities, and computer-aided design and rapid prototyping applications. A comprehensive design project including 3D CAD models and functioning prototypes is required.

Prerequisites: MEC-ENGR 130 or MEC-ENGR 131; and departmental consent.

MEC-ENGR 493 Intermediate Dynamics Credits: 3

Theoretical discussion of kinematics and dynamics of rigid bodies in three-dimensional space. General theory of rotating coordinate frames, Euler's angles, Euler's equations of motion, angular momentum, work-energy principles, and Kane's method.

Prerequisites: MEC-ENGR 285.

MEC-ENGR 494 Robotic System Identification Credits: 3

Students will develop, implement, and evaluate various system identification and parameter estimation techniques. Students will quantify estimation accuracy through both theoretical and experimental exercises.

Prerequisites: MEC-ENGR 285, MEC-ENGR 306, MEC-ENGR 352.

MEC-ENGR 496WI Mechanical Design Synthesis Credits: 3

Modern design theories and methodologies, with emphasis on the initial stages of the design process. Effect of design choices on the earth and living systems. Principles of embodiment design and life-cycle considerations. A comprehensive group design project is required. The course satisfies the Writing Intensive requirement.

Prerequisites: ANCH 309 or MEC-ENGR 492; MEC-ENGR 356.

MEC-ENGR 5500 Problems Credits: 1-6

Supervised investigation in mechanical engineering to be presented in the form of a report.

MEC-ENGR 5501 Advanced Topics In Mechanical Engineering Credits: 3**MEC-ENGR 5501AD Advanced Topics in Mechanical Engineering Credits: 3**

Advanced Topics in Mechanical Engineering

MEC-ENGR 5501CD Advanced Topics in Mechanical Engineering Credits: 3

Advanced Topics in Mechanical Engineering

MEC-ENGR 5501MS Advanced Topics in Mechanical Engineering Credits: 3**MEC-ENGR 5501SM Advanced Topics in Mechanical Engineering Credits: 2**

This course is for high school science teachers who have attended the ASM International Second Year Teachers Camp and have demonstrated the use of camp material in the classroom.

MEC-ENGR 5501TC Advanced Topics in Mechanical Engineering Credits: 2

This course is for high school science teachers who have attended the ASM International Teachers camp and have demonstrated the use of camp material in the classroom.

MEC-ENGR 5505 Imaging Techniques in Materials Science Credits: 3

Introduction to imaging techniques, including x-rays, neutron beams, electron beams and acoustic energy, to study material properties and structure.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 5507 Advanced Dynamics and Modeling Credits: 3

Fundamental principles of advance rigid body dynamics with applications. Special mathematical techniques including Lagrangian and Hamiltonian methods.

MEC-ENGR 5511 Introduction to Biomechanics Credits: 3

This course is to provide students with an introduction to the engineering principles of biomechanics.

MEC-ENGR 5512 Biodynamics Credits: 3

Introduction to musculoskeletal biomechanics including: computational biomechanics, movement simulation, motor control and musculoskeletal tissues.

Prerequisites: MEC-ENGR 5511.

MEC-ENGR 5513 Experimental Biomechanics of Human Motion Credits: 3

The purpose of this course is to provide an opportunity for students to gain a hands-on, in-depth understanding of the experimental measurement and analysis techniques used to quantify the biomechanics of human motion.

Prerequisites: MEC-ENGR 5511.

MEC-ENGR 5514 Material Science for Advanced Application Credits: 3

Study of the physical and mechanical metallurgy of alloy systems of interest in engineering applications.

Prerequisites: MEC-ENGR 324.

MEC-ENGR 5516 Biomedical Device Design Credits: 3

Project based course which exposes students to the entire design process from problem definition to prototype validation for biomedical device applications. Projects in the course are sponsored by real clients from the local biomedical industry, medical clinicians, and/or research labs. The course will cover the following main components: Problem Definition, Concept Generation and Evaluation, Detailed Design, Prototyping and Testing, Project Management, Regulations and Standards, and Technical Communication.

MEC-ENGR 5525 Failure Analysis Credits: 3

Organize and perform a failure investigation. In addition, the course will cover the general procedures for a failure investigation and various failure mechanisms such as ductile fracture, brittle fracture, fatigue, wear, corrosion and elevated temperature.

Prerequisites: MEC-ENGR 324, MEC-ENGR 380.

MEC-ENGR 5526 Introduction to Manufacturing Management Credits: 3

The objective of this course is to expose the student to various manufacturing management tools and techniques. Focus is on both the technical tools used in manufacturing as well as on the management tools needed to implement change in the manufacturing environment. As part of this course, students will research a successful company and present an analysis of manufacturing tools and techniques used.

MEC-ENGR 5533 Advanced Thermodynamics Credits: 3

Statistical methods of evaluating thermodynamic properties. Elements of quantum mechanics, statistical mechanics and kinetic theory applied to topics of engineering thermodynamics.

Prerequisites: MEC-ENGR 360, MEC-ENGR 399.

MEC-ENGR 5542 Introduction to Computational Fluid Dynamics and Heat Transfer Credits: 3

Introduction to the principles and development of the finite-difference approximations to the governing differential equations of viscous and inviscid fluid flow, as well as heat transfer. Introduction to discretization methods and the calculation of flow fields, convection, diffusion and conduction.

Prerequisites: MEC-ENGR 399, MEC-ENGR 441.

MEC-ENGR 5543 Industrial Refrigeration Credits: 3

Introduction to and analysis of the thermodynamic cycles and equipment used in Industrial Refrigeration. Applications of Industrial Refrigeration are also discussed.

Prerequisites: MEC-ENGR 299.

MEC-ENGR 5547 Contracts and Law for Engineers Credits: 3

This course covers a broad range of substantive legal topics giving the student a grounding in the legal implications of certain situations that they may encounter during their careers. The course includes coverage of basic contract law, environmental regulations and compliance, construction law, antitrust law, intellectual property law, civil procedure, employment law, business entities (corporate law) product liability and criminal law and procedure. The objective of the course is to provide students with a fundamental understanding of the wide range of federal and state laws governing behavior in our complicated and rule of law driven society.

MEC-ENGR 5549 Environmental Compliance, Auditing & Permitting Credits: 3

This course provides a high level overview of the most important statutes that have been enacted to protect the environment. The course covers regulation of hazardous waste, the Clean Air and Clean Water Acts, the Resource Conservation and Recovery Act, the All Appropriate Inquiry Rule and the law addressing sites contaminated with hazardous substances and the technology options employed to remediate those sites. In addition, the course provides coverage of environmental audits and emergency planning for extremely hazardous substances, the regulation of underground storage tanks, safe drinking water and the National Environmental Policy Act among other statutes.

Prerequisites: CIV-ENGR 211, MEC-ENGR 285.

MEC-ENGR 5554 Power Generation Systems Credits: 3

Fundamentals of the power industry in a format suitable for all engineering disciplines. Survey of electric power systems, including fossil and nuclear steam cycles, combustion turbines, combines cycles, and renewable such as solar and wind. Introduction to major machinery components, systems, controls, and an overview of fuels, emissions, and emission control technologies.

Prerequisites: MEC-ENGR 299.

MEC-ENGR 5557 Mechatronics System Design Credits: 3

Theory and application of mechatronic systems through course instruction, laboratory activities, and student projects.

Prerequisites: MEC-ENGR 352 and MEC-ENGR 415.

MEC-ENGR 5558 Intermediate Dynamics Credits: 3

Development of kinematics and dynamics of rigid bodies in three-dimensional space including: general theory of rotating coordinate frames, Eulers angles, Eulers equations of motion, angular momentum, work-energy principles, and Kane's method for creation and simulation of dynamic models.

Prerequisites: MEC-ENGR 285.

MEC-ENGR 5559 Robotics and Unmanned Systems Credits: 3

Students will develop, implement, and evaluate various path following (point mass, rigid body, and Dubin's) and trajectory generation (configuration spaces, roadmaps, cell decomposition, etc.) concepts on simulation and experimental platforms.

Prerequisites: MEC-ENGR 306, MEC-ENGR 457.

MEC-ENGR 5563 Engineer in Society - Construction Law Credits: 3

This course introduces professional, ethical, and legal concepts of the professional practice of engineering, and the role of the consulting engineer, specifically in the A/E/C industry during the design, procurement, and construction processes. A conceptual framework is developed for understanding the industry standard agreements (AIA, EJCDC, ConCensus) and the various participants roles and duties in project execution. The engineer's "professional standard of care" is examined and revisited throughout the semester, specifically what it means to be a "Professional Engineer". Emphasis is placed on project and contract management and the applicable law. Skills are developed in finding online resources of law, legal, and practice advice relevant to the practice of engineering and the construction industry

MEC-ENGR 5565 Project Finance Credits: 3

This class introduces students to the financial concepts faced by engineers in the businesses in which they work and for the projects to which they are assigned. Throughout the course students are reminded of the impact of two key variables – money and time – on their work. While not attempting to turn good engineers into mediocre accountants, the course includes a strong emphasis on managerial accounting. Students will learn how to read and apply financial statements and how to use these same financial concepts in developing pro formas to evaluate and support major capital investments. The effect of time on the value of money, appropriate discount factors, and the internal rate of return will be explored in the class. Students will learn to combine these financial factors with electronic spreadsheets to evaluate business opportunities and practices. All students will be required to develop a comprehensive financial model to evaluate/justify a real world capital project.

MEC-ENGR 5567 Fuel Cells and Renewable Energy Systems Credits: 3

This course will provide an overview of the fundamental phenomena that govern the design and operation of fuel cells. The thermodynamics of fuel cell systems will be explored including operation of ideal fuel cells and the physical and chemical phenomena that lead to losses within the fuel cell. The course will provide the methods and techniques required to analyze the performance of low, medium, and high temperature fuel cells within an overall energy system. The fueling of fuel cells from renewable resources will also be discussed.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 5568 Introduction to Nuclear Engineering Credits: 3

This course provides an overview of nuclear engineering for non-nuclear engineers. The course deals primarily with nuclear reactors including topics dealing with nuclear and reactor physics, reactor kinetics and controls and radiation environment. The general reactor types are covered in some detail with other topics dealing with licensing, waste management, quality assurance, balance of plant systems (turbine island), and significant nuclear accidents are also covered. Recent design innovations including small modular reactors and fusion are discussed.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 5570 Experimental Design & Analysis Credits: 3

Presentation of concepts and methods of statistical analysis and the design of experiments. Concepts, techniques, interpretation, and use of results are stressed. Focus is on experimental strategy and objectives, and the application of the methods discussed, rather than the mechanics of derivation. Major sections include: a review of hypothesis testing and basic analysis of variance techniques; single factor experiments including 2k and 3k design, confounding, and Taguchi philosophy; nested and split plot designs; analysis of covariance and an introduction to response surface methods.

MEC-ENGR 5572 Advanced Statistics Credits: 3

The objective of this course is to review the concepts and methods of undergraduate first course in statistical analysis and extend the student's understanding to cover topics typically covered in a second course in applied engineering statistics. Concepts, techniques, interpretation, and use of results are stressed. Focus is on the application of the methods discussed, rather than the mechanics of derivation.

Prerequisites: CIV-ENGR 319.

MEC-ENGR 5574 Linear Programming for Engineering Optimization Credits: 3

This course will cover techniques and applications of engineering optimization using linear programming techniques. The main topics will be the simplex algorithm, sensitivity analysis, duality, network models, and integer programming. Main applications will include transportation, shipments, and utility planning. Stochastic models, game theory, non-linear programming, and heuristic optimization techniques will be briefly mentioned, but not explored in detail. At the conclusion of the course the student should be able to formulate and solve optimization problems in several areas of engineering.

Prerequisites: MEC-ENGR 306.

MEC-ENGR 5586 Applied Finite Element Analysis Credits: 3

The study of advanced simulation techniques for the solution to engineering problems. The use of Finite Element Method toward solving mechanical, structural, vibration and potential flow problems will be explored. The use of current commercial simulation tools will be used extensively.

Prerequisites: CIV-ENGR 275, MATH 5517, MEC-ENGR 130.

MEC-ENGR 5594 Robotic System Identification Credits: 3

Students will develop, implement, and evaluate various system identification and parameter estimation techniques. Students will quantify estimation accuracy through both theoretical and experimental exercises. **Prerequisites:** MEC-ENGR 285, MEC-ENGR 306, MEC-ENGR 352.

MEC-ENGR 5595 Microscale Heat Transfer Credits: 3

Review of existing models. Concept of thermal lagging and the second-law admissibility. Applications to low temperatures, thermal processing of thin-film devices; amorphous materials; advanced composites.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 5599 Research Credits: 1-99

Independent investigation in field of mechanical engineering to be presented as a thesis.

MEC-ENGR 5601 Doctoral Topics In Mechanical Engineering Credits: 3**MEC-ENGR 5603 Directed Readings in Mechanical Engineering Credits: 1-3**

Faculty supervised readings course.

Prerequisites: Graduate standing.

MEC-ENGR 5610 Seminar Credit: 1

Review recent investigations, projects of major importance in mechanical engineering.

MEC-ENGR 5616 Theory of Plasticity Credits: 3

Plastic yield conditions and stress-strain relations. Behavior of elastic-perfectly plastic members. Plain strain in plastic members.

Prerequisites: MEC-ENGR 5621, MEC-ENGR 5622.

MEC-ENGR 5618 Multibody System Dynamics Credits: 3

Fundamental principles of advanced rigid body dynamics with applications. Special mathematical techniques including Lagrangian and Hamiltonian methods.

Prerequisites: MEC-ENGR 285.

MEC-ENGR 5621 Continuum Mechanics Credits: 3

Introductory course in the mechanics of continuous media. Basic concepts of stress, strain, constitutive relationships; conservation laws are treated using Cartesian tensor notation. Examples from both solid and fluid mechanics investigated.

Prerequisites: CIV-ENGR 276, MATH 345, MEC-ENGR 351.

MEC-ENGR 5622 Theory of Elasticity Credits: 3

Stress and strain at a point. General equations of elasticity. Plane stress, plain strain problems; torsion of prismatic bars. Energy methods.

Prerequisites: MEC-ENGR 5621.

MEC-ENGR 5623 Theory Of Plates And Shells Credits: 3

Bending of plates with various loading and boundary conditions. Deformations, stresses in thin shells.

Prerequisites: MEC-ENGR 5621.

MEC-ENGR 5624 Theory of Elastic Stability Credits: 3

Buckling of columns, beams, rings, curved bars, thin plates, shells.

Prerequisites: MEC-ENGR 5621.

MEC-ENGR 5627 Dynamics of Machinery Credits: 3

Dynamic balancing or rotating and reciprocating components of turbo-machinery and internal combustion engines. Gas torque analysis, vibration stress analysis and equivalent systems. Numerical and graphical techniques.

Prerequisites: MEC-ENGR 484.

MEC-ENGR 5630 Boundary Layer Theory Credits: 3

Fluid motion at high Reynolds Number. Derivation of Navier-Stokes equations and boundary layer equations. Methods of solution. Transition to turbulent flow. Completely developed turbulent flow.

Prerequisites: MEC-ENGR 441.

MEC-ENGR 5636 Heat Transfer-Convection Credits: 3

Concepts including fluid dynamics, conservation laws, thermal boundary layer theory, forced convection in laminar and turbulent flows, and free convection will be developed and applied.

Prerequisites: MEC-ENGR 399

MEC-ENGR 5637 Heat Transfer-Radiation Credits: 3

Advanced study of engineering radiation heat transfer. Concepts of electromagnetic theory. Development of thermal radiation laws from thermodynamic laws. Analysis of grey and non-grey systems with intervening gases. Study of recent literature.

Prerequisites: MEC-ENGR 399.

MEC-ENGR 5639 Introduction to Two Phase Flow Credits: 3

The fundamental principles of two-phase flow with applications to a variety of homogeneous mixture as well as separated liquid-liquid, gas-solid, liquid-solid, and gas-liquid flow problems, including steady or transient, laminar or turbulent conditions.

Prerequisites: MEC-ENGR 441.

MEC-ENGR 5643 Industrial Refrigeration Credits: 3

Introduction to and analysis of the thermodynamic cycles and equipment used in Industrial Refrigeration. Applications of Industrial Refrigeration are also discussed.

MEC-ENGR 5660 Combustion Credits: 3

Study of advanced topics in flames and combustion. Detonation and deflagrations, supersonic combustion, air pollution.

Prerequisites: MEC-ENGR 441.

MEC-ENGR 5679 Dynamics of Structures Credits: 3

Study of the dynamic behavior of structures. Analysis of equivalent lumped parameter systems for the design of structures in a dynamic environment.

Prerequisites: CIV-ENGR 276 (or CIV-ENGR 421), MEC-ENGR 484 (or MATH 345, MEC-ENGR 285).

MEC-ENGR 5685 Advanced Vibration Analysis Credits: 3

Advanced topics in vibration theory and its application to Mechanical systems. Topics include vibration analysis of multi-degree of freedom, distributed and nonlinear systems, random vibration analysis, and vibration control.

Prerequisites: MEC-ENGR 484.

MEC-ENGR 5699 Research And Dissertation Credits: 1-9

Doctoral dissertation research.

Civil Engineering

The American Society of Civil Engineers (ASCE) defines civil engineering as "the profession in which a knowledge of the mathematical and physical sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize economically, the materials and forces of nature for the progressive well-being of humanity in creating, improving and protecting the environment, in providing facilities for community living, industry and transportation, and in providing structures for the use of humankind". The CE program aims to prepare students with a breadth and depth in the technical knowledge so that they can work immediately in most areas of the profession including geotechnical engineering; hydraulics, hydrology, environmental engineering; structural engineering; and transportation/ traffic engineering.

Bachelor of Science in Civil Engineering

ABET Program Educational Objectives

1. Graduates are successfully employed in an engineering or related field or accepted into a graduate program.
2. Graduates apply the necessary problem-solving, design, and application skills for successful careers in Civil Engineering.
3. Graduates utilize their educational foundation and communication skills to effectively lead, work, and communicate in diverse career paths.
4. Graduates succeed in the complex social, business, and technical environment in which their engineering contributions will be utilized.

ABET Student Outcomes

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- An ability to communicate effectively with a range of audiences.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Use mathematical methods to make design decisions.
- Analyze applied loads and material characteristics to design structures meeting code requirements.
- Use engineering software to help create design solutions.
- Perform strength and durability tests on construction materials.
- Write technical documents communicating engineering analysis and design solutions.
- Design an engineering solution reflecting current engineering industry standard of care for a community problem.

Admissions

High school students planning to apply to the School of Computing & Engineering are strongly encouraged to take a college preparatory program that emphasizes mathematics, science and communication skills.

First-time college student applicants to the undergraduate program in civil engineering will be admitted if they obtain:

1. An ACT mathematics score of at least 25 and
2. An ACT composite score of at least 24

First-time college student applicants who do not meet the above criteria but do meet UMKC general admission requirements will have their applications reviewed by a faculty committee for admission. Applicants who are not admitted to SCE but do meet UMKC general admission requirements may be admitted to University College.

Students without the prerequisite preparation must take the needed coursework before enrolling in courses required for the bachelor's degree. Students seeking re-admission must have been in good academic standing when last enrolled. Otherwise, re-admission requires a formal review by the undergraduate program committee.

Transfer applicants must have at least 24 credits of transferable college credit, an overall 2.0 GPA on a 4.0 scale in all coursework, which includes repeated coursework, attempted at previous institutions. Transfer applicants without a 2.0 or higher college GPA must submit a petition for admission.

Program Requirements

The Bachelor of Science in Civil Engineering prepares students with a breadth and depth in the technical knowledge so that they can work immediately in most areas of the profession including geo technical engineering; water and environmental engineering; construction; and structural engineering.

Engineering programs must demonstrate that their students attain the outcomes listed above.

The civil engineering curriculum requires a minimum of 127 hours of coursework and satisfies the UMKC General Education requirements.

An approved Machine Shop Safety course must be completed prior to using tools in university sponsored activities and facilities. Additionally, an approved Machine Shop Safety course is required prior to degree conferral.

Students must also obtain OSHA safety certification prior to degree conferral.

A grade of "C" or higher must be earned in all major required coursework.

All UMKC students must take HEIghTen after completing 90 credit hours and before applying for graduation (<http://www.umkc.edu/exitexams/>).

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (Satisfied in program requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3

Critical Thinking in Natural & Physical Sciences (GECRT-SC; Satisfied in program requirements below)	
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)	3
Culture & Diversity Course (GECDV)	3
Civic & Urban Engagement Course (GECUE; Satisfied in program requirements below)	
Total Credits	21

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
Math and Science Requirements (satisfies Math Pathway)		
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
MATH 266	Accelerated Calculus I ¹	4
MATH 268	Accelerated Calculus II	3
MATH 250	Calculus III	4
MATH 345	Ordinary Differential Equations	4
PHYSICS 240	Physics For Scientists and Engineers I	5
PHYSICS 250	Physics For Scientists and Engineers II	5
BIOLOGY 108 or GEOLOGY 220	General Biology I General Geology	3
Engineering Fundamental Course Requirements		
CIV-ENGR 275	Engineering Statics (satisfies GECRT-SC course requirement)	3
CIV-ENGR 276	Strength Of Materials	3
CIV-ENGR 351	Fluid Mechanics	3
CIV-ENGR 319	Engineering Computation and Statistics	3
E&C-ENGR 216	Engineering Computation	4
MEC-ENGR 130	Engineering Graphics	3
Civil Engineering Fundamental Course Requirements		
CIV-ENGR 111	First Year Cornerstone	1
CIV-ENGR 113	Engineering Measurements	1
CIV-ENGR 190	Special Topics	1

CIV-ENGR 321	Structural Analysis	4
CIV-ENGR 335	Soil Mechanics	3
CIV-ENGR 378WI	Civil Engineering Materials	3
CIV-ENGR 411	Civil Engineering Systems Design I	2
CIV-ENGR 412	Civil Engineering Systems Design II (satisfies GECUE course requirement)	3
CIV-ENGR 422WI	Reinforced Concrete Design	3
CIV-ENGR 432	Foundation Engineering	3
CIV-ENGR 467	Introduction to Construction Management	3
CIV-ENGR 497	Engineering Hydrology	3
Civil Engineering Electives		
Take 21 hours of civil engineering electives with 12 hours at the 300/400 level.		21
CHEM 431	Physical Chemistry I	
CIV-ENGR 318	GIS for Engineers	
CIV-ENGR 323	Structural Steel Design	
CIV-ENGR 357	Engineering Hydraulics	
CIV-ENGR 404	Project Management of Integrated Design and Construction	
CIV-ENGR 405	Capital Project Delivery Methods	
CIV-ENGR 406	Construction Project Risk Management	
CIV-ENGR 417	Advanced Structural Analysis	
CIV-ENGR 421	Matrix Methods of Structural Analysis	
CIV-ENGR 423	Advanced Structural Steel Design	
CIV-ENGR 425	Prestressed Concrete	
CIV-ENGR 427	Advanced Reinforced Concrete Design	
CIV-ENGR 429	Design of Structures for Blast and Fire	
CIV-ENGR 431	Fundamentals of Geomaterial Characterization	
CIV-ENGR 436	Advanced Soil Mechanics	
CIV-ENGR 442	Hydraulic Structures	
CIV-ENGR 443	Hazardous Waste Management	
CIV-ENGR 447	Contracts and Law for Engineers	
CIV-ENGR 449	Environmental Compliance, Auditing and Permitting	
CIV-ENGR 452	Hydraulics of Open Channels	
CIV-ENGR 453	Hydraulics and Variability of Rivers	
CIV-ENGR 454	River Stability and Scour	
CIV-ENGR 456	Urban Hydrology	
CIV-ENGR 463	Construction Law	
CIV-ENGR 468	Construction Planning and Scheduling	
CIV-ENGR 469	Construction Methods and Equipment	
CIV-ENGR 470	Corrosion Engineering	
CIV-ENGR 471	Advanced Portland Cement Concrete	
CIV-ENGR 473	Durability of Civil Engineering Materials	
CIV-ENGR 475	Seismic Design of Structures	
CIV-ENGR 484	Pavement Materials Design, Maintenance, and Rehabilitation	
MEC-ENGR 285	Engineering Dynamics	
MEC-ENGR 299	Engineering Thermodynamics	
MGT 360	Groups and Teams	
Total Credits		103

¹ Students not meeting the MATH 266 prerequisite requirements will have 3-8 additional hours (MATH 110 and MATH 125, or MATH 120) with a minimum grade of 'B'.

Minimum GPA: 2.0

Total Credit Hours: 127

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
MATH 266 ^{CC}		4 MATH 268 ^{CC}	3
CHEM 211 & 211L ^{CC}		5 PHYSICS 240 ^{CC}	5
CIV-ENGR 111		1 MEC-ENGR 130	3
ENGLISH 110		3 ENGLISH 225	3
GEFSE 101		3 GECRT-SS 101	3
		16	17

Second Year

Fall Semester	Credits	Spring Semester	Credits
MATH 250 ^{CC}		4 MATH 345 ^{CC}	4
PHYSICS 250 ^{CC}		5 CIV-ENGR 276 ^{CC}	3
CIV-ENGR 275 ^{CC}		3 CIV-ENGR 351	3
E&C-ENGR 216		4 CIV-ENGR 190 or 113	1
CIV-ENGR 113 or 190		1 COMM-ST 110 or 277	3
		GECRT-AH 101	3
		17	17

Third Year

Fall Semester	Credits	Spring Semester	Credits
CIV-ENGR 319		3 CIV-ENGR 378WI	3
CIV-ENGR 321		4 CIV-ENGR 497	3
CIV-ENGR 335		3 CIV-ENGR XXX Major Elective	3

CIV-ENGR 467	3	GECDV 201	3
GEOLOGY 220, BIOLOGY 108, or BIOLOGY 102 (or other Basic Science course)	3	HISTORY 101, 102, or POL-SCI 210	3
		16	15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
CIV-ENGR 411		2 CIV-ENGR 412	3
CIV-ENGR 422WI		3 CIV-ENGR 3XX/4XX Major Elective	3
CIV-ENGR 432		3 CIV-ENGR 3XX/4XX Major Elective	3
CIV-ENGR 3XX/4XX Major Elective		3 CIV-ENGR XXX Major Elective	3
CIV-ENGR 3XX/4XX Major Elective		3 CIV-ENGR XXX Major Elective	3
		14	15
Total Credits: 127			

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

UMKC School of Computing & Engineering
 SS&C Student Services Center
 336 Flarsheim Hall
 5110 Rockhill Road
 Kansas City MO 64110
 816-235-2399
 sce@umkc.edu
<http://sce.umkc.edu>

Civil Engineering Career Opportunities

Kansas City is one of the premier centers of engineering design in the country. Numerous civil infrastructure design and construction firms with national and international reputation are headquartered in Kansas City. This offers a unique opportunity to our students, many of whom participate actively as interns or as employees with these firms during the course of their study, thereby, getting a balanced blend of course work and practical experience.

Job opportunities abound for engineering majors. In terms of starting salaries and the number of job offers, engineering graduates compare favorably with all other graduates. In addition, the civil engineering curriculum at UMKC equips the graduate with the analytic decision-making skills necessary to pursue diverse technical, managerial and entrepreneurial career opportunities.

Civil Engineering Program Description

The program offers the bachelor's degree and the master's degree in civil engineering and participates in the UMKC Interdisciplinary Ph.D. program. The Bachelor of Science in Civil Engineering is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org/>. ABET outcomes may be found on the SCE Accreditation page (<https://sce.umkc.edu/about/accreditation/#tab-id-3>).

The Master of Science in Civil Engineering has both thesis and non-thesis options. Students interested in pursuing a doctoral degree in civil engineering may select engineering as a discipline when applying for admission into the Interdisciplinary Ph.D. program.

The civil engineering program has a rich history in Kansas City. The University of Kansas City offered a General Engineering degree in the 1950's. The master's program in civil engineering was started in 1964 and later the undergraduate program was added in the early 1970s. Since 1977, the undergraduate program in civil engineering has been independently accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org/>. The program became a part of the School of Computing and Engineering (SCE) in January 2001 and is housed in Flarsheim Hall.

Civil Engineering Specialty Areas

UMKC's Civil Engineering Program has faculty members who are active in research with funding from numerous local and national industries and government agencies.

Research and study are available in the following specialty areas:

- Water and Environmental
- Structural
- Geotechnical and Materials
- Construction Management

For more information, visit our website at <http://sce.umkc.edu>.

Doctoral Studies in Civil Engineering

Civil Engineering participates in the Interdisciplinary Ph.D. program of the University of Missouri-Kansas City as part of the engineering (p. 1579) discipline. Students interested in pursuing a doctoral degree in civil engineering may select engineering as the primary discipline when applying for admission into the Interdisciplinary Ph.D. Program (p. 1543). See the School of Graduate Studies (p. 1538) section of this catalog for general and discipline-specific admission requirements and regulations for Interdisciplinary Ph.D. study with engineering as one of the desired disciplines.

Engineering and Construction Project Management Certificate

Student Learning Outcomes

Students graduating from this program will:

- An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- A recognition of the need for, and an ability to engage in life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Program Requirements

The Graduate Certificate in Engineering and Construction Project Management is a 12 hour program offered through the School of Computing and Engineering. Engineering and construction companies are increasingly requiring project management skills for those who hold technical degrees to successfully complete projects and to be promoted in their organizations. The Graduate Certificate program is designed to meet this need and enable students holding a Bachelor's degree in an appropriate discipline to learn higher-level project management skills that are critical to the successful planning and completion of projects across the spectrum of engineering, construction, and related disciplines. The Graduate is intended for post-Baccalaureate professionals working in the Kansas City area in mid- and upper-level engineering, construction, and management positions.

The Certificate requires a minimum of 12 credit hours at the 5000-level or above. Students must maintain 3.0 graduate GPA while enrolled. Upon completion, up to 12 hours of Civil Engineering Certificate courses may be applicable to the MS in Civil Engineering.

Core classes (Required): 9 credit hours

Code	Title	Credits
CIV-ENGR 5501PM	Advanced Project Management of Integrated Design and Construction	3
CIV-ENGR 5567	Introduction to Construction Management	3
CIV-ENGR 5547	Contracts and Law for Engineers	3
or CIV-ENGR 5563	Construction Law	

****Students must take either Contracts and Law for Engineers or Construction Law as part of the required classes.**

Approved electives (Choose one): 3 credit hours

Code	Title	Credits
CIV-ENGR 5565	Project Finance	3
CIV-ENGR 5501DM	Advanced Topics in Civil Engineering - Capital Project Delivery Methods	1-3
CIV-ENGR 5515	Engineering Leadership & Ethics	3
CIV-ENGR 5569	Construction Methods and Equipment	3
CIV-ENGR 5566	Green Building and Sustainable Infrastructure	3
CIV-ENGR 5568	Construction Planning and Scheduling	3
CIV-ENGR 5549	Environmental Compliance, Auditing, & Permitting	3

Master of Science in Civil Engineering

Student Learning Outcomes

Students graduating from this program will:

- An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- A recognition of the need for, and an ability to engage in life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Program Requirements

The civil engineering program offers graduate students an opportunity to get a state-of-the-art education in dynamic, challenging and professionally significant specialty areas. With written approval from the faculty advisor, master's students are allowed to take credits in other fields to encourage them to broaden their education beyond the civil engineering field. There are three degree options for earning a master's in civil engineering: coursework only, project or thesis options. For further information call (816) 235-5550 or e-mail sce@umkc.edu.

- Master of Science with *coursework only* requires the completion of a minimum of 30 credit hours of approved graduate coursework (300-level or higher). The graduate coursework must include at least 18 credit hours of 5500/5600-level courses.
- Master of Science with *project* requires the completion of a minimum of 30 credit hours, which includes 27 credit hours of approved graduate coursework (300-level or higher) and three credit hours of independent project (CIV-ENGR 5500). At least 18 credit hours must be at the 5500/5600-level. The candidate must submit a report prepared per the advisor's guidelines and present the project work in front of a three-member project examining committee.
- Master of Science with *thesis* requires the completion of a minimum of 30 credit hours, which includes 24 credit hours of approved graduate coursework (300-level or higher) and six credit hours of thesis work (CIV-ENGR 5599). At least 18 credit hours must be at the 5500/5600-level. The candidate must submit a thesis prepared per the graduate school guidelines and orally defend the thesis work in front of a three-member thesis examining committee.

A minimum of three credit hours of advanced mathematics from an approved course list is required for the M.S. degree in Civil Engineering. Exceptions are available by petition to the CME Graduate Committee.

Other specifications for students pursuing the project or thesis option:

1. The student must request to schedule a project or thesis defense in the first half of the semester in which the student plans to defend.
2. The written part of the project/thesis must be completed and given to all the committee members at least ten days prior to the defense date.
3. The defense date and an abstract must be advertised to the CME faculty and students at least one week prior to the scheduled defense date.

Mechanical Engineering

Mechanical engineering (ME) is one of the broadest of the engineering disciplines, therefore, mechanical engineers are the generalists of the engineering profession. Mechanical engineers design, construct, test and operate many types of mechanical, thermal and biological devices. They are involved in almost every industry, including aerospace, automotive, bioengineering, communications, electronics, energy, food processing, HVAC, manufacturing, power generation and refrigeration, as well as business, government and academia. The ME program aims to prepare students with a breadth and depth in technical knowledge so that they can work immediately in most areas of the profession.

Bachelor of Science in Mechanical Engineering

ABET Program Educational Objectives

1. Graduates are successfully employed in an engineering or related field or accepted into a graduate program.
2. Graduates apply the necessary problem-solving, design, and application skills for successful careers in Mechanical Engineering.
3. Graduates utilize their educational foundation and communication skills to effectively lead, work, and communicate in diverse career paths.
4. Graduates succeed in the complex social, business, and technical environment in which their engineering contributions will be utilized.

ABET Student Outcomes

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- An ability to communicate effectively with a range of audiences.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- 1. Students will be able to use mathematical methods to make design decisions.
- 2. Students will be able to analyze conduction and convection properties of thermal-fluid systems.
- 3. Students will be able to analyze kinematics and dynamics of mechanical components.
- 4. Students will be able to develop algorithms for solving engineering problems.
- 5. Students will be able to analyze strength characteristics of engineering materials.
- 6. Students will be able to use measurements to solve engineering problems.

Admissions

High school students planning to apply to the School of Computing & Engineering are strongly encouraged to take a college preparatory program that emphasizes mathematics, science and communication skills.

First-time college student applicants to the undergraduate program in mechanical engineering will be admitted if they obtain:

1. An ACT mathematics score of at least 25 and
2. An ACT composite score of at least 24

First-time college student applicants who do not meet the above criteria but do meet UMKC general admission requirements will have their applications reviewed by a faculty committee for admission. Applicants who are not admitted to SCE but do meet UMKC general admission requirements may be admitted to University College.

Students without the prerequisite preparation must take the needed coursework before enrolling in courses required for the bachelor's degree. Students seeking re-admission must have been in good academic standing when last enrolled. Otherwise, re-admission requires a formal review by the undergraduate program committee.

Transfer applicants must have at least 24 credits of transferable college credit, an overall 2.0 GPA on a 4.0 scale in all coursework, which includes repeated coursework, attempted at previous institutions. Transfer applicants without a 2.0 or higher college GPA must submit a petition for admission.

Program Requirements

The Bachelor of Science in Mechanical Engineering prepares students with a breadth and depth in technical knowledge so that they can work immediately in most areas of the profession. **Engineering programs must demonstrate that their students attain the outcomes listed above.**

The Mechanical Engineering curriculum requires a minimum of 127 hours of coursework and satisfies the UMKC General Education requirements.

An approved Machine Shop Safety course must be completed prior to using tools in university sponsored activities and facilities. Additionally, an approved Machine Shop Safety course is required prior to degree conferral.

A grade of C or higher must be earned in all major required coursework.

All UMKC student must take HEIghten after completing 90 credit hours and before applying for graduation (<http://www.umkc.edu/exitexams/>).

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (Satisfied in program requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC; Satisfied in program requirements below)		
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE; Satisfied in program requirements below)		
Total Credits		21

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
Math and Science Requirements (satisfies Math Pathway)		
MATH 120 (Precalculus; Typically not required due to ACT Admission Requirement)		
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
MATH 266	Accelerated Calculus I ¹	4
MATH 268	Accelerated Calculus II	3
MATH 250	Calculus III	4
MATH 345	Ordinary Differential Equations	4
PHYSICS 240	Physics For Scientists and Engineers I	5
PHYSICS 250	Physics For Scientists and Engineers II	5
Engineering Fundamental Course Requirements		
CIV-ENGR 275	Engineering Statics (satisfies GECRT-SC course requirement)	3
CIV-ENGR 276	Strength Of Materials	3
CIV-ENGR 319 or MATH 300	Engineering Computation and Statistics Linear Algebra I	3
E&C-ENGR 216	Engineering Computation	4
E&C-ENGR 276	Circuit Theory I	3
E&C-ENGR 277	Circuit Theory I Lab	1
MEC-ENGR 130	Engineering Graphics	3
MEC-ENGR 285	Engineering Dynamics	3
MEC-ENGR 306	Computer-Aided Engineering	3
MEC-ENGR 352	Mechanical Instruments Lab	2
MEC-ENGR 353	Heat Transfer and Fluid Mechanics Lab	2
Energy Systems Course Requirements		
CIV-ENGR 351	Fluid Mechanics	3
MEC-ENGR 299	Engineering Thermodynamics	3
MEC-ENGR 360	Applied Thermodynamics	3
MEC-ENGR 399	Heat and Mass Transfer	3

Engineering Design Course Requirements

Choose one of the following:		3
MEC-ENGR 401	Topics in Mechanical Engineering (Principles of Aircraft Design)	
MEC-ENGR 401	Topics in Mechanical Engineering (Additive Manufacturing)	
MEC-ENGR 415	Control Systems Theory	
MEC-ENGR 416	Biomedical Device Design	
MEC-ENGR 440	Heating and Air Conditioning	
MEC-ENGR 444	Composite Materials	

Mechanical System Course Requirements

MEC-ENGR 324	Engineering Materials	3
MEC-ENGR 324L	Engineering Materials Lab	1
MEC-ENGR 356	Mechanical Component Design	3
MEC-ENGR 380	Manufacturing Methods	3
MEC-ENGR 385	System Dynamics	3
MEC-ENGR 492	Mechanical Design Synthesis I (satisfies GECUE course requirement)	3
MEC-ENGR 496WI	Mechanical Design Synthesis	3

Mechanical Engineering Electives

Take 9 hours of mechanical engineering electives at the 300/400 level.		9
MEC-ENGR 401	Topics in Mechanical Engineering	
MEC-ENGR 407	Advanced Dynamics and Modeling	
MEC-ENGR 411	Introduction to Biomechanics	
MEC-ENGR 412	Biodynamics	
MEC-ENGR 413	Experimental Biomechanics of Human Motion	
MEC-ENGR 424	Non-Metallic Engineering Materials	
MEC-ENGR 425	Failure Analysis	
MEC-ENGR 426	Introduction to Manufacturing Management	
MEC-ENGR 459	Robotics and Unmanned Systems	
MEC-ENGR 467	Fuel Cells and Renewable Energy Systems	
MEC-ENGR 484	Vibration Analysis	
MEC-ENGR 486	Applied Finite Element Analysis	
MEC-ENGR 493	Intermediate Dynamics	
MEC-ENGR 494	Robotic System Identification	

Total Credits 103

¹ Students not meeting the MATH 266 prerequisite requirements will have 3-8 additional hours (MATH 110 and MATH 125, or MATH 120) with a minimum grade of 'B'.

Minimum GPA: 2.0

Total Credit Hours: 127

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office

of Registration and Records) and “what if” exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
MATH 266 ^{CC}		4 MATH 268 ^{CC}	3
CHEM 211 & 211L ^{CC}		5 PHYSICS 240 ^{CC}	5
GEFSE 101		3 MEC-ENGR 130	3
ENGLISH 110		3 ENGLISH 225	3
		GECRT-SS 101	3
		15	17

Second Year

Fall Semester	Credits	Spring Semester	Credits
MATH 250		4 MATH 345	4
PHYSICS 250 ^{CC}		5 CIV-ENGR 276 ^{CC}	3
CIV-ENGR 275 ^{CC}		3 E&C-ENGR 276 & E&C-ENGR 277	4
E&C-ENGR 216		4 MEC-ENGR 285 ^{CC}	3
		MEC-ENGR 299 ^{CC}	3
		16	17

Third Year

Fall Semester	Credits	Spring Semester	Credits
MEC-ENGR 324 & 324L		4 MEC-ENGR 306	3
MEC-ENGR 351		3 MEC-ENGR 352	2
MEC-ENGR 356		3 MEC-ENGR 353	2
MEC-ENGR 360		3 MEC-ENGR 380	3
COMM-ST 110, 140, or 277		3 MEC-ENGR 385	3
		MEC-ENGR 399	3
		16	16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
MEC-ENGR 492		3 MEC-ENGR 496WI	3
MEC-ENGR 4XX Design Elective		3 MEC-ENGR 4XX Technical Elective	3
MEC-ENGR 4XX Technical Elective		3 MEC-ENGR Technical Elective	3
CIV-ENGR 319 or MATH 300		3 GECDV 201	3

GECRT-AH 101	3 HISTORY 101, 102, or POL-SCI 210	3
	15	15
Total Credits: 127		

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

UMKC School of Computing & Engineering
 SS&C Student Services Center
 336 Flarsheim Hall
 5110 Rockhill Road
 Kansas City MO 64110
 816-235-2399
sce@umkc.edu
<http://sce.umkc.edu>

Doctoral Studies in Mechanical Engineering

Mechanical Engineering participates in the Interdisciplinary Ph.D. program of the University of Missouri-Kansas City as part of the engineering (p. 1579) discipline. Students interested in pursuing a doctoral degree in mechanical engineering may select engineering as the coordinating discipline when applying for admission into the Interdisciplinary Ph.D. Program (p. 1543). See the School of Graduate Studies (p. 1538) section of this catalog for general and discipline-specific admission requirements and regulations for Interdisciplinary Ph.D. study with engineering as one of the desired disciplines.

Master of Science in Mechanical Engineering

Student Learning Outcomes

Students graduating from this program will:

- An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- A recognition of the need for, and an ability to engage in life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Program Requirements

The mechanical engineering program offers graduate students an opportunity to get a state-of-the-art education in dynamic, challenging and professionally significant specialty areas. With written approval from the faculty advisor, master's students are allowed to take credits in other fields

to encourage them to broaden their education beyond the mechanical engineering field. There are three degree options for earning a master's in mechanical engineering: coursework only, project or thesis options. For further information call (816) 235-5550 or e-mail sce@umkc.edu.

- Master of Science with *coursework only* option requires the completion of a minimum of 30 credit hours of approved graduate coursework (300-level or higher). The graduate coursework must include at least 18 credit hours of 5500/5600-level courses.
- Master of Science with *project* requires the completion of a minimum of 30 credit hours, which includes 27 credit hours of approved graduate coursework (300-level or higher) and three credit hours of independent project (MEC-ENGR 5500). At least 18 credit hours must be at the 5500/5600-level. The candidate must submit a report prepared per the advisor's guidelines and present the project work in front of a three-member project examining committee.
- Master of Science with *thesis* option requires the completion of a minimum of 30 credit hours of approved graduate coursework (300-level or higher). The graduate coursework must include at least 24 credit hours of approved graduate coursework (300-level or higher) and six credit hours of thesis work (MEC-ENGR 5599). At least 18 credit hours must be at the 5500/5600-level. The candidate must submit a thesis prepared per the graduate school guidelines and orally defend the thesis work in front of a three-member thesis examining committee.

A minimum of six credit hours of advanced mathematics from an approved course list is required for the M.S. degree in Mechanical Engineering. Exceptions are available by petition to the CME Graduate Committee.

Other specifications for students pursuing the project or thesis option:

1. The student must request to schedule a project or thesis defense in the first half of the semester in which the student plans to defend.
2. The written part of the project/thesis must be completed and given to all the committee members at least ten days prior to the defense date.
3. The defense date and an abstract must be advertised to the CME faculty and students at least one week prior to the scheduled defense date.

Mechanical Engineering Career Opportunities

Kansas City is one of the premier engineering centers in the country. Numerous engineering and manufacturing firms with national and international reputation are headquartered in Kansas City. This offers a unique opportunity to our students, many of whom participate actively as interns or as employees with these firms during the course of their study, thereby getting a balanced blend of course work and practical experience.

Job opportunities abound for engineering majors. In terms of starting salaries and the number of job offers, engineering graduates compare favorably with all other graduates. In addition, the mechanical engineering curriculum at UMKC equips the graduate with the analytic decision-making skills necessary to pursue diverse technical, managerial and entrepreneurial career opportunities.

Mechanical Engineering Program Description

The program offers the bachelor's degree and the master's degree in mechanical engineering and participates in the UMKC Interdisciplinary Ph.D. program. The Bachelor of Science in Mechanical Engineering is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org/>. ABET outcomes may be found on the SCE Accreditation page (<https://sce.umkc.edu/about/accreditation/#tab-id-3>).

The Master of Science in Mechanical Engineering has both thesis and non-thesis options. Students interested in pursuing a doctoral degree in mechanical engineering may select engineering as a discipline when applying for admission into the Interdisciplinary Ph.D. program.

The mechanical engineering program has a rich history in Kansas City. The University of Kansas City offered a General Engineering degree in the 1950's. The master's program in mechanical engineering was started in 1964 and later the undergraduate program was added in the early 1970s. Since 1977 the undergraduate program in mechanical engineering has been independently accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org/>. The program became a part of the School of Computing and Engineering (SCE) in January 2001 and is housed in Flarsheim Hall.

Mechanical Engineering Specialty Areas

UMKC's Mechanical Engineering Program has faculty members who are active in research with funding from numerous local and national industries and government agencies.

Research and study are available in the following specialty areas:

- Biomechanics
- Materials
- Thermal & Fluid Sciences
- Robotics & Controls

For more information, visit our website at <http://sce.umkc.edu>.

Department of Computer Science Electrical Engineering

Address

University of Missouri-Kansas City
Department of Computer Science Electrical Engineering
546 Robert H. Flarsheim Science and Technology Hall (<http://www.umkc.edu/virtualtour/flarsheim-hall.asp>)
5110 Rockhill Road
Kansas City, MO 64110-2499

(816) 235-1193
Fax: (816) 235-5159
<http://sce.umkc.edu/about/computer-science-electrical-engineering/>

Department Chair:

Ghulam Chaudhry

Curators' Professor:

Deep Medhi

Professors:

Masud Chowdhury (Associate Dean of Research), Reza Derakhshani, Yugyung Lee, Farid Nait-Abdesselam, Dianxiang Xu

Professor Emeritus:

Richard Hetherington

Associate Professors:

Cory Beard, Baek-Young Choi, Deb Chatterjee, Yijie Han, Faisal Khan, Zhu Li, Ken Mitchell, Sejun Song

Associate Teaching Professor:

Wajeb Gharibi, Brian Hare, Kevin Kirkpatrick

Assistant Professors:

Ahmed Hassan, Mostifizur Rahman, Yusuf Sawar Uddin

Assistant Teaching Professors:

Preetham Goli

Instructors:

Kendall Bingham, Mahbube Siddiki, May Zein el din

Assistant Professor Emeritus:

David Skitek

CSEE Administrative Staff:

Gina N. Campbell, Sharon Griffith

Department Description

The CSEE Department faculty is at the forefront in research with funding from NSF and industries. We have strong partnerships with:

- Black & Veatch
- Burns & McDonnell
- Cerner
- Cisco
- Commerce Bank
- Federal Reserve Bank of Kansas City
- Garmin
- Google
- Honeywell
- IBM
- Intel
- Kiewit

- SS&C

We have research and teaching strengths in the following areas:

- Networking and Telecommunications (design, protocols, routing, security, teletraffic modeling and analysis, monitoring, performance modeling, RF/wireless communication, optical, mobile computing, sensors, queueing theory, etc.).
- Software Engineering and Systems (object-oriented design and analysis, data sciences, database/information management, middleware, intelligent agents, peer-to-peer computing, mobile databases, data mining, knowledge discovery, intrusion detection, etc.).
- Biomedical Informatics (machine learning and data mining methods for biological and medical data, modeling biological systems, biomedical information representation and sequence & structural analyses of biomolecules).
- Communications, Signal and Image Processing (digital signal processing, computational electromagnetics, RF and antenna theory and design, biomedical image processing, biometrics, neural networks, etc.).
- Computer Engineering (VLSI and mixed-signals chip design, performance and design of low power devices, embedded systems, System-On-Chip (SOC) and ASIC/FPGA design).
- Algorithms (complexity, distributed and parallel computations, graph, optimization, and combinatorial algorithms).
- Power Engineering

The CSEE department is committed to excellence in teaching. We stay on the top of the technology curve and continually offer new courses in emerging/hot topics. Our graduates are sought after by regional as well as national companies.

Advising and Registration

For advising in regard to their degree programs, students need to contact the SS&C Student Services Center. Each student is assigned an advisor. Students are required to meet with their advisor every semester prior to registration for the following semester.

Student Organizations

CSEE encourages every student to actively participate in a student organization that matches his or her interests. These organizations include:

SCE Student Council (<http://sce.umkc.edu/current-students/student-life/organizations/student-council/>), represents and supports all students enrolled in the School of Computing and Engineering.

ACM (Association for Computing Machinery) (<http://www.acm.org/>) is the leading professional organization in Computer Science and Information Technology. Among others, it sponsors and participates in programming and web design contests taking home awards from Consortium for Computing Sciences in Colleges (CCSC) and recognition in IEEE Extreme Programming Competition.

EWB (<http://sce.umkc.edu/current-students/student-life/organizations/ewb/>) (Engineers Without Borders) focuses on local and global engineering projects. These projects are teamed with the professional chapter of EWB-Kansas City.

IEEE (Institute of Electrical and Electronics Engineers) is the world's leading professional association for the advancement of engineering and technology. As such, many (if not most) electrical and computer engineers, computer scientists, and information technology professionals are members of IEEE. Formed in 1980, our student branch, won the prestigious *Region 5 RAB Student Branch Membership Growth and Leadership Award*, the *Region 5 Student Branch Web Site Contest* and was *Runner Up* in the *IEEE International Student Branch Web Site Contest*. The UMKC student branch hosts monthly meetings, company tours and SPACS during the academic year.

Eta Kappa Nu (Theta Pi Chapter) is the Honor Society in Electrical and Computer Engineering. The student chapter at UMKC was installed in 1980. Members also participate in community outreach activities such as teaching K-12 students about science, technology, engineering and math.

MSPE/NSPE (<http://sce.umkc.edu/current-students/student-life/organizations/mspe-nspe/>) (Missouri Society of Professional Engineers) is an engineering organization dedicated to emphasizing the importance of professional engineering licensure, encouraging the safe and ethical practice of engineering and facilitating interaction between student chapter members and members of the profession.

NSBE (<http://sce.umkc.edu/current-students/student-life/organizations/nsbe/>) (National Society of Black Engineers) seeks "to increase the number of culturally responsible Black Engineers who excel academically, succeed professionally, and positively impact the community."

SWE (<http://sce.umkc.edu/current-students/student-life/organizations/swe/>) (Society of Women Engineers) The purpose is to stimulate women to achieve full potential in careers as engineers and leaders, expand the image of the engineering profession as a positive force in improving the quality of life, and to demonstrate the value of diversity.

TBP (Tau Beta Pi Mo-Delta Chapter) is the honor society for all engineering majors.

UMKC Robotics (<https://roogroups.collegiatelink.net/organization/UMKCRobotics/>) is a design/build team comprised of students from any discipline and level. Formed in 2004, the team mainly competes at the annual IEEE Region 5 Robotics Competition but not solely this competition. In addition

to robot competitions, UMKC Robotics provides educational opportunities to students wishing to learn about robotics, programming, and electronics. They also participate in several community outreach activities throughout the year.

Upsilon Pi Epsilon (<http://upe.acm.org/>) is the International Honor Society for the computing and information discipline. A UPE student chapter (<http://www.umkc.edu/studo/upe/>) was founded in 2004. They organize field trips to local organizations and industries with a strong CS/IT presence.

Undergraduate Undergraduate Degrees:

- Bachelor of Information Technology (p. 1339)
- Bachelor of Science in Computer Science (p. 1350)
- Bachelor of Arts in Computer Science (p. 1334)
- BS/MS Computer Science Program (p. 1357)
- Minor in Computer Science
- Bachelor of Science in Electrical and Computer Engineering (p. 1345)
- BS/MS Electrical and Computer Engineering Program (p. 1356)

A BS/MS Option for completing both an undergraduate degree and a masters degree within five years is available for CS and ECE/EE, as described below. Furthermore, a minor in computer science is available as well.

The two degrees in computer science are the bachelor of arts in computer science (B.A. with a liberal arts perspective), and bachelor of science in computer science (B.S. with a more thorough technical perspective). The bachelor of science in electrical and computer engineering (B.S.) is for students wanting to pursue a career in electrical engineering or electrical and computer engineering. The bachelor of information technology (B.I.T.) degree caters to the needs of the IT industry and uniquely blends both computer science and business coursework.

Certified General Education Core at Another Missouri Institution

Students wanting to transfer into the CSEE department with a certified 42-hour block of general education credit from another Missouri institution are strongly encouraged to consult an academic advisor in the School of Computing & Engineering in addition to the advisor at their home institution. This ensures coursework taken in this block also satisfies specific degree requirements in our department.

Undergraduate Academic Regulations - All Students Pursuing an Undergraduate Degree

Academic Regulations

All students pursuing an undergraduate degree in the Department of CSEE, i.e. the Bachelor in Information Technology (IT), B.A. in Computer Science (CS), B.S. in Computer Science (CS), or B.S. in Electrical and Computer Engineering (ECE), must follow all academic regulations as specified in the following sections.

Academic Load

For a student to complete the degree in four years, it is imperative that the student takes approximately 15 credit hours worth of coursework each semester (not including summer). The 4-year program samples shown for each degree can be found in the UMKC Major Maps section. They are intended as a planning guideline for students.

Academic Standing

The University tries to assure that students progress satisfactorily toward their goals and receive clear warning when they do not. To this end, this academic program adheres to a clear policy, but provides for exceptions in unusual cases. The interest of the student is paramount.

Good Academic Standing

A student is in good academic standing when term grade-point average (T-GPA), cumulative grade-point average (C-GPA), and grade-point average in courses necessary for their degree program (D-GPA) from the University of Missouri system are all 2.0 or higher. If a student starts a semester in good academic standing, and receives a T-GPA or D-GPA less than 2.00 (but higher than 1.00), then the student is placed on *academic probation*. If a student starts a semester in good academic standing, and receives a T-GPA or D-GPA less than 1.00, then the student becomes *ineligible* to continue their degree objective.

Academic Probation

A student who is placed on probation must return to good academic standing in one or two semesters, under the following restrictions: If the T-GPA, D-GPA, and C-GPA are all 2.0 or higher at the end of the first probationary semester, then the student is returned to Good Academic Standing. If the T-GPA is 2.0 or higher for the first probationary semester, then the student will be allowed to enroll for a second and final probationary semester. If the T-GPA is less than 1.0, the student becomes *ineligible* to continue their degree objective. Note: Students may also be placed on academic probation at the time of initial admission or readmission because they do not fully meet the minimum standards.

Academic Ineligibility

Students become *ineligible* to continue their degree objective if either T-GPA or D-GPA is less than 1.0, or if the T-GPA is less than 2.0 in a probationary semester.

Grade Reports

The academic standing statements found at the top of semester grade reports are only calculated from T-GPA and C-GPA (the D-GPA is not incorporated and will be calculated by your advisor) and are defined as follows:

- Now In Good Standing - Term and cumulative GPA greater than 2.0.
- Now On Probation - Term or cumulative GPA less than 2.0.
- Academically Ineligible - Term GPA less than 1.0 or two consecutive semesters with term or cumulative GPA less than 2.0.

Repeating a Course and Grade Replacement

Please see the Request for GPA Adjustment Form (http://www.umkc.edu/registrar/forms/UGRAD_Repeat_Form.pdf) available at the Registrar's website about retaking a course.

Auditing a Course

A student cannot take a course for audit and later expect to take the same course for credit in the degree program. For that reason, students must not audit any courses required in their program, unless credit has already been established.

To audit an elective course, written consent from both the student's advisor and the instructor of the course is required. After the first week of classes, a student cannot change from credit to audit or audit to credit.

Academic Dishonesty

A student enrolling in any UMKC course is expected to exhibit high standards of academic honesty in all works, and are expected to refrain from cheating and plagiarism. Rules governing any suspected violation are clearly spelled out elsewhere in the UMKC catalog. Instructors are obligated to report any cases of suspected academic dishonesty, and any violation will result in sanctions being imposed on the student, ranging from a warning, probation, loss of scholarships, suspension, and dismissal. Please note that both receiving and giving unauthorized assistance is considered academically dishonest.

Petitioning

Any exception to academic policy and regulations regarding the degree requirements (e.g. transfer courses taken elsewhere, course waivers, waivers of residency) must be requested through a written petition. The petition form is available in the SS&C Student Services Center and the SCE website. The completed petition that includes an explanation for the petition should be submitted to the student's academic advisor with any necessary documents attached. The Degree Program Coordinator or his/her designee will review such petitions and will communicate the result to the student.

Graduation Requirement

For students to obtain an undergraduate degree in the Department of CSEE, they must have passed the courses as specified in various categories under the header Curriculum Requirement for the desired degree, B.I.T, B.A. in CS, B.S. in CS, or B.S. in ECE. In addition, there are a number of University-wide degree requirements and a number of restrictions that apply:

1. A minimum of 36 credit hours from junior/senior level courses must be included.
2. The GPA from all courses attempted at the University of Missouri must be at least 2.0.
3. The GPA from all courses attempted in the major must be at least 2.0.
4. Can count individual coursework in CS, ECE, or IT toward the degree if at least a C (2.0) is earned.
5. Can transfer individual coursework in CS, ECE, or IT toward the degree if the student received at least a C (2.0), and the coursework is from an ABET-accredited degree program in either computing or engineering or if the coursework is part of a transfer articulation agreement.
6. Thirty (30) credit hours of course work must be taken at UMKC.
7. Participation in University-sponsored assessment tests is a prerequisite for graduation; a degree completion survey and exit interview may also be required.

Students who have completed 90 hours of credits should file an application for graduation and make an appointment for a degree check. Students who are pursuing a second undergraduate degree or a second major must complete a minimum of 30 additional credit hours from UMKC, of which a minimum of 12 credit hours are from junior/senior level courses.

Graduate

Graduate Degrees:

- Master of Science in Computer Science (p. 1360)
- BS/MS Computer Science Program (p. 1357)
- Master of Science in Electrical Engineering (p. 1365)

- BS/MS Electrical Engineering Program (p. 1356)
- Doctoral Studies in Computer Science or Electrical Engineering

Graduate Academic Regulations

For smooth completion of the degree program, a student must follow various academic regulations as described below. Should a student want to switch from the MS in CS program to the MS in EE program (or vice versa), then the student needs to petition the graduate committee to have the record evaluated for admissibility.

Program of Study

A graduate degree indicates mastery of a coherent program in a chosen field and the ability to engage in creative projects in that specialty. The program of study is vital in assuring the completion of a formal program of study designed to ensure the mastery of specified knowledge and skills.

Forms for the program of study specification may be obtained from the SS&C Student Services Center or the SCE website. It is required that the program be approved by the student's graduate advisor and the graduate committee chair in the semester in which the student will complete 12 credit hours toward the degree, which is usually during the second semester of enrollment. It is then forwarded to the graduate officer for further approval and handling.

Once a program of study has been approved, it is the student's responsibility to ensure that all curricular requirements and prerequisites are satisfied. If a change in the approved program is needed, a petition must be submitted to the student's advisor who forwards it to the graduate committee for approval. It is not expected that more than four courses will change from the original program of study. If more than four courses are changed, then a new program of study should be filed.

Advising

Students are assigned an academic advisor and must be advised each semester before enrolling in their courses. Academic advising holds are placed on students' accounts each semester and are removed upon discussing the planned courses with the academic advisor.

In the semester that results in 12 hours of credit toward the master's degree, students should decide between a thesis option and a non-thesis option. If students decide on a non-thesis option, they should consult with their advisor and submit a plan of study for approval. If students decide on a thesis option, they should seek a thesis advisor, who then also becomes the academic advisor. The thesis advisor must be a full member of the graduate faculty and, in collaboration with the student, will then appoint two other graduate or associate graduate faculty members to be on the student's thesis committee. The thesis committee may consist of more than three members, but the majority of committee members must have full graduate faculty status. Again, a plan of study must be submitted for approval.

Academic Loads

A graduate student enrolled in the fall or spring semester in nine or more credit hours is considered full time. A graduate student enrolled in the summer semester in five or more credit hours is considered full time. Any student enrolled in less than the above number of hours is considered part time. A student who is enrolled for six credit hours during a regular semester may be considered full time if the student has at least a quarter-time graduate assistantship. A student's academic load may be restricted as deemed fit by the student's graduate advisor or the CSEE master's committee.

Students holding graduate assistantships should take a minimum of six credit hours during each of the fall and spring semesters and a minimum of three credit hours during the summer session. However, GA/GTA/GRAs who have completed all coursework and who are working on research need to enroll in only one credit hour. International students must abide by the requirements of the U.S. Immigration Service and should consult the International Student Affairs Office (<http://www.umkc.edu/isao/>) regarding this matter.

Enrollment Policies

To remain in good standing, the student must enroll for at least one semester during each calendar year until all the courses in the program of study are completed. After this time, the student must be continuously enrolled each fall and spring semester until the degree is awarded. The student must be enrolled in the semester in which the degree will be received. Students working as graduate assistants during the summer must be enrolled during the summer semester. Failure to follow the above policies will result in a need to apply for new admission to the program under the degree requirements in effect at the time of re-admission.

Academic Standing

The student must maintain at least a 3.0 GPA every semester. Deficiency courses, if any, must be passed with a B (3.0) or higher. A 400-level course in which the student receives a grade lower than B (3.0) can not be used to satisfy the degree requirements. Similarly, a 5000-level course in which the student receives a grade lower than C (2.0) can not be used to satisfy the degree requirements. However, all grades for courses taken for graduate credit shall be used in the calculation of the current GPA. No more than one grade below B (3.0) in a course taken for graduate credit can be applied toward the degree. If a student receives three grades below B (3.0) in courses taken for graduate credit or taken to fulfill a deficiency requirement, or if a student receives a grade below C (2.0) in a course taken for graduate credit or taken to fulfill a deficiency requirement, then the student will be ineligible to enroll.

Academic Dishonesty

A student enrolling in any UMKC course is expected to exhibit high standards of academic honesty in all works, and are expected to refrain from cheating and plagiarism. Rules governing any suspected violation are clearly spelled out elsewhere in the UMKC catalog (www.umkc.edu/umkc/catalog/html/append/policy/0040.html (<http://www.umkc.edu/umkc/catalog/html/append/policy/0040.html>)). Instructors are obligated to report any cases of alleged academic dishonesty, and any violation will result in sanctions being imposed on the student, ranging from a warning, probation, loss of scholarships, suspension, and dismissal. Please note that both receiving and giving unauthorized assistance is considered academically dishonest.

Petitions

Any exception to academic policy and regulations or to the degree requirements (e.g. deficiency waiver) must be requested through a written petition. The petition form is available from the SS&C Student Services Center and on the SCE website; the completed petition which includes an explanation for the petition should be submitted to the student's academic advisor. The degree program coordinator or his/her designee will review petitions and communicate the result to the student. It is important that the petition include any necessary documents as attachments for a timely decision.

Ineligibility

Ineligible students may petition the CSEE graduate committee to be re-enrolled. Such petitions will be reviewed by the graduate committee whose ruling is final. An ineligible student will only be approved for further graduate study under the terms of a restrictive probation in the form of a written contract between the student and the CSEE department. The CSEE department may render a student ineligible regardless of the student's GPA. Such procedures are rare and will involve a recommendation to the dean of the School of Graduate Studies.

Auditing a Course

A graduate student should not take a course for audit if that student plans to take the course for credit. Once a course has been audited by a student, the student cannot take the course for credit later in the program.

A graduate student cannot change a course to audit after the eighth week of the fall and spring semesters or after the fourth week of the summer semester. Changes to audit status must have the permission of the course instructor, as well as be within the allowable period.

Computer Science Courses

COMP-SCI 100 Computer Fundamentals and Applications Credits: 3

The course covers essential computer concepts and skills. The emphasis is on using the computer as a tool to enhance productivity. Topics include basic computer concepts such as what to look for when buying a computer and how to avoid hackers and viruses when operating one. Students will also learn how to create word processing, spreadsheet, database, and presentation documents using the Microsoft Office suite of applications. The course prepares students to succeed in both college and business by enabling them to write reports, analyze and chart data, prepare presentations and organize large data sets.

Prerequisites: MATH 110 (or higher) or ALEKS score of 51 (or higher); or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

COMP-SCI 101 Problem Solving and Programming I Credits: 3

Problem solving, algorithms, and program design. Use of structured programming, lists, control structures, recursion, objects and files in Python. Introduction to graphical interface programming. Coding, testing and debugging using a modern development environment.

Prerequisites: MATH 110 or MATH 120 (or higher) or ALEKS score of 51 (or higher); ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

Co-requisites: COMP-SCI 101L.

COMP-SCI 101L Problem Solving & Programming I Lab Credit: 1

Programming exercises and demonstrations to reinforce concepts learned in COMP-SCI 101 and provide additional practice in Python programming.

Prerequisites: MATH 110 or MATH 120 (or higher); ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

Co-requisites: COMP-SCI 101.

COMP-SCI 191 Discrete Structures I Credits: 3

Mathematical logic, sets, relations, functions, mathematical induction, algebraic structures with emphasis on computing applications.

Prerequisites: MATH 110 or MATH 120 (or higher) or ALEKS score of 51 (or higher); or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

COMP-SCI 201L Problem Solving and Programming II - Lab Credit: 1

Programming exercises and demonstrations to reinforce concepts learned in COMP-SCI 201R and provide additional practice in C++ programming.

Prerequisites: COMP-SCI 101.

Co-requisites: COMP-SCI 191 and COMP-SCI 201R.

COMP-SCI 201R Problem Solving and Programming II Credits: 3

Problem solving and programming using classes and objects. Algorithm efficiency, abstract data types, searching and sorting, templates, pointers, linked lists, stacks and queues implemented in C++.

Prerequisites: COMP-SCI 101.

Co-requisites: COMP-SCI 191 and COMP-SCI 201L.

COMP-SCI 281R Introduction to Computer Architecture and Organization Credits: 3

Digital Logic and Data Representation, process architecture and instruction sequencing, memory hierarchy and bus-interfaces and functional organization.

Prerequisites: COMP-SCI 101, COMP-SCI 191.

COMP-SCI 291 Discrete Structures II Credits: 3

Recurrence relations and their use in the analysis of algorithms. Graphs, trees, and network flow models. Introduction to Finite state machines, grammars, and automata.

Prerequisites: COMP-SCI 191.

COMP-SCI 303 Data Structures Credits: 3

Linear and hierarchical data structures, including stacks, queues, lists, trees, priority queues, advanced tree structures, hashing tables, dictionaries and disjoint-set. Abstractions and strategies for efficient implementations will be discussed. Linear and hierarchical algorithms will be studied as well as recursion and various searching and sorting algorithms. Programming concepts include Object Orientation, concurrency and parallel programming. Several in-depth projects in C++ will be required.

Prerequisites: COMP-SCI 191, COMP-SCI 201R, and COMP-SCI 201L.

COMP-SCI 304WI Ethics and Professionalism Credits: 3

Societal and ethical obligations of computer science, information technology, and electrical/computer engineering practice. Topics include obligations of professional practice, electronic privacy, intellectual property, ethical issues in networking, computer security, computer reliability, and whistle-blowing.

Prerequisites: Departmental consent.

COMP-SCI 371 Database Design, Implementation and Validation Credits: 3

This course discusses in detail all aspects of database management systems. It covers in detail database design, implementation, and validation. In addition to these, it briefly covers implementation, tuning, database security, and implementation. The course is suitable for undergraduates and professionals alike.

Prerequisites: COMP-SCI 303.

COMP-SCI 394R Applied Probability Credits: 3

Basic concepts of probability theory. Counting and measuring. Probability, conditional probability and independence. Discrete, continuous, joint random variables. Functions of random variables. Sums of independent random variables and transform methods. Random number generation and random event generation. Law of large numbers, central limit theorem, inequalities. Their applications to computer science and electrical and computer engineering areas are stressed.

Prerequisites: COMP-SCI 201R and COMP-SCI 201L (or E&C-ENGR 216), MATH 220, and STAT 235 (or E&C-ENGR 241).

COMP-SCI 404 Introduction to Algorithms and Complexity Credits: 3

A rigorous review of asymptotic analysis techniques and algorithms: from design strategy (such as greedy, divide-and-conquer, and dynamic programming) to problem areas (such as searching, sorting, shortest path, spanning trees, transitive closures, and other graph algorithms, string algorithms) arriving at classical algorithms with supporting data structures for efficient implementation. Throughout, the asymptotic complexity is studied in worst case, best case, and average case for time and/or space, using appropriate analysis techniques (recurrence relations, amortization). Introduction to the basic concepts of complexity theory and NP-complete theory.

Prerequisites: COMP-SCI 291 and COMP-SCI 303.

COMP-SCI 420 Introductory Networking and Applications Credits: 3

This introductory course examines the systems aspects of the different LAN/MAN/WAN models, including topics such as protocols, network operating systems, applications, management and wireless communication systems. It also examines how the different models are interconnected using bridges and routers.

Prerequisites: COMP-SCI 303.

COMP-SCI 421A Foundations of Data Networks Credits: 3

This introductory course examines the analytical aspects of data communications and computer networking. Topics cover protocol concepts and performance analysis that arise in physical, data link layer, MAC sub layer, and network layer.

Prerequisites: COMP-SCI 291, COMP-SCI 303, COMP-SCI 394R.

COMP-SCI 423 Client/Server Programming and Applications Credits: 3

Fundamentals of Client/Server programming using socket interface; features of network programming including connection oriented and connectionless communication in multiple environments (Windows, UNIX, and Java); other client/server mechanisms, such as RPC and RMI) and formal object environments designed to facilitate network programming (CORBA, COM and Beans).

Prerequisites: COMP-SCI 303, COMP-SCI 431.

COMP-SCI 424 Software Methods and Tools Credits: 3

This course covers a number of software methods and tools that are widely used in industry. These methods include architecture patterns and styles, software frameworks, unit testing, and version control. The covered software tools include Microsoft Project, IBM Rational Systems Modeler, Eclipse Plug-ins, JUnit, Subversion, and GIT. The course emphasizes practice. Students will use these methods and tools to develop a software system from the initial planning to final deployment.

COMP-SCI 431 Introduction to Operating Systems Credits: 3

This course covers concurrency and control of asynchronous processes, deadlocks, memory management, processor and disk scheduling, x86 assembly language, parallel processing, security, protection, and file system organization in operating systems.

Prerequisites: COMP-SCI 303, COMP-SCI 281R.

COMP-SCI 441 Programming Languages: Design and Implementation Credits: 3

This course covers programming language paradigms (object-oriented programming, functional programming, declarative programming, and scripting) and design tradeoffs in terms of binding, visibility, scope, lifetime, type-checking, concurrency/parallelism, and abstraction. It also covers programming language specification, grammar, lexical analysis, exception handling, and runtime considerations.

Prerequisites: COMP-SCI 303.

COMP-SCI 449 Foundations of Software Engineering Credits: 3

The course introduces concepts of software engineering (e.g. definitions, context) and the software development process (i.e. life cycle). Students will get a solid foundation in agile methodology, software requirements, exceptions and assertions, verification and validation, software models and modeling, and user interface design. Various software architectures will be discussed.

Prerequisites: COMP-SCI 303.

COMP-SCI 451R Software Engineering Capstone Credits: 3

The course will focus on the requirements and project planning and managing of medium sized projects with deliverables of each phase of the software life cycle. Additional studies of system integration and architecture, software modeling, requirements specifications, configuration management, verification, validation, software evolution and quality and finally measurement, estimation and economics of the software process.

Prerequisites: COMP-SCI 303, COMP-SCI 449.

COMP-SCI 456 Human Computer Interface Credits: 3

Design of human-computer interfaces considering the psychological and physical abilities of the user. User interface design from a functional and ergonomic perspective. Contents organization, visual organization, navigation. Use of graphical user interface (GUI) and the development of high quality user interfaces.

Prerequisites: COMP-SCI 449.

COMP-SCI 457 Software Architecture: Requirements & Design Credits: 3

Introduction to requirements and design engineering with emphasis on organization and presentation of system requirements and designs for customers, users and engineers; validation of requirements and design with needs of system customer; examination of requirement and design changes during the lifetime of a system; transformation of informal ideas into formal detailed descriptions; examination of the different stages in the design process including architectural design, interface design and data structure design, database design, program and transaction design; examination of domain modeling criteria and examination of design quality attributes; non-functional attributes and project resource allocation.

Prerequisites: COMP-SCI 303.

COMP-SCI 458 Software Testing and Verification Credits: 3

Introduction to principles and techniques of software testing and verification for quality assurance in software development processes.

Prerequisites: COMP-SCI 303.

COMP-SCI 461 Introduction to Artificial Intelligence Credits: 3

This course provides an overview of the field of artificial intelligence. Topics include guided and unguided search, adversarial search, generation and use of heuristics, logic programming, probabilistic reasoning, and neural networks. Application areas studied include game playing, automated proofs, expert systems, and data mining. Recommended preparation: One or more of COMP-SCI 394R, COMP-SCI 404, or an advanced programming elective.

Prerequisites: COMP-SCI 303.

COMP-SCI 465R Introduction to Statistical Learning Credits: 3

This course provides a practical introduction to analytical techniques used in data science and prepares students for advanced courses in machine learning. Topics covered include multivariate distributions, information theory, linear algebra (eigenanalysis), supervised/unsupervised learning, classification/regression, linear/non-linear learning, introduction to Bayesian learning (Bayes rule, prior, posterior, likelihood), parametric/non-parametric estimation.

Prerequisites: COMP-SCI 394R.

COMP-SCI 470 Introduction to Database Management Systems Credits: 3

This course covers database architecture, data independence, schema, Entity-Relationship (ER) and relational database modeling, relational algebra and calculus, SQL, file organization, relational database design, physical database organization, query processing and optimization, transaction structure and execution, concurrency control mechanisms, database recovery, and database security.

Prerequisites: COMP-SCI 303.

Co-requisites: COMP-SCI 431.

COMP-SCI 479 Introduction to Computer Vision Credits: 3

Image is an essential form of information representation and communication in modern society. This course focuses on topics of computer vision, teaching computers how to understand images. Introductory topics include image formation, color and texture features, homograph, key points detection, aggregation, subspace methods in image modeling, and deep learning based image segmentation and classification, with applications in photography, media and entertainment, education, defense and medicine. The course is project based and emphasis hands on experiences for students to solve real world problems.

Prerequisites: E&C-ENGR 484.

COMP-SCI 490 Special Topics Credits: 3

Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

Prerequisites: Junior standing.

COMP-SCI 490CR Special Topics Credits: 1-3

Special topics in Computer Science.

COMP-SCI 490R Special Topics Credits: 1-3

Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

COMP-SCI 491 Internship Credits: 6

Students may participate in structured internships under the joint supervision of an employer and a faculty member. The student must carry out significant professional responsibilities that also have academic merit. The number of credit hours is based on the quality of the academic experience. Available for credit/no credit only and students must be in good standing with at least 18 credit hours of CS/IT counting towards the degree.

Registration by consent number only: petition forms for CS/IT491 Internships are available in the office of CSEE Division and on the web.

Prerequisites: Junior standing, Departmental consent.

COMP-SCI 497 Directed Readings Credits: 1-3

Readings in an area selected by an undergraduate student in consultation with a faculty member. Arrangements must be made prior to registration.

Prerequisites: Departmental consent.

COMP-SCI 498 Research Seminar Credits: 1-3

Undergraduate research based on intensive readings from the current research literature under the direction of a faculty member. Arrangements must be made prior to registration.

Prerequisites: Departmental consent.

COMP-SCI 499 Undergraduate Research Credits: 1-3

Completion of project, including a final written report, under the direction of a faculty member. A prospectus must be accepted prior to registration.

Prerequisites: Departmental consent.

COMP-SCI 5101 Discrete Structures Review for Graduate Students Credits: 1-3

A review of mathematical logic, sets, relations, functions, mathematical induction, and algebraic structures with emphasis on computing applications. Recurrence relations and their use in the analysis of algorithms. Graphs, trees, and network flow models. Introduction to Finite state machines, grammars, and automata. Students must have completed College Algebra before taking this course.

COMP-SCI 5102 Operating Systems Review for Graduate Students Credits: 1-3

This course covers concurrency and control of asynchronous processes, deadlocks, memory management, processor and disk scheduling, parallel processing, and file system organization in operating systems.

Prerequisites: Data Structures, Computer Architecture.

COMP-SCI 5103 Advanced Data Structures and Analysis of Algorithms Review for Graduate Students Credits: 1-3

A review of linear and hierarchical data structures, including stacks, queues, lists, trees, priority queues, advanced tree structures, hashing tables, dictionaries and disjoint-sets. Asymptotic analysis techniques and algorithms: from design strategy (such as greedy, divide-and-conquer, and dynamic programming) to problem areas (such as searching, sorting, shortest path, spanning trees, transitive closures, graph algorithms, and string algorithms) arriving at classical algorithms with efficient implementation. Introduction to the basic concepts of complexity theory and NP-complete theory. Students must have taken courses in Linear Algebra, Discrete Structures, Data Structures, and Applied Probability before taking this course.

COMP-SCI 5514 Optical Fiber Communications Credits: 3

Fiber optic cable and its characteristics, optical sources and transmitters, optical detectors and receivers, optical components such as couplers and connectors, WDM and OFDM techniques, modulation and transmission of information over optical fibers, design of optical networks, single and multihop fiber LANs, optical carrier systems.

Prerequisites: COMP-SCI 411.

COMP-SCI 5525 Cloud Computing Credits: 3

Cloud computing systems operate in a very large scale, and are impacting the economics and the assumptions behind computing significantly. This special topics course provides a comprehensive overview of the key technical concepts and issues behind cloud computing systems such as compute, storage and network resource virtualization and management. We will cover a range of topics of cloud computing including: Cloud system architectures and taxonomy, Computing virtualization techniques, Virtual machine resource management, Data center networking issues, Big data transfer protocols and management, Large scale distributed file system examples (Google File System), Cloud programming.

Prerequisites: CSEE 5110, COMP-SCI 431.

COMP-SCI 5531 Advanced Operating Systems Credits: 3

Components of an operating system, scheduling/routing mechanisms, process control blocks, design and test various operating system components.

Prerequisites: COMP-SCI 431.

COMP-SCI 5540 Principles of Big Data Management Credits: 3

This course will introduce the essential characteristics of Big Data and why it demands rethinking how we store, process, and manage massive amounts of structured and unstructured data. It will cover the core technical challenges in Big Data management i.e., the storage, retrieval, and analysis of Big Data. It will emphasize on fundamental concepts, analytical skills, critical thinking, and software skills necessary for solving real-world Big Data problems. Tools such as Apache Hadoop, Pig, Hive, HBase, and Apache Spark will be covered. Extensive reading of research papers and in-class presentations will be heavily emphasized in this class.

Prerequisites: COMP-SCI 431 and COMP-SCI 470.

COMP-SCI 5542 Big Data Analytics and Applications Credits: 3

Big Data analytics focus on analyzing large amounts of data to find useful information and to make use of the information for better business decisions. This course introduces students to the practice and potential of big data analytics and applications. In this course, students will have hands-on experience with Big Data technologies (Hadoop and its ecosystems) and tools (Cloudera, Mahout, HBase) for the analysis of large data sets across clustered systems. Students will learn how to develop highly interactive applications for business intelligence.

Prerequisites: COMP-SCI 451.

COMP-SCI 5543 Real-time Big Data Analytics Credits: 3

This course teaches students fundamental theory and practice in the field of big data analytics and real time distributed systems for real time big data applications. In this course, students will have hands-on experience for the development of real-time applications with various tools such as Twitter's Storm, Apache Flume, Apache Kafka for real time analysis of stream data such as twitter messages and Instagram images.

Prerequisites: COMP-SCI 451.

COMP-SCI 5551 Advanced Software Engineering Credits: 3

Current concepts in software architecture and design, comparative analysis for design, object-oriented software design, software quality criteria for evaluation of software design. Introduction to metrics, project management and managerial ethics.

Prerequisites: COMP-SCI 451R.

COMP-SCI 5552A Formal Software Specification Credits: 3

Formal modeling including specification and deviation of abstract data types, completeness issues in the design of data types and data structures, implementation of data structures from a formal data type specification, verification of abstract to concrete data mapping.

Prerequisites: COMP-SCI 291, COMP-SCI 303.

COMP-SCI 5553 Software Architecture and Design Credits: 3

The course introduces a number of basic concepts and enabling technologies of software architecture, including architecture styles, architecture description languages, architecture-implementation mapping, and product line architectures. It also covers some advanced topics, such as the REST architecture style and Web Services. Students will read research papers, analyze the existing results, write critiques, give presentations, and exercise the research results with real examples. In addition, students will have an opportunity to work in groups and study the architecture of some real software systems.

Prerequisites: COMP-SCI 451R.

COMP-SCI 5555 Software Methods and Tools Credits: 3

Software methods and tools are extensively used in current software production to improve software productivity and quality. In this course, we are going to learn a number of popular software methods and tools being used in industry. These methods include object-oriented design and analysis (e.g. UML, design patterns), architecture styles, code generation, and unit testing. The covered software tools include Microsoft Project, IBM Rational Systems Developer, Eclipse Plug-ins, Emacs, JUnit, Subversion, and GIT. The course emphasizes practice, and students will be using these methods and tools to develop a software system, from the initial planning to the final deployment.

COMP-SCI 5560 Knowledge Discovery and Management Credits: 3

This course teaches students fundamental theory and practice in the field of knowledge discovery and management and also provides them with hands-on experience through application development.

Prerequisites: COMP-SCI 5551, COMP-SCI 461.

COMP-SCI 5561 Advanced Artificial Intelligence Credits: 3

AI systems and their languages, implementations and applications, case studies of various expert systems, current research topics in AI, logic programming using PROLOG.

Prerequisites: COMP-SCI 461.

COMP-SCI 5565 Introduction to Statistical Learning Credits: 3

Introduction to Machine Learning; Multivariate Distributions; Information Theory; Linear Algebra (Eigenanalysis); Supervised/Unsupervised Learning, Classification/Regression; Linear/Non-linear Learning; Introduction to Bayesian Learning (Bayes rule, Prior, Posterior, Maximum Likelihood); Parametric/Non-parametric Estimation. Recommended preparation: MATH 300; Familiarity with MATLAB.

Prerequisites: COMP-SCI 394R.

COMP-SCI 5566 Introduction to Bioinformatics Credits: 3

This course introduces students to the field of Bioinformatics with a focus on understanding the motivation and computer science behind existing Bioinformatic resources, as well as learning the skills to design and implement new ideas.

Prerequisites: COMP-SCI 303, a course or background in Biology (Genomics or Meta Models preferred).

COMP-SCI 5567 Machine Learning for Data Scientists Credits: 3

This course teaches the theoretical basis of methods for learning from data, illustrated by examples of applications to several domains.

Recommended preparation: COMP-SCI 5565.

Prerequisites: COMP-SCI 303, COMP-SCI 394R.

COMP-SCI 5568 Fundamentals of Probabilistic Graphical Models Credits: 3

Many real world systems are probabilistic in nature. Probability theory gives us the basic tools for modeling many real world systems, allowing us to understand complex behavior. Probabilistic graphical models allow us to model complex probabilistic relationships using graphs. This framework, which spans methods such as Bayesian networks and Markov networks, allows us to manipulate complex probability distributions that often involve hundreds or even many thousands of variables. These methods have been used for an enormous range of applications, which include: web search, turbo coding, robot navigation, image identification, epidemic identification in complex networks, medical diagnosis and speech recognition. Recommended preparation: COMP-SCI 5565.

Prerequisites: COMP-SCI 303, COMP-SCI 394R.

COMP-SCI 5570 Architecture of Database Management Systems Credits: 3

Covers in detail, architecture of centralized database systems, database processing, management of concurrent transactions, query processing, query optimization, data models, database recovery, datawarehousing, workflow, World Wide Web and Database performance, and reviews the architecture of some commercial centralized database systems.

Prerequisites: COMP-SCI 431, COMP-SCI 470.

COMP-SCI 5572 Mobile Computing Credits: 3

This course covers in detail the architecture of mobile and wireless network. It discusses and develops relevant concepts and algorithms for building mobile database systems (MDS), which is necessary for managing information on the air and E-commerce.

Prerequisites: COMP-SCI 5570.

COMP-SCI 5573 Information Security and Assurance Credits: 3

This course deals with information security and assurance and covers the concepts necessary to secure the cyberspace. It introduces security models, assurance policies, security policies and procedures, and technology. It enables students to understand the need for information assurance, identify security vulnerabilities, and devise security solutions that meaningfully raise the level of confidence in computer systems. It teaches students how to design secured database and computer systems.

Prerequisites: COMP-SCI 470.

COMP-SCI 5574 Large Scale Semistructured Data Management Credits: 3

This course will cover topics related to managing large scale semistructured data modeled using the Extensible Markup Language XML and the Resource Description Framework (RDF). This will include storing XML (e.g. natively, using a relational database), indexing XML (e.g. numbering schemes, structural indexes, sequencing paradigms), XML query processing algorithms (e.g. join-based, subsequence-based), RDF DATA STORAGE (e.g. triple stores, graph stores), RDF indexing and SPARQL query processing algorithms. The course will also cover emerging many core processor architectures (e.g. Intel Single-chip Cloud Computer) and the opportunities they provide for building next-generation semistructured data management solutions. Extensive reading of research papers and in-class presentations will be a core part of this class. Grades will be based on in-class presentations of research papers, exams, and a research project (to be done in groups).

Prerequisites: COMP-SCI 470.

COMP-SCI 5581 Parallel Computer Architecture I Credits: 3

Parallelism in computer architecture, pipelined processors, array processors and multi-processor systems, algorithms for SISD, SIMD, MISD and MIMD organizations, vectorization, pipelining algorithms.

COMP-SCI 5582 Computer Vision Credits: 3

The image is an essential form of information representation and communication in modern society. This course focuses on topics of computer vision, teaching computer how to understand images. Topics include image formation, color and texture features, key points detection, aggregation, subspace methods in image modeling, and deep learning image classification, with many applications in photography, media and entertainment, education, defense and medicine.

COMP-SCI 5590 Special Topics Credits: 1-6

Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

COMP-SCI 5590AW Special Topics Credits: 1-3**COMP-SCI 5590BD Special Topics Credits: 1-3****COMP-SCI 5590CC Special Topics In Computer Science Credits: 1-3****COMP-SCI 5590CI Special Topics Credits: 1-3****COMP-SCI 5590CN Special Topics Credits: 1-3****COMP-SCI 5590HI Special Topics Credits: 1-3****COMP-SCI 5590MT Special Topics Credits: 1-3****COMP-SCI 5590NN Special Topics Credits: 1-3**

Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

COMP-SCI 5590OS Special Topics Credits: 1-3**COMP-SCI 5590PB Special Topics Credits: 1-3**

Special Topics

COMP-SCI 5590PG Special Topics In Computer Science Credits: 1-3**COMP-SCI 5590SA Special Topics In Computer Science Credits: 1-3****COMP-SCI 5590WW Special Topics Credits: 1-3****COMP-SCI 5590WX Special Topics Credits: 1-3****COMP-SCI 5590XX Special Topics Credits: 1-3****COMP-SCI 5590YL Special Topics Credits: 1-3****COMP-SCI 5592 Design and Analysis of Algorithms Credits: 3**

Combinatorial analysis, searching and sorting, shortest path algorithms, spanning trees, search and traversal techniques, backtracking, branch and bound, heuristics, algebraic simplification and transformation.

Prerequisites: COMP-SCI 303 and COMP-SCI 404.

COMP-SCI 5596A Computer Security I: Cryptology Credits: 3

Study of theory, and algorithmic techniques, of the fields of number theory and cryptology, as they are applied in the general area of computer and network security.

Prerequisites: COMP-SCI 291.

COMP-SCI 5596B Computer Security II: Applications Credits: 3

Application of the algorithmic techniques learned in COMP-SCI 5596A to provide suitable security countermeasures to the variety of security threats across the spectrum of computing.

Prerequisites: COMP-SCI 5596A.

COMP-SCI 5597 Directed Readings Credits: 1-3

Readings in an area selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

COMP-SCI 5598 Research Seminar Credits: 1-3

Graduate research based on intensive readings from the current research literature under the direction of a faculty member. Arrangements must be made prior to registration.

COMP-SCI 5599 Research and Thesis Credits: 1-6

A project investigation leading to a thesis, or written report under the direction of a faculty member. A prospectus must be accepted prior to registration.

COMP-SCI 5690 Advanced Special Topics Credits: 1-3

A lecture course presenting advanced research level topics. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

Prerequisites: Ph.D. Candidacy.

COMP-SCI 5690ND Advanced Special Topics Credits: 1-3**COMP-SCI 5697 Directed Readings Credits: 1-3**

Readings in an area selected by the doctoral student in consultation with a doctoral faculty member. Arrangements must be made prior to registration.

COMP-SCI 5698 Advanced Research Seminar Credits: 1-3

Advanced research by a group of doctoral students based on intensive readings from the current research literature under the direction of one or more doctoral faculty. Original research results of each student are exchanged by presentations and group discussion. Arrangements must be made prior to registration.

COMP-SCI 5699A Research And Dissertation Research In Computer Science Credits: 1-12

Doctoral research in computer science.

COMP-SCI 5899 Required Grad Enrollment Credit: 1

Computer Sci Electrical Engr Courses

CSEE 5110 Network Architecture I Credits: 3

This course provides an introduction to fundamental concepts and principles in the design and implementation of computer communication networks, their protocols, and architectures. Topics to be covered include: layering, and addressing, naming, routing, internetworking, Internet protocols, reliable transfer, congestion control, link control, multiple media access, and network measurement and management.

Prerequisites: COMP-SCI 421A, COMP-SCI 431.

CSEE 5111 Network Architecture II Credits: 3

In this course, advanced principles, protocols, and architectures of computer networks will be studied with specific emphasis on emerging technologies. The focus will be on the latest networking protocol designs with particular attention to the TCP/IP and application layers.

Prerequisites: CSEE 5110.

CSEE 5113 Network Routing Credits: 3

Algorithms, protocols and analysis for network routing. Routing in different networks such as circuit-switched networks, Internet, broadband networks, and transmission networks are covered.

Prerequisites: CSEE 5110, CSEE 5112.

CSEE 5590 Special Topics Credits: 1-3

This course is intended to allow faculty and visiting scholars to offer special courses in selected topics.

CSEE 5690 Advanced Special Topics Credits: 1-3

A lecture course presenting advanced research level topics. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

CSEE 5697 Directed Readings Credits: 1-3

Readings in an area selected by the doctoral student in consultation with a doctoral faculty member. Arrangements must be made prior to registration.

CSEE 5699 Research and Dissertation Research in Telecommunications and Computer Networking Credits: 1-12

Doctoral Research in Telecommunications and Computer Networking.

CSEE 5899 Required Graduate Enrollment Credit: 1

Required Graduate Enrollment.

Electrical Computer Engr Courses

E&C-ENGR 130 Engineering Graphics Credits: 3

Introduction to Engineering Graphics with the use of the Computer Aided Design tools AutoCAD and SolidWorks. Introduction to 2D design with AutoCAD and introduction to 3D design with SolidWorks. Also an introduction to electrical circuit diagrams. No previous 2D or 3D CAD experience is necessary to take this class.

E&C-ENGR 216 Engineering Computation Credits: 4

Development, analysis and synthesis of structured computer programs for solving engineering problems in the Python, MATLAB, and C languages. Introduction to algorithms and data structures.

Prerequisites: MATH 110 or MATH 120 (or higher) or ALEKS score of 51 (or higher); or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

E&C-ENGR 217 Engineering Computation Credits: 2

Students learn to develop, analyze and synthesize structured computer programs for solving engineering problems in the Python, MATLAB, and C languages. This course also provides an introduction to algorithms and data structures. This course is available by approval of the degree program committee if transfer credit has been approved for one of the listed programming languages.

Prerequisites: MATH 110 or MATH 120 (or higher) or ALEKS score of 51 (or higher); or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

E&C-ENGR 226 Logic Design Credits: 3

Design of combinational logic circuits, logic minimization techniques, design of sequential logic circuits, state machine design techniques, digital system design.

Co-requisites: E&C-ENGR 227.

E&C-ENGR 227 Logic Design Laboratory Credit: 1

Laboratory for E&C-ENGR 226. Experimental topics related to the design of combinational and sequential logic systems and small digital systems.

Co-requisites: E&C-ENGR 226.

E&C-ENGR 228 Introduction to Computer Design Credits: 3

This course covers computer organizations and fundamental computer design techniques. It also discusses design of computer data unit, control unit, input-output, microprogramming. Memory systems (RAM memory, Cache memory, interrupts, secondary memory) and direct memory access design is also discussed. Verilog HDL design is introduced and applied to small digital systems.

Prerequisites: E&C-ENGR 226 and E&C-ENGR 227.

Co-requisites: E&C-ENGR 229.

E&C-ENGR 229 Introduction to Computer Design Laboratory Credit: 1

This laboratory course covers experimental topics related to the design of digital computer systems and arithmetic circuits which students study in the E&C-ENGR 228.

Prerequisites: E&C-ENGR 226 and E&C-ENGR 227.

Co-requisites: E&C-ENGR 228.

E&C-ENGR 241 Applied Engineering Analysis I Credits: 3

Partial differentiation, multiple integrals, first and second order ordinary differential equations, partial fractions, and Laplace transform solution of Ordinary Differential Equations.

Prerequisites: MATH 220 or MATH 268 (with a grade of C or better).

E&C-ENGR 250 Engineering Mechanics and Thermodynamics Credits: 3

This course concentrates on practical concepts in mechanics and thermodynamics for EC-ENGR majors, such as the practical use of forces, moments, couples, centroids, and moment of inertia, friction, manipulating systems of rigid bodies in motion and applying conservation of energy to gases, liquids, and solids. Materials will also be addressed.

Prerequisites: MATH 220 or MATH 266; and PHYSICS 240 (both with a grade of C or better).

E&C-ENGR 276 Circuit Theory I Credits: 3

Kirchoff's circuit laws, Ohm's Law, nodal and mesh analyses, source transformations, superposition, Thevenin and Norton equivalents, transient analysis of 1st and 2nd order systems. AC circuit analysis, phasors, impedance, sinusoidal steady-state responses, operational amplifiers and PSpice.

Prerequisites: PHYSICS 250 and E&C-ENGR 241 (or MATH 345 as a pre or co-req) with a grade of C or better.

E&C-ENGR 277 Circuit Theory I Lab Credit: 1

Introduction to the use and limitations of basic instruments used in electrical testing and measurement. Experimental techniques and laboratory safety. Data gathering, interpretation and presentation. Preparation of laboratory reports. Experimental work supporting theoretical concepts developed in E&C-ENGR 276.

Co-requisites: E&C-ENGR 276.

E&C-ENGR 302 Electromagnetic Waves and Fields Credits: 3

Elements of vector calculus: curl, gradient and divergence differential operations; vector identities; integration of vectors Stokes and Gauss's theorems, laplacian; review of electrostatic and magnetostatic fields; boundary value problems; boundary conditions; time-harmonic fields and phasors; Maxwell's equations, Poynting vector; vector and scalar wave equations; electromagnetic wave propagation in free-space, lossy and lossless dielectrics and conductors; polarization; reflections at normal and oblique incidences; transmission line parameters; telegrapher's equations; input impedance and VSWR; Smith Chart and impedance matching; transients on transmission lines.

Prerequisites: E&C-ENGR 341R, E&C-ENGR 376.

Co-requisites: E&C-ENGR 303.

E&C-ENGR 303 Electromagnetic Waves and Fields Lab Credit: 1

The goal of the lab is to complement and demonstrate the main concepts of transmission line and microwave theory using hands on experiments. The experiments will introduce students to microwave sources, components, and transmission lines. Moreover, the experiments will demonstrate the concepts of wave propagation, attenuation, power splitting, reflection, and standing waves. Moreover, students will design and conduct experiments to characterize unknown loads and antennas. Recommended preparation: MATLAB knowledge/proficiency.

Co-requisites: E&C-ENGR 302.

E&C-ENGR 330 Electronic Circuits Credits: 3

Application of operational amplifiers, semiconductor device physics, elementary analysis and design of analog electronic circuits that utilize diodes, BJT's, and MOSFET's in single and multistage amplifiers with passive loads and power amplifiers; DC biasing, small signal analysis and calculation of frequency responses. The use of CAD (Spice) in the analysis and design of electronic circuits.

Prerequisites: E&C-ENGR 276 and E&C-ENGR 334.

Co-requisites: E&C-ENGR 331.

E&C-ENGR 331 Electronic Circuits Laboratory Credit: 1

Laboratory experiments in the application of operational amplifiers, the analysis, design, and testing of single and multistage amplifiers with passive loads, and the measurement of frequency response. Recommended preparation: E&C-ENGR 276, E&C-ENGR 277.

Co-requisites: E&C-ENGR 330.

E&C-ENGR 334 Semiconductors and Devices Credits: 3

Junction theory, semiconductor diodes and models, bipolar transistors and models, field-effect transistors and models, selected electron devices and models.

Prerequisites: E&C-ENGR 341R, PHYSICS 250.

E&C-ENGR 341R Applied Engineering Analysis II Credits: 3

Complex numbers; Euler's formulas, analytic functions, Taylor and Laurent series; Cauchy residue theorem and application to evaluation of integrals; linear algebra, eigenvalue and eigenvectors; Fourier series and transforms.

Prerequisites: E&C-ENGR 241 (with a grade of C or better).

E&C-ENGR 358 Introduction to Control Systems Credits: 3

Study of feedback techniques, with applications to control systems. Includes modeling, applications of Bode plot, root locus, state-variable, and Nyquist methods.

Prerequisites: E&C-ENGR 376.

E&C-ENGR 376 Circuit Theory II Credits: 3

Power, transformers, three-phase circuits, two-port networks, the theory and application of Laplace Transforms.

Prerequisites: E&C-ENGR 276.

Co-requisites: E&C-ENGR 377.

E&C-ENGR 377 Circuit Theory II Lab Credit: 1

Continuation of E&C-ENGR 277 introducing the use of additional instruments used in electrical testing and measurements. Statistical data evaluation methods. Experimental work supporting concepts developed in E&C-ENGR 376.

Prerequisites: E&C-ENGR 277.

Co-requisites: E&C-ENGR 376.

E&C-ENGR 380 Signals and Systems Credits: 3

Continuous and discrete-time signals and systems, frequency response, Fourier analysis of discrete and continuous signals and systems and use of z, Fourier, Discrete Fourier, and Fast Fourier Transforms.

Prerequisites: E&C-ENGR 341R.

Co-requisites: E&C-ENGR 381.

E&C-ENGR 381 Signals and Systems Lab Credit: 1

Computer Laboratory for E&C-ENGR 380. Various signal processing software programs (MATLAB and DSP) are used to investigate properties and applications of continuous and discrete time signals and systems.

Co-requisites: E&C-ENGR 380.

E&C-ENGR 400 Problems in Electrical and Computer Engineering Credits: 1-4

Analytic or experimental problems pertaining to electrical or computer engineering.

Prerequisites: Departmental consent.

E&C-ENGR 401 Topics In Electrical And Computer Engineering Credits: 1-4

Topics covering current and new technical developments in electrical or computer engineering.

Prerequisites: Senior standing.

E&C-ENGR 401PQ Topics in Electrical Engineering Credits: 1-4

Topics covering current and new technical developments in electrical or computer engineering.

Prerequisites: Senior standing.

E&C-ENGR 402 Senior Design I Credits: 2

First capstone design course in electrical and computer engineering. Provides and accounts for laboratory, library, research and other work needed for the development of the project. Stresses oral presentations.

Prerequisites: E&C-ENGR 330 and E&C-ENGR 420 or E&C-ENGR 466.

E&C-ENGR 403 Senior Design II Credit: 1

Second capstone design course in electrical and computer engineering. Project management, professional practice, ethical and engineering economic considerations and development of written and oral presentation skills. Provides laboratory experience in prototyping, fabrication, and troubleshooting of the design project. Stresses written and oral presentation.

Prerequisites: E&C-ENGR 402.

E&C-ENGR 412 Principles of RF/Microwave Engineering Credits: 3

General aspects of TE, TM and TEM mode propagation in waveguides; circular waveguides; optical waveguides; wave propagation on dielectric backed conductors; wire antennas; equivalence principle and aperture antennas; antenna impedance and mutual coupling in arrays; array beamforming; scattering matrix representations; impedance matching; resonators; filters, couplers and power-dividers; microstriplines and striplines; r.f. propagation in wireless and radar systems; conformal mapping techniques and applications (optional). Recommended preparation: MATLAB proficiency.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380, E&C-ENGR 381.

E&C-ENGR 414 Microwave Engineering for Wireless Systems Credits: 3

Microwave networks; s-, z-, y- and abcd matrices; signal flow graphs; circular waveguides; stripline microstrip characteristics; impedance transformers; power dividers and directional couplers; microwave filters; microwave resonators; active microwave circuits.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380, MATLAB proficiency.

E&C-ENGR 415 Microwave Engineering for Wireless Systems Lab Credit: 1

Design performance simulation of microwave filters and active microwave circuits; comparative analysis of impedance transformers; use of CAD tools in microwave circuit design.

Prerequisites: E&C-ENGR 414.

E&C-ENGR 416 Neural and Adaptive Systems Credits: 3

A hands-on introduction to the theory and applications of neurocomputing. Includes classification, function approximation, supervised and unsupervised learning, time series analysis, and adaptive filtering using different feed-forward and recurrent artificial neural networks.

Prerequisites: COMP-SCI 394R, E&C-ENGR 341R.

E&C-ENGR 418 Introduction to Radar Systems Credits: 3

Radar equation; MT, Pulsed Doppler and Tracking Radars; detection of and information from radar signals; radar antennas; transmitters and receivers; radar propagation and clutter.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380, E&C-ENGR 381.

E&C-ENGR 420 Advanced Engineering Computation Credits: 2

Programming and computational analysis principles and techniques for various problems in embedded programming, applied computation, and signal processing.

Prerequisites: E&C-ENGR 216.

E&C-ENGR 426 Microcomputer Architecture and Interfacing Credits: 3

Advanced microprocessor architecture and programming; interfacing and programming of peripherals. Parallel and serial communication, interrupts, direct memory access, coprocessors.

Prerequisites: E&C-ENGR 226.

E&C-ENGR 427 Microcomputer Laboratory Credit: 1

Laboratory for E&C-ENGR 426. Microprocessor hardware and software involving interfacing of peripherals to 8-bit and 16-bit microprocessor. Simple D/A conversion, music composition, and various programmable controllers.

Prerequisites: E&C-ENGR 227.

Co-requisites: E&C-ENGR 426.

E&C-ENGR 428R Embedded Systems Credits: 3

This course examines the hardware/software aspects associated with developing microcontroller-based computer systems. The students learn about the architecture and assembly language for popular microcontrollers and how to take advantage of a variety of input/output options that include binary ports, A/D and D/A converters, communication ports, and interfacing techniques for various applications.

Prerequisites: E&C-ENGR 426, E&C-ENGR 427.

Co-requisites: E&C-ENGR 429.

E&C-ENGR 429 Embedded Systems Laboratory Credit: 1

The laboratory introduces the students to a variety of challenging design projects using microcontroller interfacing techniques to develop real world applications, such as digital thermometer and digital pressure monitoring systems. Students must produce an individual design project.

Prerequisites: E&C-ENGR 426, E&C-ENGR 427.

Co-requisites: E&C-ENGR 428R.

E&C-ENGR 436 Power Electronics I Credits: 3

Power electronic device characteristics, important circuit and component concepts, phase controlled rectifiers, line communicated inverters and AC phase control. Includes laboratory projects.

E&C-ENGR 442 Introduction to VLSI Design Credits: 3

The goal of this course is to familiarize students with the design fundamentals and layout of Very Large Scale Integrated (VLSI) Circuits. The primary focus of this course is complementary MOSFET (CMOS) based digital integrated circuits design and analysis. However, the topics regarding transistor, interconnect, and circuit implementation are relevant to digital, analog and mixed-signal integrated circuits. This course is designed to be a comprehensive foundation for advanced micro- and nano-electronics courses. To familiarize the students with the realities of design complexities they will get exposure to commercial CAD tools in a separate lab co-requisite class. Recommended preparation: Basic Electronics.

Prerequisites: E&C-ENGR 330.

E&C-ENGR 443 Introduction to VLSI Design Laboratory Credits: 3

The goal of this course is to teach basic design concepts and implementation issues of digital integrated circuits. Various methods of designing and optimizing very large scale integrated (VLSI) circuits will be introduced in the lab projects. To familiarize students with the realities of integrated circuit design and layout, they will get exposure to industry-standard computer aided design (CAD) and simulation tools for VLSI circuits and systems. The students will be using these CAD tools in the following levels – schematic, layout, parasitic extraction, and circuit simulation.

Co-requisites: E&C-ENGR 330.

E&C-ENGR 454 Robotic Control and Intelligence Credits: 3

Introduces robotics; robot system characteristics; robot motive power systems; geometric structure of robots; sensors and feedback; control applications and algorithms; data acquisition and output actuation functions; robots and Artificial Intelligence; microprocessor applications in robotics.

Prerequisites: E&C-ENGR 226 (or E&C-ENGR 426), E&C-ENGR 358.

E&C-ENGR 455 Instrumentation and Control Credits: 3

The instrumentation and control of industrial processes and systems, introduction to Programmable Logic Controllers, and simulation modeling of various systems.

Prerequisites: E&C-ENGR 358.

E&C-ENGR 457 Fundamentals of Solar Photovoltaic Cells Credits: 3

The science and engineering of solar cell/solar photovoltaic (PV) spans several disciplines namely physics, chemistry, electronic and electrical engineering. Even though solar cell related researches are carried out in those traditional disciplines but it is not widely taught as a comprehensive course. This course highlights the fundamental science and engineering of solar PV devices, solar energy conversion as well as solar cell manufacturing issues. It covers from basic to modern solar PV devices, including typical solar cell materials, basic device physics, ideal and non-ideal models, device parameters and design, and device fabrication.

Prerequisites: E&C-ENGR 330 or E&C-ENGR 334.

E&C-ENGR 458 Automatic Control System Design Credits: 3

Techniques for feedback system design analysis: compensator design examples, state variable methods, non-linear systems, and sampled-data control systems.

Prerequisites: E&C-ENGR 380, E&C-ENGR 358.

E&C-ENGR 459 Introduction to Photovoltaic Systems Credits: 3

The course presents an updated background of world energy production and consumption, a summary of the solar spectrum, how to locate the sun, and how to optimize the capture of its energy, as well as the various components that are used in PV systems. Also studied are why certain photovoltaic (PV) designs are used in certain ways, as well as how the design process is implemented. Economic and environmental issues involved in PV design criteria are discussed along with the most recently available technology, design, and installation practices.

E&C-ENGR 460 Introduction to Power Systems Credits: 3

Magnetic circuitry in general and in machinery; DC machine theory, operation, applications, transformer circuits, synchronous machine theory, operation applications, basic principles of energy conversion, introduction to power electronics, and basic principles of power transmission and control.

Prerequisites: E&C-ENGR 376.

E&C-ENGR 463 Advanced Sustainable Energy Systems Engineering Credits: 3

Sustainable Energy Systems Engineering focuses on understanding the theory and application of emerging energy technologies, including solar, wind, biomass, oceanic, geothermal, hydropower, fuel cell (hydrogen), nuclear, and other more exotic energy sources. A premise of the course is that a sustainable energy technology must both be technically feasible and economically viable. Renewable energy sources will be highlighted with a focus on projections for a sustainable energy future. Graduate students will be assigned an additional project to work.

Prerequisites: E&C-ENGR 466.

E&C-ENGR 466 Power Systems I Credits: 3

Electric power system fundamentals, rotating machines in general, synchronous, induction and DC machines, methods of power system analysis and design, modeling of power systems components such as transmission lines, transformers and generators, and analysis of steady state operation of power system under balanced conditions.

Prerequisites: E&C-ENGR 376.

E&C-ENGR 467 Power Systems II Credits: 3

Power system matrices. Power flow analysis. Gauss-Seidel and Newton-Raphson techniques. Fast-decoupled load flow. Economic dispatch. Voltage control system. Power system control.

Prerequisites: E&C-ENGR 358, E&C-ENGR 466.

E&C-ENGR 468 Electric Power Distribution Systems Credits: 3

Operation and design of utility and industrial distribution systems including distribution system planning; load characteristics; application of distribution transformers; design of subtransmission lines, distribution substations, primary systems, secondary systems; application of capacitors; voltage regulation and reliability.

Prerequisites: E&C-ENGR 466.

E&C-ENGR 474 Introduction to Communication Systems Credits: 3

Introduction to principles and fundamentals of communication systems. Signal representation and analysis, Fourier transform and applications, probability and random variables, analog and digital modulation techniques.

Prerequisites: COMP-SCI 394R, E&C-ENGR 380.

E&C-ENGR 477 Introduction to Wireless Networking Credits: 3

Principles of the design and analysis of wireless networks. Study of medium access control, administration routing and adaptation to the complexities of the wireless environment. Investigation of networking issues in the IEEE 802.11 family of standards, IEEE 802.15 (Bluetooth), Long Term Evolution, cellular, satellite, ad hoc, and sensor networks.

Prerequisites: COMP-SCI 394R.

E&C-ENGR 480 Digital Signal Processing Credits: 3

Concepts, analytic tools, design techniques used in computer processing of signals: signal representation, sampling, discrete-time system analysis, recursive/non-recursive filters, design/implementation of digital filters.

Prerequisites: E&C-ENGR 380.

E&C-ENGR 484 Digital Image Processing Credits: 3

Fundamentals of digital image processing hardware and software, including digital image acquisition, display, compression, transforms and segmentation. Recommended preparation: Experience in a high-level programming language.

Prerequisites: E&C-ENGR 380.

E&C-ENGR 486 Pattern Recognition Credits: 3

Pattern recognition techniques of applications such as automatic recognition for speech, visual inspection systems, clinical medicine, automatic photographic recognition systems and advanced automation systems.

Prerequisites: E&C-ENGR 380.

E&C-ENGR 491 Internship Credits: 6

Students may participate in structured internships under the joint supervision of an employer and a faculty member. The student must carry out significant professional responsibilities that also have academic merit. The number of credit hours is based on the quality of the academic experience. Available for credit/nocredit only and students must be in good standing with at least 18 credit hours of EC-ENGR courses counting towards the degree. Registration by consent number only: petition forms for E&C-ENGR 491 internships are available in the office of CSEE Division and on the web.

Prerequisites: At least 18 hours of EC-ENGR courses toward the degree.

E&C-ENGR 497 Directed Readings Credits: 1-4

Readings in an area selected by an undergraduate student in consultation with a faculty member. Arrangements must be made prior to registration.

Prerequisites: Departmental consent.

E&C-ENGR 499 Undergraduate Research Credits: 1-3

Completion of a project, including a final written report, under the direction of a faculty member. A prospectus must be accepted prior to registration.

Prerequisites: Departmental consent.

E&C-ENGR 5316 Artificial Neural and Adaptive Systems Credits: 3

This graduate course is a hands-on introduction to theory and applications of neurocomputing, including: classification, function approximation, supervised and unsupervised learning, time series analysis, and adaptive filtering using different feed-forward and recurrent artificial neural networks.

Prerequisites: E&C-ENGR 341R (or COMP-SCI 5590CI).

E&C-ENGR 5318 Dynamical Systems and Complex Networks Credits: 3

An overview of classical dynamical systems, and its application in different fields such as Electrical Engineering (nonlinear circuits), Network Sciences, Epidemiology, and Ecology will be discussed. Phenomena such as chaos, bifurcation, and limit cycles will be examined. This course will also introduce and develop the mathematical theory of Complex Networks with applications to network-driven phenomena in Um Internet, search engines, social networks, the World Wide Web, information and biological networks; spectral graph theory; models of networks including random graphs, preferential attachment models, and the small-world models.

E&C-ENGR 5501AP Special Topics In Electrical Engineering Credits: 1-4**E&C-ENGR 5501NN Special Topics In Electrical Engineering Credits: 1-4****E&C-ENGR 5512 Microwave Remote Sensing Credits: 3**

Basic principles of remote sensing including scattering, absorption, transmission, and reflection of microwave energy. Basic radiative transfer theory. Microwave remote sensing systems including altimeters, scatterometers, radiometers, synthetic-aperture systems. Principle applications of remote sensing systems including imaging, atmospheric sounding, oceanographic monitoring, ice-sheet dynamics, etc.

Prerequisites: E&C-ENGR 414.

E&C-ENGR 5513 Advanced Principles of RF/Microwave Engineering Credits: 3

General aspects of TE, TM and TEM mode propagation in waveguides; circular waveguides; optical waveguides; wave propagation on dielectric backed conductors; wire antennas equivalence principle and aperture antennas; antenna impedance and mutual coupling in arrays; array beamforming; scattering matrix representations; impedance matching; resonators; filters, couplers and power-dividers; microstriplines and striplines; r.f. propagation in wireless and radar systems; conformal mapping techniques ad applications (optional). Recommended preparation: Knowledge in Engineering Computation, Technical Writing Skills.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380, E&C-ENGR 381.

E&C-ENGR 5516 Computer Networks Credits: 3

Concepts and goals of computer networking, structure of computer networks, OSI model and layers, network control, analysis, design and management, data communication techniques including fiber optics, WAN, MAN and LAN architecture and protocols, internetworking, case studies and hand-on studying the performance by analytic modeling and computer simulation.

E&C-ENGR 5518 Advanced Radar Systems & Techniques Credits: 3

Radar equation; MTI, Pulsed Doppler and Tracking Radars; Detection of and information from Radar Signals; Radar Antennas, Transmitters and Receivers; Radar Propagation and clutter.

Prerequisites: E&C-ENGR 302, E&C-ENGR 380.

E&C-ENGR 5528 Advanced Embedded Systems Credits: 3

This course examines the hardware/software aspects associated with developing microcontroller-based computer systems. The students learn about the architecture and assembly language for popular microcontrollers and how to take advantage of a variety of input/output options that include binary ports, A/D and D/A converters, communication ports, and interfacing techniques for various applications. Graduate students are required to do Embedded Systems lab experiments.

Prerequisites: E&C-ENGR 426, E&C-ENGR 427.

E&C-ENGR 5530 Digital Electronics Credits: 3

Electronic hardware aspects of digital systems. Includes state-of-the-art information on integrated-circuit logic devices and their applications.

E&C-ENGR 5532 Biomedical Instrumentation Credits: 3

Biomedical objectives, physical and engineering principles; optimal equipment design and actual performance of biomedical instrumentation; considers practical instrumentation problem solutions and unsolved problems.

Prerequisites: E&C-ENGR 330.

E&C-ENGR 5533 Analog Integrated Circuit Design Credits: 3

This course will cover the analysis and design of analog and mixed signal integrated circuits, with an emphasis on design principles for realizing state-of-the-art analog circuits. The course will provide the critical concepts by giving physical and intuitive explanations in addition to the quantitative analysis of important analog building block circuits. First-order hand calculations and extensive computer simulations are utilized for performance evaluation and circuit design. Students will be required to complete a final project which will involve the design at the layout level of an analog circuit. Successful designs will be fabricated through the MOSIS Educational Service.

Prerequisites: E&C-ENGR 276, E&C-ENGR 330.

E&C-ENGR 5534 Computer Arithmetic Credits: 3

Computer arithmetic is a sub field of digital computer organization. It deals with the hardware realization of arithmetic functions to support various computer architectures as well as with arithmetic algorithms for firmware/software implementation. A major thrust of digital computer arithmetic is the design of hardware algorithms and circuits to enhance the speed of various numeric operations. Verilog HDL is used as tool to simulate the algorithms and circuits.

Prerequisites: E&C-ENGR 226, E&C-ENGR 5535.

E&C-ENGR 5535 Hdl-Based Digital Systems Design Credits: 3

This course covers hardware design techniques using a Hardware Description Language (HDL). It also discusses several digital system design methodologies, including structural specifications of hardware, HDL-based simulations and testbenches. Courses focus on the synthesis methodologies for use-defined primitives (UPD), data types, operators, Verilog constructs multiplexed datapaths, buses, bus drivers, FSMs, assignments, case, functions, tasks, named events and rapid prototyping techniques with Verlog HDL, ASICs and FPGAs.

Prerequisites: E&C-ENGR 226.

E&C-ENGR 5536 Power Electronics II Credits: 3

Circuit concepts and analysis techniques for transistor switching regulators, thyristor choppers, transistor inverters, self-commutated thyristor inverters and cycloconverters.

Prerequisites: E&C-ENGR 436.

E&C-ENGR 5537 Mixed-Signal Integrated Circuit Design Credits: 3

Modern integrated circuit design often requires the integration of analog and digital circuits on the same chip. This integration provides numerous advantages over purely analog or digital approaches. This course will cover the analysis and design of mixed-signal integrated circuits and will address the challenges of having both analog and digital circuits on the same substrate. Important mixed-signal circuits such as data converters and filters will be studied in detail.

Prerequisites: E&C-ENGR 5533.

E&C-ENGR 5542 Introduction to VLSI Design Credits: 3

With a focus on CMOS Digital technology this course covers the basic concepts of integrated circuits, various methods of designing VLSI circuits, and techniques to analyze performance metrics (speed, area, power and noise). Clocking, interconnect and scaling issues of integrated circuit will also be discussed. It will cover device, interconnect and circuit level implementation issues of both logic and memory circuits. To familiarize students with the realities of design complexities and layout environment they will get exposure to VLSI CAD tools in the following levels - schematic, layout, extraction and circuit simulation through the labs and projects.

E&C-ENGR 5556 Advanced Instrumentation and Control Credits: 3

The instrumentation and control of industrial processes and systems. Introduction to Programmable Logic Controllers. Simulation modeling of various systems.

Prerequisites: E&C-ENGR 358 (or MEC-ENGR 415).

E&C-ENGR 5557 Fundamentals of Solar Photovoltaic Cells Credits: 3

The science and engineering of solar cell/solar photovoltaic (PV) spans several disciplines namely physics, chemistry, electronic and electrical engineering. Even though solar cell related researches are carried out in those traditional disciplines but it is not widely taught as a comprehensive course. This course highlights the fundamental science and engineering of solar PV devices, solar energy conversion as well as solar cell manufacturing issues. It covers from basic to modern solar PV devices, including typical solar cell materials, basic device physics, ideal and non-ideal models, device parameters and design, and device fabrication.

E&C-ENGR 5558 Automatic Control System Design Credits: 3

Techniques for feedback system design and analysis; computational aids, compensator design and examples, state variable methods, non-linear systems, ad sampled-data control systems.

Prerequisites: E&C-ENGR 226, E&C-ENGR 358.

E&C-ENGR 5559 Introduction to Photovoltaic Systems Credits: 3

The course presents an updated background of world energy production and consumption, a summary of the solar spectrum, how to locate the sun and how to optimize the capture of its energy, as well as the various components that are used in PV systems. Some section of the course has also been added to explain why certain photovoltaic (PV) designs are done in certain ways, as well as how the design process is implemented. Economic and environmental issues as PV design criteria are discussed along with the most recently available technology and design and installation practice.

E&C-ENGR 5560 Electric Power Distribution Systems Credits: 3

Operation and design of utility and industrial distribution systems including distribution system planning; load characteristics; application of distribution transformers; design of subtransmission lines, distribution substations, primary systems, secondary systems, Smart Grid; application of capacitors; voltage regulation and reliability.

Prerequisites: E&C-ENGR 466.

E&C-ENGR 5563 Sustainable Energy System Engineering Credits: 3

This course focuses on understanding the theory and application of emerging energy technologies, including solar, wind, biomass, oceanic, geothermal, hydropower, fuel cell (hydrogen), nuclear, and other more exotic energy sources. A premise of the course is that a sustainable energy technology must both be technically feasible and economically viable. We consequently investigate the above energy technologies and the technological promise, progress, and application of each energy source, as well as its economic opportunities and challenges. Renewable energy sources will be highlighted with a focus on projections for a sustainable energy future.

E&C-ENGR 5565 Auxiliary Electric System Design Credits: 3

This course provides design, operation, contingency analysis and black start requirements of an Auxiliary Electric System (AES) for a coal fired power plant using industry standards (IEEE-666, NEMA MG-1, ANSI C57 and C37 as well as relevant IEC).

Prerequisites: E&C-ENGR 466 or Department Approval.

E&C-ENGR 5567 Power Systems II Credits: 3

This course covers power system matrices, power flow analysis, Gauss-Seidel and Newton-Raphson techniques, fast-decoupled load flow, economic dispatch, transient stability and operation, and power system control.

Prerequisites: E&C-ENGR 358, E&C-ENGR 466.

E&C-ENGR 5568 Economics of Power Systems Credits: 3

Transmission loss formula coefficients, incremental costs and losses, economic scheduling of generation, and applications.

Prerequisites: E&C-ENGR 466, E&C-ENGR 467.

E&C-ENGR 5569 Reliability of Electric Power Systems Credits: 3

Development and use of mathematical models for the calculation and estimation of various measures of reliability in electric power systems, Reliability restoration times and cost assessment of generation, transmission, distribution and composite systems are analyzed.

Prerequisites: COMP-SCI 394R.

E&C-ENGR 5570 Principles of Digital Communication Systems Credits: 3

Principles of random processes, information sources and source coding, modulation and demodulation, block and convolutional error control coding, and equalization.

Prerequisites: COMP-SCI 394R, E&C-ENGR 380.

E&C-ENGR 5572 Antennas & Propagation For Wireless Systems Credits: 3

This course introduces the mathematical aspects of the basic antenna parameters such as vector potential, gain, directivity, impedance, radiation patterns, and develops a comprehensive theory of antenna arrays including the effects of mutual coupling. In-depth modeling studies for wire, aperture and microstrip antennas, is presented; diffraction of plane electromagnetic (TE and TM) waves by perfectly conducting half-planes and wedges- applications to site-specific propagation path modeling in wireless systems.

Prerequisites: E&C-ENGR 341R, E&C-ENGR 412.

E&C-ENGR 5573 Advanced Electric Power Lab Credits: 3

Advanced applications of concepts experienced in Generating Plants, Substations and Power Plants of fundamentals and concepts of power systems to practical power plan and industrial applications. Operational limitations of all components of power system equipment. Single and Three Phase Circuits, Generators/Alternators, Transformers, Motors, and specialty items (Coronal mass Ejection, Ferroresonance, System Protection).

Prerequisites: E&C-ENGR 466 and Consent of the Department.

E&C-ENGR 5577 Wireless Communications Credits: 3

Principles of the design and analysis of wireless communications, Study of propagation mechanisms, statistical characterization of wireless channels, diversity and MIMO, spread spectrum and CDMA, Orthogonal Frequency Division Multiplexing (OFDM).

Prerequisites: COMP-SCI 394R.

E&C-ENGR 5578 Multimedia Communication Credits: 3

Visual communication is dominating the Internet and mobile networks. This class covers topics on video signal processing, modeling, compression, and communication. Includes information theory foundations on source coding, lossless coding schemes, video coding framework, as well as the current status of video coding standards and multimedia communication systems.

E&C-ENGR 5579 Digital Signal Processing in Telecommunications Credits: 3

Applications of digital signal processing in telecommunications systems; oversampling and quantization, Delta-Sigma modulation, linear predictive speech coding, adaptive filtering, echo canceller, adaptive receivers and equalizers for wireless communication, digital cellular, CDMA.

Prerequisites: E&C-ENGR 474, E&C-ENGR 480.

E&C-ENGR 5580 Digital Signal Processing Credits: 3

Analysis and representation of discrete-time signals and systems including a discussion of discrete-time convolution, difference equations, the z-transform and the discrete Fourier transform. Similarities with and distinctions between discrete-time and continuous-time signals and systems. Digital network structures for implementation of both recursive (infinite impulse response) and nonrecursive (finite impulse response) digital filters. FFT (Fast Fourier Transform) algorithm for computation of the discrete Fourier transform. Graduate students will be expected to successfully complete a number of additional projects as compared with E&C-ENGR 480.

Prerequisites: E&C-ENGR 380.

E&C-ENGR 5582 Computer Vision Credits: 3

The image is an essential form of information representation and communication in modern society. This course focuses on topics of computer vision, teaching computer how to understand images. Topics include image formation, color and texture features, key points detection, aggregation, subspace methods in image modeling, and deep learning image classification, with many applications in photography, media and entertainment, education, defense and medicine.

E&C-ENGR 5584 Advanced Digital Image Processing Credits: 3

Fundamentals of applied grayscale digital image processing, image sensing and acquisition and quantization, basic set and discrete convolution operations with images, intensity transformations and spatial domain filtering via convolutional masks (smoothing, Laplacian and gradient masks), frequency domain filtering via the two-dimensional discrete transform, two-dimensional sampling and Nyquist theory, frequency domain filtering using lowpass/highpass, rectangular, round, Gaussian and Butterworth filters, image restoration using noise filtering via mean order-statistic and adaptive filters, bandpass, band reject and notch filters, Weiner filters, image deblurring filters, computed aided tomography (i.e. CAT scans), morphological image processing and image segmentation.

Prerequisites: E&C-ENGR 380 and prior experience with MATLAB.

E&C-ENGR 5586 Pattern Recognition Credits: 3

Decision functions, distance measures, minimum distance classifiers, hard clustering methods, fuzzy clustering methods, statistical pattern recognition methods, Bayesian classifiers, error probabilities, estimation of density functions, perceptrons, least-mean-square algorithms, feature selection, dimensionality reduction and syntactic pattern recognition.

Prerequisites: COMP-SCI 394R (or STAT 436), a course in high-level programming language.

E&C-ENGR 5588 Communication Theory I Credits: 3

Generalized communication systems, signal processing, signals as random processes, optimum receivers.

Prerequisites: COMP-SCI 394R, a statistics course.

E&C-ENGR 5590 Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590AC Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590AD Special Topics in Electrical and Computer Engineering Credits: 1-4
Special Topics in Electrical and Computer Engineering

E&C-ENGR 5590AE Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590AN Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590AR Special Topics in Electrical and Computer Engineering Credits: 1-4
Special Topics in Electrical and Computer Engineering

E&C-ENGR 5590PD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PG Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PL Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PL2 Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PL3 Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PQ Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PR Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PS Special Topics in Electrical and Computer Engineering Credits: 1-4

Special Topics in Electrical and Computer Engineering.

E&C-ENGR 5590PV Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590RD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590RE Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590RF Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590SC Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590SD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590SI Special Topics In Electrical And Computer Engineering Credits: 1-4

Special Topics In Electrical And Computer Engineering

E&C-ENGR 5590SL Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590SP Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590T Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590TC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590VL Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590WC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590WW Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590WX Special Topics Credits: 1-3

E&C-ENGR 5590XX Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5597 Directed Readings Credits: 1-3

Readings in an electrical and computer engineering areas selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5598 Research Seminar Credits: 1-3

Graduate research and/or readings in an electrical and computer engineering area selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5599 Research Credits: 1-6

Independent investigation in field of electrical engineering to be presented in the form of a thesis.

E&C-ENGR 5600 Problems Credits: 2-5

Supervised investigation in electrical engineering to be presented in form of report.

E&C-ENGR 5606 Electromagnetic Scattering and Antenna Theory Credits: 3

Dyadic analysis; integral equations and Green's functions; field theorems-uniqueness, induction equivalence, reciprocity; image and Babinet's Principles; applications to antennas; method of stationary phase and applications to aperture antennas; array antennas and mutual coupling analysis; method of moments; asymptotic techniques and applications to EM scattering from wedges, cylinders, and spheres; RF propagation path loss modeling and conformal antennas.

Prerequisites: E&C-ENGR 412.

E&C-ENGR 5616 Parallel and Distributed Processing Credits: 3

Covers the fundamental issues involved in designing and writing programs for simultaneous execution. Semaphores and monitor constructs are covered to provide a basis for critical section programming. Expansion of these concepts provide a basis for the analysis and design of control systems for multiprocessor devices and computer networks.

Prerequisites: A systems programming course.

E&C-ENGR 5617 Neural Network Based Computing System Credits: 3

The course will consider computing systems based on neural networks and learning models, along with implementations and applications of such systems.

E&C-ENGR 5618 Artificial Intelligence Credits: 3

Concepts, theories, and models pertaining to neural nets, pattern recognition, learning systems, and programmed problem solving.

E&C-ENGR 5619 Theory of Automata Credits: 3

Sequential machines: Turing machines; deterministic and stochastic automata; applications of automata.

E&C-ENGR 5624 Digital Software Systems Design Credits: 3

Characteristics and parameters of various software subsystem including assemblers, compilers, utility programs, special programming packages, interpreters, and operating systems; and principles of organization into efficient systems.

E&C-ENGR 5633 Nanoelectronics II: Nanoscale Integration & Manufacturing Credits: 3

This course is continuation of Nanoscale Devices and circuits course offered in Fall 2016. In this course students will learn theory about semiconductor processing, and their applications. Limitations of existing process techniques will be discussed, and advances in both physical implementation and circuit/integration techniques will be introduced. Some example of topics that will be covered are: optical lithography, EUV lithography, nanoimprint, implantation, manufacturing aware circuit design, etc. The laboratory work will include modeling and simulation with state-of-the-art semiconductor processing and device simulation tools such as: SRIM, Sentaurus TCAD Process, Sentaurus TCAD Device, etc. Research intensive course.

Co-requisites: E&C-ENGR 5542.

E&C-ENGR 5635 Vlsi Systems Design Credits: 3

Course discuss design of the MOSFETs (nFETs and pFETs), and high speed CMOS cascades in VLSI. It also covers the design of various arithmetic circuits, different fast adders, memories, and chip-level physical designs requirements in the VLSI subsystems are also the focus of this course. It uses Verilog HDL/VHDL as a tool to design VLSI systems.

Prerequisites: E&C-ENGR 5535 (or knowledge of VHDL).

E&C-ENGR 5642 Advanced VLSI Design Credits: 3

Course focuses on the issues and challenges of high performance VLSI circuits and systems. The course will be based on papers published in accredited journals and conference proceedings. The goals of this course: (1) Familiarize students with the current and emerging trends, issues and design alternatives of deep submicron and nanoscale IC technologies; (2) Help students acquire the knowledge and skills required for graduate study and research, and professional careers in IC industry; and (3) Teach students how to collect and survey technical materials, develop new research ideas, write research papers, and present technical contents in front of an audience.

E&C-ENGR 5644 Liapunov and Related Nonlinear Methods in Automatic Control Credits: 3

A study of nonlinear methods in automatic control including phase plane analysis, describing function techniques, basic definitions and theorems of Liapunov, methods of generating Liapunov functions, applications of Liapunov's methods, and Popov's methods.

E&C-ENGR 5645 Optimal Control Theory Credits: 3

Analysis and design of dynamic systems using optimal control theory parameter optimization, dynamic optimization, computational methods, differential games.

E&C-ENGR 5646 Stochastic Optimal Estimation and Control Credits: 3

Surveys random process theory; stochastic control and optimization; estimation and filtering based on Kalman-Bucy techniques; stochastic stability; adaptive and learning control systems.

E&C-ENGR 5647 Emerging Interdisciplinary Research in Nanotechnology Credits: 3

This cross-disciplinary course will focus on nanoscale materials, devices and circuit technologies, and its applications in the next generation computing, communication, electronics, biomedical, energy and environment sectors. The course will familiarize students with recent technological progresses and potential socio-economic impacts in the broader fields of nanotechnology. This will be a high level graduate course for students from diverse academic backgrounds. Instructor's prior approval is recommended.

E&C-ENGR 5660 Power-Systems Stability Credits: 3

Performance of synchronous machines under transient conditions, power system stability, system fault computations using symmetrical components; computer solutions of power system problems.

E&C-ENGR 5661 Solid State Energy Conversion Credits: 3

Solid state direct energy conversion; and design of thermoelectric generators and heat pumps.

E&C-ENGR 5662 Power Electronic Drives Credits: 3

Advanced study of dc and ac motor drives controlled by power electronic methods, including phase controlled rectifier de chopper, cycloconverter, variable frequency inverters.

Prerequisites: E&C-ENGR 5536.

E&C-ENGR 5664 Lightning and Switching Surges in Power Systems Credits: 3

Overvoltage, switching surge and lightning effects of a power system. Use of grounding and lightning arresters. Effects of surges off and on machines.

Prerequisites: E&C-ENGR 466 (or equivalent), E&C-ENGR 467 (or equivalent).

E&C-ENGR 5668 Advanced Computer Methods in Power System Analysis Credits: 3

Power system matrices. Sparse matrix methods. Advanced load flow analysis techniques and concepts. Contingency analysis. State estimation.

Prerequisites: E&C-ENGR 466, strong background in FORTRAN or C.

E&C-ENGR 5670 Direct Current Power Systems Credits: 3

Characteristic and performance analysis of DC transmission lines and associated conversion systems.

E&C-ENGR 5672 Power Systems Relaying Credits: 3

Theory of relaying systems for power system protection, improvement of power system stability. Relay coordination; performance of relays during transient swings and out-of-step conditions.

Prerequisites: E&C-ENGR 466.

E&C-ENGR 5674 Machine Intelligence Credits: 3

Formal languages in relation to natural language processing; formal languages, graphs, and image processing; formal logic and automated theorem proving; natural language processing; aspects of problem solving and heuristic programming.

E&C-ENGR 5675 Introduction to the Modeling and Management of Uncertainty Credits: 3

Theoretical and practical issues in the modeling and management of uncertainty. Topics include probabilistic uncertainty, belief theory and fuzzy set theory. Applications to computer vision, pattern recognition and expert systems.

E&C-ENGR 5676 Advanced Electric Circuit Analysis Credits: 3

Specialized study of mathematical analysis as applied to solutions of circuit networks with fixed and variable parameters.

E&C-ENGR 5677 Network Synthesis Credits: 3

Surveys linear active and nonreciprocal circuit elements, reliability conditions, methods for synthesizing active networks, and practical applications.

Prerequisites: E&C-ENGR 5676.

E&C-ENGR 5680 Digital and Sample-Data Systems Credits: 3

Introduces sampling and quantization, design of digital and sample-data systems, digital filters, adaptive sampling and quantization.

Prerequisites: E&C-ENGR 480.

E&C-ENGR 5681 Applications Of Transforms Credits: 3

Applications of Laplace and other transform methods of solution of circuit and field problems.

E&C-ENGR 5682 Coding Theory II Credits: 3

Further study of error-correcting codes; ring and cyclic codes, linear switching circuits, burst error codes, codes for arithmetic units, etc.

Prerequisites: E&C-ENGR 5579.

E&C-ENGR 5688 Communication Theory II Credits: 3

Probability theory of analog and digital communication in the presence of random process noise. Encoding systems, detection systems, optimum receivers.

E&C-ENGR 5690 Advanced Topics In Electrical And Computer Engineering Credits: 1-4**E&C-ENGR 5690EM Advanced Topics In Electrical And Computer Engineering Credits: 1-4****E&C-ENGR 5690ET Advanced Topics In Electrical And Computer Engineering Credits: 1-4****E&C-ENGR 5690ND Special Topics in Electrical and Computer Engineering Credits: 1-3****E&C-ENGR 5697 Advanced Directed Readings Credits: 1-5**

Advanced readings in an electrical and computer engineering area selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5698 Advanced Research Seminar Credits: 1-5

Advanced Graduate research and/or readings in an electrical and computer engineering area selected by the doctoral student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5699 Dissertation Research Credits: 1-9

Doctoral Dissertation

Information Technology Courses

INFO-TEC 222 Multimedia Production and Concepts Credits: 3

Multimedia production and concepts will give an overview of multimedia technology and communication theory needed to deliver information and to produce interactive presentations for the web, portable media, and for in-person presentations and demos. The course offers exposure to software, hardware, other multimedia technologies, authoring and copyright matters.

Prerequisites: COMP-SCI 101.

INFO-TEC 321 Introduction to Computing Resources Administration Credits: 3

This introductory course is designed to give an overview of a wide variety of technical, interpersonal, documentation, and managerial skills needed to become an effective systems administrator.

Prerequisites: COMP-SCI 201R.

INFO-TEC 426 Practical Network Security Credits: 3

This course examines common threats to computer network security and discusses various techniques to mitigate those threats. The course material is supplemented with lab assignments that implement network security tools and use them to build a small secure network. It discusses information hiding, traffic monitoring and control, intrusion detection, and security policy. Note: NOT FOR GRADUATE CREDIT.

Prerequisites: COMP-SCI 420.

INFO-TEC 429 Introduction to Cybersecurity Credits: 3

This course introduces students to cybersecurity and its domains. The course will cover topics such as cryptography, software development security, access control, security architecture, security operations, disaster recovery, and physical and environmental security.

Prerequisites: INFO-TEC 321.

INFO-TEC 490 Special Topics Credits: 1-3

Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

Prerequisites: Departmental consent.

INFO-TEC 490DC Introduction to Data Compression Credits: 3

This course provides an introduction to information theory, first-order entropy; lossless methods such as Huffman coding, arithmetic coding, and dictionary methods; and lossy and transform coding including image, audio, and video formats. The emphasis in this course is on algorithmic understanding and applications rather than derivation from first principles. Not for graduate credit.

Prerequisites: MATH 210, COMP-SCI 303, or equivalent.

INFO-TEC 491 Internship Credits: 1-6

Students may participate in structured internships under the joint supervision of an employer and a faculty member. The student must carry out significant professional responsibilities that also have academic merit. The number of credit hours is based on the quality of the academic experience. Available for credit/no credit only, and students must be in good standing with a least 18 credit hours of CS/IT counting towards the degree.

Prerequisites: Departmental consent.

Bachelor of Arts: Computer Science

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Be able to apply knowledge of discrete structures and computer organization appropriate to the discipline.
- Be able to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- Be able to communicate effectively with a range of audiences.

Program Description

Please note that accreditation for the Bachelor of Arts in Computer Science (BACS), has not been requested.

This degree program serves to give the student excellent preparation for careers in computer science or for fields where CS is an important ingredient. Students receive a strong technical background in computer science, which is coupled with a broad, general education. The BA degree prepares for a career path where the student contributes to advancing infrastructures tailored for specific areas, often outside the core areas of computer science. Furthermore, a Bachelor of Science in Computer Science as well as a minor in Computer Science are available.

Please contact the SS&C Student Services Center for more information at (816)235-2399 or sce@umkc.edu.

Educational Objectives

The undergraduate degrees in CS are designed so that graduates will attain employment and advance their careers in industry, government and academia. BA students will find employment in fields where computing is an important ingredient. Some graduates will achieve appropriate certifications and/or pursue advanced study in computer science or other graduate fields. Graduates will be engaged in lifelong learning and thereby advance in their careers.

Career Implications

Computers and processors of all sizes and descriptions appear in every area of the public and private sectors. Consequently, employment prospects for computer science degree holders remain steady. Current projections have the demand for computer science graduates exceeding the supply for many years to come. The range of opportunities open to the new graduate in computer science is impressive.

Computer science graduates are employed as members of technical staff, software engineers, programming or systems analysts, and scientific or application programmers by some of the nation's largest companies. These companies include internet based commerce and software based hi-tech industries, insurance, banks and financial institutions, computer and electronics manufacturers, the communications industry, the biomedical industry, the defense industry, and engineering firms.

Admission Requirements

High school students planning to apply to the School of Computing & Engineering are strongly encouraged to take a college preparatory program that emphasizes mathematics, science and communication skills.

First-time college student applicants to the undergraduate program in computer science will be admitted if they obtain:

1. An ACT mathematics score of at least 25 and
2. An ACT composite score of at least 24

First-time college student applicants who do not meet the above criteria but do meet UMKC general admission requirements will have their applications reviewed by a faculty committee for admission. Applicants who are not admitted to SCE but do meet UMKC general admission requirements may be admitted to University College.

Students without the prerequisite preparation must take the needed coursework before enrolling in courses required for the bachelor's degree. Students seeking re-admission must have been in good academic standing when last enrolled. Otherwise, re-admission requires a formal review by the undergraduate program committee.

Transfer applicants must have at least 24 credits of transferable college credit, an overall 2.0 GPA on a 4.0 scale in all coursework, which includes repeated coursework, attempted at previous institutions. Transfer applicants without a 2.0 or higher college GPA must submit a petition for admission.

Program Requirements

Curriculum requirements for both of the Computer Science degrees are categorized into several areas totaling at least 120 hours of study.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3

COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

A minimum grade of C is required in all Computer Science, Math, and Stat coursework.

Code	Title	Credits
Mathematics (satisfies Math Pathway)		
MATH 120 (Pre-Calculus; Typically not required due to ACT Admission Requirement)		
MATH 210	Calculus I ¹	4
MATH 220	Calculus II	4
STAT 235	Elementary Statistics ¹	3
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
Life and Physical Sciences		7-10
One Life Science course		
One Physical Science course		
With a minimum of one lab ²		
Synthesis Course Requirements		
COMP-SCI 449	Foundations of Software Engineering	3
COMP-SCI 451R	Software Engineering Capstone	3

Computer Science Requirements

COMP-SCI 101 & 101L	Problem Solving and Programming I and Problem Solving & Programming I Lab	4
COMP-SCI 191	Discrete Structures I	3
COMP-SCI 201R & COMP-SCI 201L	Problem Solving and Programming II and Problem Solving and Programming II - Lab	4
COMP-SCI 281R	Introduction to Computer Architecture and Organization	3
COMP-SCI 291	Discrete Structures II	3
COMP-SCI 303	Data Structures	3
COMP-SCI 304WI	Ethics and Professionalism	3
COMP-SCI 431	Introduction to Operating Systems	3
COMP-SCI Electives (300 or 400 level)		9
Any 300- or 400-level elective not completed above		
COMP-SCI 423	Client/Server Programming and Applications	
COMP-SCI 424	Software Methods and Tools	
COMP-SCI 457	Software Architecture: Requirements & Design	
COMP-SCI 458	Software Testing and Verification	
COMP-SCI Advanced Electives (400 level) ³		3
Any 400-level elective not completed above.		
COMP-SCI 491	Internship (by petition)	
COMP-SCI 497	Directed Readings (by petition)	
COMP-SCI 498	Research Seminar (by petition)	
COMP-SCI 499	Undergraduate Research (by petition)	

Foreign Language Requirement

Students must take a two course sequence of one foreign language, or have taken a two year sequence at high school. If foreign language requirement is waived due to high school credit, then students need to add up to ten (10) credit hours of General Electives to total 120 credit hours total for the BA COMP-SCI degree 6-10

Total Credits 68-75

¹ ALEKS Math Placement Assessment may be required.

² A minimum of one lab in either from one of the following areas: Biology, Chemistry, Environmental Science, Geosciences, or Physics.

Code	Title	Credits
General Electives		15-22

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
MATH 210 ^{CC}		4 MATH 220 ^{CC}	4
COMP-SCI 101 & 101L ^{CC}		4 COMP-SCI 191 ^{CC}	3
GEFSE 101		3 COMP-SCI 201R & COMP-SCI 201L	4
ENGLISH 110		3 ENGLISH 225	3
		14	14

Second Year

Fall Semester	Credits	Spring Semester	Credits
STAT 235		3 COMP-SCI 281R	3
COMP-SCI 291		3 Life Science Elective (with Lab)	5
COMP-SCI 303		3 Foreign Language (120 or higher)	3
Foreign Language (110 or higher)		3 COMM-ST 110 or 277	3
GECRT-SS 101		3 GECRT-AH 101	3
		15	17

Third Year

Fall Semester	Credits	Spring Semester	Credits
COMP-SCI 431		3 COMP-SCI 449	3
GECRT-SC 101		3 COMP-SCI 304WI	3
GECDV 201		3 Physical Science Elective (with Lab if not yet completed)	3
HISTORY 101, 102, or POL-SCI 210		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
COMP-SCI 451R		3 COMP-SCI 3XX/4XX Major Elective	3
COMP-SCI 3XX/4XX Major Elective		3 COMP-SCI 4XX Major Elective	3
COMP-SCI 3XX/4XX Major Elective		3 3XX/4XX General Elective	3
GECUE 201		3 3XX/4XX General Elective	3
3XX/4XX General Elective		3 General Elective	3
		15	15

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

UMKC School of Computing & Engineering
SS&C Student Services Center
336 Flarsheim Hall
5110 Rockhill Road
Kansas City MO 64110
816-235-2399
sce@umkc.edu
<http://sce.umkc.edu>

Bachelor of Information Technology

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

ABET Program Educational Objectives

Within a few years of graduation, graduates of the Information Technology program are expected to:

1. Demonstrate peer-recognized expertise, and articulate that expertise for use in contemporary problem solving in the analysis, design and evaluation of computing and technology practices, as productive members of diverse professional teams.
2. Successfully apply technical and business knowledge in a variety of contexts to innovate and create transformational change for metropolitan, regional, and global advancement.
3. Demonstrate leadership in ethical and responsible development and deployment of secure technology to solve real-world problems and minimize risk in diverse communities, environments, and user groups.
4. Demonstrate lifelong learning and professional growth via advanced study, career advancement, or social contributions.

ABET Student Outcomes

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Identify and analyze user needs and to take them into account in the selection, creation, integration, evaluation, and administration of computing-based systems.

Student Learning Outcomes

Students graduating from this program will:

- Have the ability to apply knowledge of computing and mathematics appropriate to the discipline;
- Have the ability to analyze a problem, and identify and define the computing requirements appropriate to its solution;
- Have the ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs;
- Have the ability to function effectively on teams to accomplish a common goal;
- Have the understanding of professional, ethical, legal, security and social issues and responsibilities;
- Have the ability to communicate effectively with a range of audiences;
- Have the ability to analyze the local and global impact of computing on individuals, organizations, and society;
- Have recognition of the need for and an ability to engage in continuing professional development;
- Have the ability to use current techniques, skills, and tools necessary for computing practice;
- Have the ability to use and apply current technical concepts and practices in the core information technologies;
- Have the ability to identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems;
- Have the ability to effectively integrate IT-based solutions into the user environment;
- Have the understanding of best practices and standards and their application;
- Have the ability to assist in the creation of an effective project plan.

Program Description

The Bachelor of Information Technology is accredited by the Computing Accreditation Commission of ABET (<http://www.abet.org> (<http://www.abet.org/>)).

The use of computers in commerce and industry keeps the college educated IT professional at the forefront of occupational demand. The Bachelor of Information Technology (B.I.T.) program prepares for a career path where the student contributes to the continued deployment of technology infrastructure (operating systems, browsers, applications, software, networking, etc.). It blends both CS, IT, and Business coursework and requires an internship for the completion of the degree. Please contact the SS&C Student Services Center for more information at (816)235-2399 or sce@umkc.edu.

Educational Objectives

The Bachelor of Information Technology degree is designed so that graduates will attain employment in an IT related field. Some graduates will achieve appropriate certifications and/or will pursue advanced study in business, IT or other fields. Graduates will be engaged in lifelong learning and thereby advance in their careers.

Career Implications

There remains a large and growing number of unfulfilled IT positions both nationwide and within the Kansas City area. B.I.T. graduates are typically employed as software developers, network specialists, web developers, information system operators, programmer analysts, digital media specialists and database administrators. The need of the future is for students with an analytic and problem solving mindset who are able to adapt quickly to an ever-changing environment.

Admission Requirements

High school students planning to apply to the School of Computing & Engineering are strongly encouraged to take a college preparatory program that emphasizes mathematics, science and communication skills.

First-time college student applicants to the undergraduate program in information technology will be admitted if they obtain:

1. An ACT mathematics score of at least 25 and
2. An ACT composite score of at least 24

First-time college student applicants who do not meet the above criteria but do meet UMKC general admission requirements will have their applications reviewed by a committee for admission. Applicants who are not admitted to SCE but do meet UMKC general admission requirements may be admitted to University College.

Students without the prerequisite preparation must take the needed coursework before enrolling in courses required for the bachelor's degree. Students seeking re-admission must have been in good academic standing when last enrolled. Otherwise, re-admission requires a formal review by the undergraduate program committee.

Transfer applicants must have at least 24 credits of transferable college credit, an overall 2.0 GPA on a 4.0 scale in all coursework, which includes repeated coursework, attempted at previous institutions. Transfer applicants without a 2.0 or higher college GPA must submit a petition for admission.

Program Requirements

The requirements for the BIT degree are categorized into several areas totaling at least 124 hours of study.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (Satisfied in program requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC; Satisfied in program requirements below)		
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE; Satisfied in program requirements below)		
Total Credits		21

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.

- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

A minimum grade of C is required in all courses offered in the School of Computing & Engineering, as well as in Math and Stat coursework.

Code	Title	Credits
Mathematics (satisfies Math Pathway)		
MATH 120 (Precalculus; Typically not required due to ACT Admission Requirement)		
MATH 210	Calculus I ¹	4
STAT 235	Elementary Statistics ¹	3
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
Life and Physical Sciences		7-10
One Life Science		
One Physical Science		
To include at least one laboratory component		
General Education Synthesis		
COMP-SCI 449	Foundations of Software Engineering	3
COMP-SCI 451R	Software Engineering Capstone	3
Anatomy of Business		
ACCTNG 210	Introduction To Financial Accounting	3
ECON 202	Introduction To Economics II	3
MKT 324	Principles of Marketing	3
DSOM 340	Supply Chain and Operations Management	3
or MGT 332	Principles of Organizational Behavior	
Select two of the following:		6
ACCTNG 211	Introduction To Managerial Accounting	
ENT 315	Entrepreneurial Mindset and Opportunity Recognition	
FIN 325	Financial Management	
MGT 306	Legal, Ethical And Regulatory Environment Of Business	
MGT 332	Principles of Organizational Behavior (If not already completed above) ³	
Computer Science/Information Technology		
COMP-SCI 101 & 101L	Problem Solving and Programming I and Problem Solving & Programming I Lab	4
COMP-SCI 191	Discrete Structures I	3
COMP-SCI 201R & COMP-SCI 201L	Problem Solving and Programming II and Problem Solving and Programming II - Lab	4
COMP-SCI 281R	Introduction to Computer Architecture and Organization (satisfies GECRT-SC course requirement)	3
COMP-SCI 291	Discrete Structures II	3
COMP-SCI 303	Data Structures	3
COMP-SCI 304WI	Ethics and Professionalism (satisfies GECUE course requirement)	3
COMP-SCI 431	Introduction to Operating Systems	3
COMP-SCI 420	Introductory Networking and Applications	3
or COMP-SCI 421A	Foundations of Data Networks	
COMP-SCI 456	Human Computer Interface	3
COMP-SCI 470	Introduction to Database Management Systems	3
or COMP-SCI 371	Database Design, Implementation and Validation	
INFO-TEC 222	Multimedia Production and Concepts	3
INFO-TEC 321	Introduction to Computing Resources Administration	3
CS/IT Electives (Upper Level)		9
Courses regularly offered include:		

COMP-SCI 423	Client/Server Programming and Applications	
COMP-SCI 457	Software Architecture: Requirements & Design	
COMP-SCI 458	Software Testing and Verification	
INFO-TEC 426	Practical Network Security	
INFO-TEC 429	Introduction to Cybersecurity	
Internship Requirement²		
Take 1 hour of the following:		1
INFO-TEC 491	Internship	
Total Credits		89-92

¹ ALEKS Math Placement Assessment may be required.

² Students with appropriate CS/IT business experience may petition to replace the internship requirement with a 3 credit hour senior CS/IT course.

³ Course required if pursuing a business minor.

Code	Title	Credits
General Electives		4-7

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
MATH 210 ^{CC}		4 STAT 235	3
COMP-SCI 101 & 101L ^{CC}		4 COMP-SCI 191 ^{CC}	3

GEFSE 101		3 COMP-SCI 201R & COMP-SCI 201L	4
ENGLISH 110		3 ENGLISH 225	3
		GECRT-SS 101	3
		14	16
Second Year			
Fall Semester	Credits	Spring Semester	Credits
COMP-SCI 291		3 COMP-SCI 281R	3
COMP-SCI 303		3 INFO-TEC 222	3
ACCTNG 210		3 MKT 324	3
ECON 202		3 Life Science Elective (with Lab)	5
COMM-ST 110, 140, or 277		3 GECRT-AH 101	3
		15	17
Third Year			
Fall Semester	Credits	Spring Semester	Credits
COMP-SCI 304WI		3 COMP-SCI 371 or 470	3
COMP-SCI 431		3 INFO-TECH 3XX/4XX Specialty Elective	3
INFO-TEC 321		3 DSOM 340 or MGT 332	3
HISTORY 101, 102, or POL-SCI 210		3 3XX/4XX Business Elective	3
GECDV 201		3 Physical Science Elective (with Lab if not yet completed)	3
		15	15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
COMP-SCI 420 or 421A		3 COMP-SCI 451R	3
COMP-SCI 449		3 COMP-SCI 3XX/4XX Elective	3
COMP-SCI 456		3 INFO-TEC 491	1
INFO-TECH 3XX/4XX Specialty Elective		3 3XX/4XX Business Elective	3
General Elective		3 General Elective	3
		15	13

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

UMKC School of Computing & Engineering

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 336 Flarsheim Hall
 5110 Rockhill Road
 Kansas City MO 64110
 816-235-2399
sce@umkc.edu
<http://sce.umkc.edu>

Bachelor of Science in Electrical and Computer Engineering

ABET Program Educational Objectives

The undergraduate degree in ECE is designed so that graduates will attain employment in electrical and/or computer engineering and advance their careers in this field or achieve success in other areas. Some graduates will become registered professional engineers and/or pursue advanced studies.

ABET Student Outcomes

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- An ability to communicate effectively with a range of audiences.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Be able to apply knowledge of mathematics, science, and engineering
- Be able to design and conduct experiments, as well as to analyze and interpret data
- Be able to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- Be able to function on multidisciplinary teams
- Be able to identify, formulate, and solve engineering problems
- Be able to understand professional and ethical responsibility

- Be able to communicate effectively
- Be able to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- Be able to recognize of the need for, and an ability to engage in life-long learning
- Have knowledge of contemporary issues
- Be able to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Program Description

The Bachelor of Science in Electrical and Computer Engineering (ECE) is accredited by the Engineering Accreditation Commission of ABET <http://www.abet.org/>.

The ECE degree program is designed to provide the key elements of both an electrical engineering and a computer engineering curriculum. It also provides additional courses that involve the business and entrepreneurial aspects of engineering. Graduates of this program are prepared for larger breadth in job opportunities than are typically available in a traditional electrical engineering program. A BS/MS Program for completing both a BS in ECE and a MS in EE in five years is available (see below). For additional information, please contact the SS&C Student Services Center at (816)235-2399 or sce@umkc.edu.

Educational Objectives

The undergraduate degree in ECE is designed so that graduates will attain employment in electrical and/or computer engineering and advance their careers in this field or achieve success in other areas. Some graduates will become registered professional engineers and/or pursue advanced studies.

Career Implications

Job opportunities abound for electrical and computer engineering majors. In terms of starting salaries and the number of job offers, ECE graduates compare favorably with other engineering graduates. In addition, the ECE curriculum at UMKC equips the graduate with the analytical decision-making skills necessary to pursue diverse technical, managerial and entrepreneurial career opportunities.

Admission Requirements

High school students planning to apply to the School of Computing & Engineering are strongly encouraged to take a college preparatory program that emphasizes mathematics, science and communication skills.

First-time college student applicants to the undergraduate program in electrical and computer engineering will be admitted if they obtain:

1. An ACT mathematics score of at least 25 and
2. An ACT composite score of at least 24

First-time college student applicants who do not meet the above criteria but do meet UMKC general admission requirements will have their applications reviewed by a committee for admission. Applicants who are not admitted to SCE but do meet UMKC general admission requirements may be admitted to University College.

Students without the prerequisite preparation must take the needed coursework before enrolling in courses required for the bachelor's degree. Students seeking re-admission must have been in good academic standing when last enrolled. Otherwise, re-admission requires a formal review by the undergraduate program committee.

Transfer applicants must have at least 24 credits of transferable college credit, an overall 2.0 GPA on a 4.0 scale in all coursework, which includes repeated coursework, attempted at previous institutions. Transfer applicants without a 2.0 or higher college GPA must submit a petition for admission.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (Satisfied in program requirements below)		

Critical Thinking in Arts & Humanities (GECRT-AH)	3
Critical Thinking in Natural & Physical Sciences (GECRT-SC; Satisfied in program requirements below)	
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)	3
Culture & Diversity Course (GECDV)	3
Civic & Urban Engagement Course (GECUE; Satisfied in program requirements below)	
Total Credits	21

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

Code	Title	Credits
Math Requirements		
MATH 110 (PreCalculus Algebra; Typically not required due to ACT Admission Requirement)		
MATH 120 (Pre-Calculus; Typically not required due to ACT Admission Requirement)		
MATH 210	Calculus I	4
MATH 220	Calculus II	4
COMP-SCI 394R	Applied Probability	3
E&C-ENGR 241	Applied Engineering Analysis I	3
E&C-ENGR 341R	Applied Engineering Analysis II	3
Life and Physical Sciences Requirements		
CHEM 211 & 211L or BIOLOGY 102/102L	General Chemistry I and Experimental General Chemistry I Biology and Living	4-5
PHYSICS 240	Physics For Scientists and Engineers I	5
PHYSICS 250	Physics For Scientists and Engineers II	5
Higher Order Thinking Requirements		
E&C-ENGR 216	Engineering Computation	4
Electrical and Computer Engineering Requirements		
COMP-SCI 304WI	Ethics and Professionalism (satisfies GECUE course requirement)	3
E&C-ENGR 226	Logic Design	3
E&C-ENGR 227	Logic Design Laboratory	1
E&C-ENGR 228	Introduction to Computer Design	3

E&C-ENGR 229	Introduction to Computer Design Laboratory	1
E&C-ENGR 276	Circuit Theory I	3
E&C-ENGR 277	Circuit Theory I Lab	1
E&C-ENGR 302	Electromagnetic Waves and Fields (satisfies GECRT-SC course requirement)	3
E&C-ENGR 303	Electromagnetic Waves and Fields Lab	1
E&C-ENGR 330	Electronic Circuits	3
E&C-ENGR 331	Electronic Circuits Laboratory	1
E&C-ENGR 334	Semiconductors and Devices	3
E&C-ENGR 358	Introduction to Control Systems	3
or E&C-ENGR 474	Introduction to Communication Systems	
E&C-ENGR 376	Circuit Theory II	3
E&C-ENGR 377	Circuit Theory II Lab	1
E&C-ENGR 380	Signals and Systems	3
E&C-ENGR 381	Signals and Systems Lab	1
E&C-ENGR 402	Senior Design I	3
E&C-ENGR 403	Senior Design II	2
E&C-ENGR 416	Neural and Adaptive Systems	3
or E&C-ENGR 472	Power Generation Systems	
E&C-ENGR 426	Microcomputer Architecture and Interfacing	3
E&C-ENGR 427	Microcomputer Laboratory	1
E&C-ENGR 428R	Embedded Systems	3
E&C-ENGR 429	Embedded Systems Laboratory	1
E&C-ENGR 466	Power Systems I	3
MEC-ENGR 130	Engineering Graphics	3
Senior Electives		
Take 2 elective courses at the 400 level in ECE (not already completed above).		6
E&C-ENGR 412	Principles of RF/Microwave Engineering	
E&C-ENGR 436	Power Electronics I	
E&C-ENGR 442	Introduction to VLSI Design	
E&C-ENGR 443	Introduction to VLSI Design Laboratory	
E&C-ENGR 455	Instrumentation and Control	
E&C-ENGR 457	Fundamentals of Solar Photovoltaic Cells	
E&C-ENGR 458	Automatic Control System Design	
E&C-ENGR 459	Introduction to Photovoltaic Systems	
E&C-ENGR 463	Advanced Sustainable Energy Systems Engineering	
E&C-ENGR 467	Power Systems II	
E&C-ENGR 468	Electric Power Distribution Systems	
E&C-ENGR 477	Introduction to Wireless Networking	
E&C-ENGR 480	Digital Signal Processing	
E&C-ENGR 484	Digital Image Processing	
Take one elective course at the 400 level in ECE, COMP-SCI, INFO-TEC, or PHYSICS (not already completed above).		3
COMP-SCI 423	Client/Server Programming and Applications	
COMP-SCI 457	Software Architecture: Requirements & Design	
COMP-SCI 458	Software Testing and Verification	
INFO-TEC 426	Practical Network Security	
INFO-TEC 429	Introduction to Cybersecurity	
PHYSICS 410	Thermal Physics	
PHYSICS 420	Optics	
PHYSICS 450	Introduction To Solid State Physics	
PHYSICS 460	Electricity And Magnetism I	
PHYSICS 461	Electricity And Magnetism II	

Minimum GPA: 2.0**Minimum grade of C in all courses offered in the School of Computing & Engineering as well as Math and Physics.****Total Credit Hours: 126**

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
MATH 210 ^{CC}		4 MATH 220 ^{CC}	4
MEC-ENGR 130		3 PHYSICS 240 ^{CC}	5
CHEM 211 & 211L (or BIOLOGY 102 & 102L)		5 ENGLISH 225	3
GEFSE 101		3 GECRT-SS 101	3
ENGLISH 110		3	
		18	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
E&C-ENGR 216		4 E&C-ENGR 228 & E&C-ENGR 229	4
E&C-ENGR 226 & E&C-ENGR 227 ^{CC}		4 E&C-ENGR 276 & E&C-ENGR 277 ^{CC}	4
E&C-ENGR 241 ^{CC}		3 E&C-ENGR 341R ^{CC}	3
PHYSICS 250 ^{CC}		5 COMP-SCI 394R	3

		COMM-ST 110 or 277		3
		16		17
Third Year				
Fall Semester	Credits	Spring Semester	Credits	
E&C-ENGR 334		3 E&C-ENGR 302 & E&C-ENGR 303		4
E&C-ENGR 376 & E&C-ENGR 377		4 E&C-ENGR 330 & E&C-ENGR 331		4
E&C-ENGR 380 & E&C-ENGR 381		4 E&C-ENGR 428R & E&C-ENGR 429		4
E&C-ENGR 426 & E&C-ENGR 427		4 E&C-ENGR 466		3
		15		15
Fourth Year				
Fall Semester	Credits	Spring Semester	Credits	
E&C-ENGR 358 or 474		3 COMP-SCI 304WI		3
E&C-ENGR 402		3 E&C-ENGR 403		2
E&C-ENGR 416 or 472		3 E&C-ENGR 4XX Major Elective		3
E&C-ENGR 4XX Major Elective		3 E&C-ENGR 4XX Major Elective		3
GECRT-AH 101		3 HISTORY 101, 102, or POL-SCI 210		3
		GECDV 201		3
		15		17

Total Credits: 128

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

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 5110 Rockhill Road
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 816-235-2399
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Bachelor of Science: Computer Science

ABET Program Educational Objectives

Within a few years of graduation, graduates of the Computer Science program are expected to:

1. Successfully apply their problem solving skills to advance software development in a variety of domains.
2. Successfully apply technical knowledge to innovate and bring forth transformational change for metropolitan, regional, and global well-being.
3. Demonstrate responsible leadership in the development of software/computing technologies to solve real-world problems in diverse communities.
4. Demonstrate lifelong learning and professional growth via advanced study, career advancement, or social contributions.

ABET Student Outcomes

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Apply computer science theory and software development fundamentals to produce computing-based solutions.

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Be able to analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Be able to design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Be able to communicate effectively in a variety of professional contexts.
- Be able to recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Be able to function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Be able to apply computer science theory and software development fundamentals to produce computing-based solutions.

Program Description

The Bachelor of Science in Computer Science is accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org>. (<http://www.abet.org/>)

Please note that accreditation for the Bachelor of Arts in Computer Science (BACS), which we also offer, has not been requested.

This degree program serves to give the student excellent preparation for careers in computer science, for graduate study, or for fields where CS is an important ingredient. Students receive a strong technical background in computer science, which is coupled with a broad, general education. The BS degree prepares for a career path where the student contributes to the continued development of technology infrastructure (operating systems, browsers, applications, softwares, networking, etc). A BS/MS Option for completing both a BS in CS and a MS in CS in five years is available, (see

below) (<http://www.umkc.edu/umkc/catalog/html/sce/cs-ee/cs-fast-track.html>). Furthermore, a minor in Computer Science is available as well. Please contact the SS&C Student Services Center for more information at (816)235-2399 or sce@umkc.edu.

Educational Objectives

The undergraduate degree in CS is designed so that graduates will attain employment and advance their careers in industry, government and academia. BS graduates will find employment in CS related fields. Some graduates will achieve appropriate certifications and/or pursue advanced study in computer science or other graduate fields. Graduates will be engaged in lifelong learning and thereby advance in their careers.

Career Implications

Computers and processors of all sizes and descriptions appear in every area of the public and private sectors. Consequently, employment prospects for computer science degree holders remain steady. Current projections have the demand for computer science graduates exceeding the supply for many years to come. The range of opportunities open to the new graduate in computer science is impressive.

Computer science graduates are employed as members of technical staff, software engineers, programming or systems analysts, and scientific or application programmers by some of the nation's largest companies. These companies include internet based commerce and software based hi-tech industries, insurance, banks and financial institutions, computer and electronics manufacturers, the communications industry, the biomedical industry, the defense industry, and engineering firms.

Admission Requirements

High school students planning to apply to the School of Computing & Engineering are strongly encouraged to take a college preparatory program that emphasizes mathematics, science and communication skills.

First-time college student applicants to the undergraduate program in computer science will be admitted if they obtain:

1. An ACT mathematics score of at least 25 and
2. An ACT composite score of at least 24

First-time college student applicants who do not meet the above criteria but do meet UMKC general admission requirements will have their applications reviewed by a committee for admission. Applicants who are not admitted to SCE but do meet UMKC general admission requirements may be admitted to University College.

Students without the prerequisite preparation must take the needed coursework before enrolling in courses required for the bachelor's degree. Students seeking re-admission must have been in good academic standing when last enrolled. Otherwise, re-admission requires a formal review by the undergraduate program committee.

Transfer applicants must have at least 24 credits of transferable college credit, an overall 2.0 GPA on a 4.0 scale in all coursework, which includes repeated coursework, attempted at previous institutions. Transfer applicants without a 2.0 or higher college GPA must submit a petition for admission.

Program Requirements

Curriculum requirements for both of the Computer Science degrees are categorized into several areas totaling at least 120 hours of study.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate	
COMM-ST 277	Interpersonal Communication	
Math Pathway (Satisfied in program requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC; Satisfied in program requirements below)		
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3

Civic & Urban Engagement Course (GECUE; Satisfied in program requirements below)

Total Credits	21
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Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Major Requirements

A minimum grade of C is required in all Computer Science, Info Tech, Math, Stat, and Physics coursework.

Code	Title	Credits
Mathematics (satisfies Math Pathway)		
MATH 120 (Precalculus; Typically not required due to ACT Admission Requirement)		
MATH 210	Calculus I ²	4
MATH 220	Calculus II	4
MATH 300	Linear Algebra I	3
STAT 235	Elementary Statistics ²	3
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
Life and Physical Sciences		
PHYSICS 240 & PHYSICS 250	Physics For Scientists and Engineers I and Physics For Scientists and Engineers II	10
One Life Science Course		3
Synthesis Courses		
COMP-SCI 449	Foundations of Software Engineering	3
COMP-SCI 451R	Software Engineering Capstone	3
Computer Science Requirements		
COMP-SCI 101 & 101L	Problem Solving and Programming I and Problem Solving & Programming I Lab	4
COMP-SCI 191	Discrete Structures I	3
COMP-SCI 201R & COMP-SCI 201L	Problem Solving and Programming II and Problem Solving and Programming II - Lab	4
COMP-SCI 281R	Introduction to Computer Architecture and Organization (satisfies GECRT-SC course requirement)	3
COMP-SCI 291	Discrete Structures II	3
COMP-SCI 303	Data Structures	3

COMP-SCI 304WI	Ethics and Professionalism (satisfies GECUE course requirement)	3
COMP-SCI 394R	Applied Probability	3
COMP-SCI 404	Introduction to Algorithms and Complexity	3
COMP-SCI 421A	Foundations of Data Networks	3
or COMP-SCI 420	Introductory Networking and Applications	
COMP-SCI 431	Introduction to Operating Systems	3
COMP-SCI 441	Programming Languages: Design and Implementation	3
COMP-SCI 461	Introduction to Artificial Intelligence	3
or COMP-SCI 465R	Introduction to Statistical Learning	
COMP-SCI 470	Introduction to Database Management Systems	3
or COMP-SCI 371	Database Design, Implementation and Validation	
Major Electives		
COMP-SCI Electives (300 or 400 level) ¹		9
Any 300- or 400- level elective not completed above		
COMP-SCI 423	Client/Server Programming and Applications	
COMP-SCI 457	Software Architecture: Requirements & Design	
COMP-SCI 458	Software Testing and Verification	
COMP-SCI Adv Elective (400 level) ¹		3
Any 400-level elective not completed above.		
COMP-SCI 491	Internship (by petition)	
COMP-SCI 497	Directed Readings (by petition)	
COMP-SCI 498	Research Seminar (by petition)	
COMP-SCI 499	Undergraduate Research (by petition)	
Total Credits		89

¹ See academic advisor for additional course options.

² ALEKS Math Placement Assessment may be required.

Code	Title	Credits
General Electives		7

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
MATH 210 ^{CC}		4 MATH 220 ^{CC}	4
COMP-SCI 101 & 101L ^{CC}		4 COMP-SCI 191 ^{CC}	3
GEFSE 101		3 COMP-SCI 201R & COMP-SCI 201L	4
ENGLISH 110		3 GECRT-SS 101	3
		14	14

Second Year

Fall Semester	Credits	Spring Semester	Credits
COMP-SCI 291		3 COMP-SCI 281R	3
COMP-SCI 303		3 MATH 300	3
PHYSICS 240		5 PHYSICS 250	5
STAT 235		3 COMM-ST 110 or 277	3
ENGLISH 225		3 GECRT-AH 101	3
		17	17

Third Year

Fall Semester	Credits	Spring Semester	Credits
COMP-SCI 304WI		3 COMP-SCI 371 or 470	3
COMP-SCI 394R		3 COMP-SCI 404	3
COMP-SCI 431		3 COMP-SCI 3XX/4XX Major Elective	3
HISTORY 101, 102, or POL-SCI 210		3 Life Science Elective	3
General Elective		3 GECDV 201	3
		15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
COMP-SCI 420 or 421A		3 COMP-SCI 451R	3
COMP-SCI 441		3 COMP-SCI 461 or 465R	3
COMP-SCI 449		3 COMP-SCI 3XX/4XX Major Elective	3
COMP-SCI 3XX/4XX Major Elective		3 COMP-SCI 4XX Major Elective	3
General Elective		4	
		16	12

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

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 816-235-2399
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<http://sce.umkc.edu>

BS/MS Electrical and Computer Engineering/Electrical Engineering

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

The School of Computing and Engineering established the BS/MS program to offer students an opportunity to meet the full requirements of the existing BS and MS degree programs in a shorter time period than the separate degree programs by completing a B.S. degree within four years and then completing an M.S. degree in the fifth year.

- Students are required to maintain full-time undergraduate enrollment (minimum 12 hours/semester)
- Must be continuously enrolled from BS to MS programs (must enter graduate program the semester following completion of BS degree requirements, summer excepted)
- Students admitted to the program will receive the SCE BS/MS Scholarship which will cover the difference between Graduate and Undergraduate tuition rates
- Students are required to maintain full-time graduate enrollment (minimum 9 hours/semester) and complete the masters degree within the year following the completion of their bachelor's degree to remain enrolled in the program and receive the BS/MS Scholarship.

Admission Requirements for BS/MS Program:

Students must meet the following requirements to be eligible:

- The GRE will be waived for students who meet the qualifications above and are planning to enroll in the BS/MS program
- Students must indicate their interest and apply to the program no later than the end of their junior year
- Students must complete 30 hours at SCE prior to admission to the BS/MS program
- Students are expected to follow the recommended curriculum (although deviations are possible) and must maintain a UMKC cumulative GPA of 3.00 or higher

Please contact the SS&C Student Services Center for additional info or clarification by phone (816) 235-2399 or by e-mail sce@umkc.edu. (csee@umkc.edu)

Requirements for BS/MS Graduation

Credit Hour Requirements

The BS/MS combination of a Bachelor of Science in Electrical and Computer Engineering and a Master of Science in Electrical Engineering requires:

- 127 Undergraduate Credit Hours
- 24 Graduate Credit Hours
- 151 Total Credit Hours.

Academic Requirements

The curricular requirements for both degrees are identical to the requirements for the two degrees when considered separately, with a few additions and exceptions.

1. Students enrolled in the plan must maintain a 3.0 cumulative GPA for all UMKC coursework.
2. Students must receive a minimum grade of C (2.0) for every undergraduate course attempted in the CSEE Department.
3. Students must receive a minimum grade of B (3.0) for every graduate course attempted in the CSEE Department.
4. Students should follow the recommended sample program in order to graduate within five years, but variations are possible.

For additional details, please contact our Department by phone (816) 235-1193 or by e-mail csee@umkc.edu. (csee@umkc.edu)

Five Year Program Sample

Students should follow the sample program as listed for the BS in ECE degree and should apply for the graduate degree prior to enrolling for the fall semester of their fourth year. During their fifth year, they could enroll in 12 credit hours each semester or make use of the summer semester between their fourth and fifth year to take a course or special project, if offered.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

BS/MS Program in Computer Science

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a

Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Be able to apply knowledge of discrete structures and computer organization appropriate to the discipline.
- Be able to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- Be able to communicate effectively with a range of audiences.
- Develop solutions for advanced problems using appropriate skills and knowledge in computer science.
- Demonstrate advanced knowledge in an area of specialization.
- Recognize and apply state of the art techniques and tools in the field.
- Plan and conduct scholarly activities.
- Communicate effectively in both written and oral forms.
- Recognize the need for and ability to engage in life-long learning.
- Understand ethical and professional responsibilities.
- Work effectively in teams.

The School of Computing and Engineering established the BS/MS program to offer students an opportunity to meet the full requirements of the existing BS and MS degree programs in a shorter time period than the separate degree programs by completing a B.S. degree within four years and then completing an M.S. degree in the fifth year.

- Students admitted to the program will receive the SCE BS/MS Scholarship which will cover the difference between Graduate and Undergraduate tuition rates
- Students are required to maintain full-time undergraduate enrollment (minimum 12 hours/ semester)
- Must be continuously enrolled from BS to MS programs (must enter graduate program the semester following completion of BS degree requirements, summer excepted)
- Students are required to maintain full-time enrollment (minimum 9 hours/semester) in the graduate phase of the program and complete the master's degree within a year of their bachelor's degree completion to continue to receive the BS/MS Scholarship

Admission Requirements for BS/MS Program:

Students must meet the following requirements to be eligible:

- The GRE will be waived for students who meet the qualifications above and are planning to enroll in the BS/MS program
- Students must indicate their interest and apply to the program no later than the end of their junior year
- Students must complete 30 hours at SCE prior to admission to the BS/MS program
- Students are expected to follow the recommended curriculum (although deviations are possible) and must maintain a UMKC cumulative GPA of 3.00 or higher

This program offers students an opportunity to meet the full requirements of the existing BS and MS degree programs in a shorter time period than the separate degree programs by completing a B.S. degree in Computer Science within four years, and then completing an M.S. degree in Computer Science in their fifth year. Please contact the SS&C Student Services Center for additional information or clarification on the information below by calling (816) 235-2399, or sending an e-mail to sce@umkc.edu. (csee@umkc.edu)

Requirements for Graduation

Credit Hour Requirements

The BS and MS program in Computer Science requires:

- 120 Undergraduate Credit Hours,
- 24 Graduate Credit Hours,
- 6 General Elective hours that can be satisfied at any level,
- 150 Total Credit Hours.

Academic Requirements

The academic requirements for both degrees are identical to the requirements for the two degrees when considered separately, with a few additions and exceptions.

1. Students enrolled in the plan must maintain a 3.0 cumulative GPA for all UMKC coursework.
2. Students must receive a minimum grade of C (2.0) in every undergraduate course attempted in the CSEE Department.
3. Students must receive a minimum grade of B (3.0) for every graduate course attempted in the CSEE Department.
4. Students should follow the recommended sample program in order to graduate within five years, but variations are possible.

For additional details, please contact our Department by phone (816) 235-1193 or by e-mail sce@umkc.edu. (sce@umkc.edu)

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Doctoral Studies in Computer Science or Electrical Engineering

The Department of Computer Science Electrical Engineering also participates in the Ph.D. program of the University of Missouri-Kansas City. This program is administered through the School of Graduate Studies at the University of Missouri-Kansas City and requires a student to select both a primary discipline and a co-discipline. Many doctoral students choose both primary and co-disciplines in our department or the School of Computing and Engineering, but other disciplines can be taken as well. Three such disciplines are housed in our department:

- Computer Science
- Electrical and Computer Engineering
- Computer Networking and Systems

For more information, please refer to the School of Graduate Studies in this catalog.

Financial Assistance for Doctoral Students

Graduate assistantships are available to prospective doctoral students, but are highly competitive. Currently, most full-time Ph.D. students in the CSEE department are supported either as a graduate assistant or as graduate research assistant, or as graduate teaching assistant.

Doctoral students already in the program are eligible to apply for several fellowships available from the School of Graduate Studies. Check the School of Graduate Studies Web site at www.umkc.edu/sgs/financial.asp (<http://www.umkc.edu/sgs/financial.asp>) for additional information.

Master of Science in Computer Science

Program Description

The University of Missouri-Kansas City has created an exciting and uniquely designed program of graduate study in computer science. Significant changes are always occurring within this discipline in recent years and our graduate program in computer science reflects those changes, providing in-depth education in the new technology and skills most in demand in this growing industry.

The UMKC graduate student has the unique opportunity to get a concentrated state-of-the-art education in some of the most dynamic, challenging and professionally significant specialty areas. This is made possible by unusual advantages which the UMKC program possesses:

- An interdisciplinary approach to new technology.
- Faculty who are each actively pursuing research in these areas.

Students can earn an M.S. degree in computer science with an emphasis or area of interest in:

- Bioinformatics
- Data Science
- Database and Information Management
- Networking and Telecommunications
- Software Engineering

Many courses are offered in these areas. Contact us for more information by phone: (816) 235-1193 or send an e-mail csee@umkc.edu

Admission Requirements

The University of Missouri-Kansas City's graduate program in computer science will accept college and university graduates whose past performance indicates an ability to succeed in graduate study in computer science. This ability can be demonstrated by the following undergraduate preparation.

1. A sound background in computer science as indicated by an above-average understanding (e.g. a cumulative GPA in CS coursework of 3.0 or better with no single course grade lower than 2.0) of the content of the following courses:

Code	Title	Credits
COMP-SCI 101	Problem Solving and Programming I	3
COMP-SCI 191	Discrete Structures I	3
COMP-SCI 201R	Problem Solving and Programming II	3
COMP-SCI 201L	Problem Solving and Programming II - Lab	1
COMP-SCI 281R	Introduction to Computer Architecture and Organization	3
COMP-SCI 291	Discrete Structures II	3
COMP-SCI 303	Data Structures	3
COMP-SCI 394R	Applied Probability	3
COMP-SCI 404	Introduction to Algorithms and Complexity	3
COMP-SCI 431	Introduction to Operating Systems	3

2. A sound background in mathematics as indicated by an above average understanding (e.g. a GPA of 3.0 or better with no single course grade lower than 2.0) of calculus (minimum of 10 hours) and of the content of at least two additional upper-level courses in areas such as linear algebra, differential equations, abstract algebra, numerical analysis or mathematical logic.
3. An overall GPA of 3.0 or better in all undergraduate work.
4. Official results of the Graduate Record Exam (GRE) general test. The applicant must score in at least the 75th percentile on the quantitative portion of the GRE and it is recommended that the applicant score in at least the 30th percentile on the verbal portion of the GRE. Admission to our degree programs is competitive so higher scores are recommended.
5. For international students, a minimum test score of IELTS 6.5 or iBT 79 is needed. A higher score makes the application competitive for DISA (Dean's International Student Award) consideration.
6. Prospective students who want to be considered for acceptance to the M.S. degree program should submit the following documents:
 - a. Transcripts for all graduate and undergraduate work completed so far; syllabi of these courses (or a URL to these) is strongly suggested.
 - b. Copies of academic and scholarly diplomas received.

- c. GRE scores and, for international students, TOEFL scores, as well as a statement of purpose, i.e. a one- or two-page essay in which the prospective students indicate their career objectives.

It is possible that a prospective student has obtained a solid understanding of either computer science or mathematics through work or other experience rather than formal study. These students must submit a detailed description of such experience and ask a supervisor to write a letter of reference supporting the application.

Applications will be reviewed by the master's committee when all documentation is received.

U.S. citizens or permanent residents may apply online at www.umkc.edu/admissions or submit application forms and required supporting materials to:

Mailing Address

University of Missouri-Kansas City
Office of Admissions
120 Administrative Center
5100 Rockhill Road
Kansas City, MO 64110-2499

Their telephone number is (816) 235-1111 and their e-mail address is admit@umkc.edu.

International students may apply online at www.umkc.edu/isao (<http://www.umkc.edu/isao/>) or fax application to (573) 884-4894 and send all supporting documents to:

Mailing Address

University of Missouri-Kansas City
Office of International Student Affairs
5100 Rockhill Road
Kansas City, MO 64110-2499

Their telephone number is (816) 235-1113 and their e-mail address is isao@umkc.edu.

Prospective students can request additional information or request information regarding their application by contacting UMKC at the above addresses or by sending e-mail to: csee@umkc.edu.

Starting the Program

When accepted into the program, the student's first contact is with the computer science principal graduate advisor or with members of the CSEE graduate degree program committee during the orientation session. The most immediate concern is for the courses to be taken in the first semester. The principal graduate advisor will help the student select those initial courses. At this initial meeting, a review will be made of the student's status in the program and the student will be required to provide a tentative program of study within the first semester. Such a program should reflect the deficiency and prerequisite courses that have been prescribed and may have to be taken prior to taking courses for graduate credit.

Within the first semester, the student will be assigned a graduate advisor (faculty) who will then become the primary contact person for that student until a thesis advisor (for thesis option) is selected. The CS co-chair of the CSEE graduate degree program committee or his/her designee will notify the student of the identity of the specific graduate advisor. It will be the responsibility of students, in conjunction with their advisors/chairs, to devise a program of study using the degree requirements worksheet and the course planning worksheet. This should be submitted to the graduate committee, usually by the end of the second semester. The CSEE graduate degree program committee is in charge of handling procedural issues related to the M.S. program in computer science. Any request for exception to rules, regulations or policies should be directed to this committee.

Deficiencies

The CSEE graduate degree program committee reviews and evaluates all applications for admissions to the M.S. degree programs. Frequently, they review applications from students whose past academic record show strong positive indications for success as a graduate student, yet have not satisfied all courses needed for full admission. Students with an undergraduate degree in computer science from an ABET accredited program are well prepared. Others may have deficiencies in their preparation. The committee may offer these students admission to the program on a conditional basis and compile a list of "deficiency courses". The successful completion of these courses with a grade of B or better will be a condition of full admission to the program. The student is then required to complete all such deficiencies as a contractual obligation at the earliest opportunity.

The committee creates this list based on the transcripts and syllabi submitted by the applicant. However, it is possible that applicants have indeed satisfied one or more of their listed deficiencies. In these cases, the student should contact their academic advisor as soon as possible in the first semester to initiate a petition to waive the deficiencies in question. The written petition with all the needed supporting documentation (such as course syllabus) attached, must be submitted no later than six weeks (two weeks for summer) after the start of the first semester of enrollment. Any petition received after the deadline will be denied and returned without review. The decision of the committee is final and can be one of three:

- The waiver is granted.
- The waiver is denied and the student is allowed to take an examination.
- The waiver is denied and the student must pass the class with a B (3.0) or higher (usually the course of action if the student does not pass the examination).

The committee's decision is final, so it is important that students consult with their advisor to ensure that all the proper documentation supporting the waiver is submitted.

If the student is allowed to take an examination, it must take place no later than the second semester of enrollment. The student may take the exam only once. If the student does not perform satisfactorily on the exam, then the student must enroll in the course to satisfy the deficiency requirement.

All deficiencies shall be satisfied within two semesters of admission. If deficiencies are not satisfied within this time period, enrollment will be limited to deficiency courses until all deficiencies have been satisfied.

Graduate Course Prerequisites

Note that there are graduate level courses that have an undergraduate course as prerequisite and that not all undergraduate courses can be taken for graduate credit.

Student Learning Outcomes

Students graduating from this program will:

- Develop solutions for advanced problems using appropriate skills and knowledge in computer science.
- Demonstrate advanced knowledge in an area of specialization.
- Recognize and apply state of the art techniques and tools in the field.
- Plan and conduct scholarly activities.
- Communicate effectively in both written and oral forms.
- Recognize the need for and ability to engage in life-long learning.
- Understand ethical and professional responsibilities.
- Work effectively in teams.

Core Requirements

All students are required to complete a core curriculum of:

Code	Title	Credits
COMP-SCI 5592	Design and Analysis of Algorithms	3
Select two of the following:		6
CSEE 5110	Network Architecture I (formerly offered as COMP-SCI 5520)	
COMP-SCI 5551	Advanced Software Engineering	
COMP-SCI 5566	Introduction to Bioinformatics	
COMP-SCI 5570	Architecture of Database Management Systems	
COMP-SCI 5565	Introduction to Statistical Learning	
or		
COMP-SCI 5540	Principles of Big Data Management	
or		
COMP-SCI 5542	Big Data Analytics and Applications	

CS-Emphasis and CS-Areas of Interest

All students are required to complete courses in a CS-emphasis and/or area of interest. The approved areas and their associated courses are:

Bioinformatics Emphasis -

Code	Title	Credits
COMP-SCI 5565	Introduction to Statistical Learning	3
COMP-SCI 5566	Introduction to Bioinformatics	3
COMP-SCI 5567	Machine Learning for Data Scientists	3
COMP-SCI 5590NN/E&C-ENGR 5316	Special Topics (Artificial, Neural and Adaptive Systems)	3
E&C-ENGR 5590SL	Special Topics in Electrical and Computer Engineering	1-4

And others	
Total Credits	13-16

Data Science Emphasis

Code	Title	Credits
COMP-SCI 5525	Cloud Computing	3
COMP-SCI 5540	Principles of Big Data Management	3
COMP-SCI 5542	Big Data Analytics and Applications	3
COMP-SCI 5543	Real-time Big Data Analytics	3
COMP-SCI 5565	Introduction to Statistical Learning	3
COMP-SCI 5567	Machine Learning for Data Scientists	3
COMP-SCI 5570	Architecture of Database Management Systems	3
COMP-SCI 5574	Large Scale Semistructured Data Management	3
COMP-SCI 5590PG	Special Topics In Computer Science (Probabilistic Graphical Models)	3
And others		
Total Credits		27

Database and Information Management Area of Interest [not transcribed] -

Code	Title	Credits
COMP-SCI 5570	Architecture of Database Management Systems	3
COMP-SCI 5571	Distributed Database Management Systems	3
COMP-SCI 5572	Mobile Computing	3
COMP-SCI 5573	Information Security and Assurance	3
COMP-SCI 5574	Large Scale Semistructured Data Management	3
And others		
Total Credits		15

Networking and Telecommunications Emphasis -

Code	Title	Credits
CSEE 5110	Network Architecture I	3
CSEE 5111	Network Architecture II	3
CSEE 5112	Computer Network Design and Analysis	3
CSEE 5113	Network Routing	3
CSEE 5130	Queuing Theory and Applications	3
COMP-SCI 5523	Capacity Planning for Service-Oriented Architectures	3
COMP-SCI 5525	Cloud Computing	3
E&C-ENGR 5570	Principles of Digital Communication Systems	3
E&C-ENGR 5577	Wireless Communications	3
And others		
Total Credits		27

Software Engineering and System Emphasis -

Code	Title	Credits
COMP-SCI 5531	Advanced Operating Systems	3
COMP-SCI 5551	Advanced Software Engineering	3
COMP-SCI 5552A	Formal Software Specification	3
COMP-SCI 5553	Software Architecture and Design	3
COMP-SCI 5554	Software Tools and Programming Environments	3
COMP-SCI 5555	Software Methods and Tools	3
COMP-SCI 5560	Knowledge Discovery and Management	3
And others		
Total Credits		21

If a student desires an emphasis or area of interest other than these, a petition must be submitted to the graduate committee requesting that an emphasis or area of interest be recognized for the student's specific degree plan. It should specifically state which courses the student wants to include in this emphasis or area of interest and it should explain why these courses together form a coherent group and how these courses fit the student's academic goals. Students must petition before including other courses in their program of study.

Please note that many of our bioinformatics courses also count towards a MS in Bioinformatics, administered in the Department of Informatic Medicine and Personalized Health in the School of Medicine. Please contact Dr. Stan Edlavitch for more information, 1000 East 24th Street, 5th Floor, Phone: 816-235-6617, Email: edlavitchs@umkc.edu.

Degree Requirements

To earn an M.S. degree in computer science, the student must satisfy both the general master of science degree requirements of the University of Missouri-Kansas City and the requirements of the CSEE Department for either the thesis or non-thesis option as outlined below.

Specific Requirements for the Thesis Option (30 cr. hrs.):

1. Complete a minimum of 24 hours of approved COMP-SCI coursework for graduate credit with a cumulative GPA of at least 3.0.
2. Additionally, complete a minimum of six additional graduate COMP-SCI hours, including at least three hours COMP-SCI 5599. The total number of hours of COMP-SCI 5597 or COMP-SCI 5599 should not exceed six.
3. Contact a thesis advisor in the semester in which the student completes 12 hours of graduate work.
4. Present evidence of research abilities in the form of a master's thesis resulting from enrollment in at least three hours of COMP-SCI 5599.
5. Pass a general oral examination which may cover all the work covered in the student's graduate program.
6. Satisfy the requirements listed under the common requirements, see below.

Specific Requirements for the Non-Thesis Option (30 cr. hrs.):

1. Complete a minimum of 27 hours of approved coursework for graduate credit with a cumulative GPA of at least 3.0.
2. Additionally, complete another 3 hours of approved course work, or 3 hours of approved COMP-SCI 5597. Only 3 hours of COMP-SCI 5597 can be applied toward the degree.
3. Contact an advisor after completing 12 hours of graduate work to complete the program of study.
4. Satisfy all common requirements, see below.

Common Requirements and Limitations for both MS-CS Thesis Option and Non-Thesis Option:

1. Satisfy the core requirement:

Code	Title	Credits
COMP-SCI 5592	Design and Analysis of Algorithms	3
Select two of the following:		6
CSEE 5110	Network Architecture I	3
COMP-SCI 5551	Advanced Software Engineering	3
COMP-SCI 5566	Introduction to Bioinformatics	3
COMP-SCI 5570	Architecture of Database Management Systems	3
COMP-SCI 5540	Principles of Big Data Management (formerly offered as COMP-SCI 5590PB)	3
or		
COMP-SCI 5542	Big Data Analytics and Applications	3
or		
COMP-SCI 5565	Introduction to Statistical Learning (formerly offered as COMP-SCI 5590CI)	3

2. Complete a minimum of nine hours (if thesis) or twelve hours (if non-thesis) in one CS-emphasis or CS-area of interest and a minimum of six hours in another CS-emphasis or CS-area of interest.
3. Each student must have a plan of study approved by both the student's supervisory committee and the graduate officer before the end of the semester in which the student completes 12 credit hours of graduate work.

4. No more than six credit hours total from any graduate coursework taken outside the CSEE department and from COMP-SCI 411, COMP-SCI 421A, COMP-SCI 423, COMP-SCI 457, COMP-SCI 470, and COMP-SCI 494R can be used to satisfy degree requirements. Each of these courses must be completed with a grade of "B" (3.0) or higher.
5. Courses cannot be identical to courses already taken for a prior degree.
6. No more than three hours of COMP-SCI 5597 can be used to satisfy degree requirements. All COMP-SCI 5597 hours to be applied to the master of science in Computer Science degree requirements must be approved by the CSEE Master's Committee at least six weeks before classes begin.
7. No more than one course grade below "B" or 3.0 may be applied toward the degree requirements.

Thesis Option

Master's degree candidates in computer science who decide to do the thesis option are required to demonstrate knowledge and maturity in the discipline by completing at least three hours of COMP-SCI 5599. Students may enroll in more than three hours of COMP-SCI 5599, however, only six hours combined from COMP-SCI 5597 and COMP-SCI 5599 may be applied toward the degree. The research program will be defined by the student in conjunction with the student's thesis committee. Under the direction of the thesis advisor, the student will investigate a topic of current interest in computer science and prepare a master's thesis on that topic.

The final requirement for conferral of the M.S. degree is defense of the thesis, where the supervisory committee is the examining body. The thesis must be submitted in complete typewritten form to the advisor and supervisory committee at least six weeks before the date the advanced degree is to be conferred. Also, the supervisory committee must have access to the thesis at least one week before the date of the defense. Students must comply with all rules and regulations governing theses outlined in the general catalog under General Graduate Academic Regulations and Information.

Directed Readings Courses

Up to three hours of COMP-SCI 5597 is allowed toward a master of science. Such a course must be approved in advance (i.e., before the student takes the course) by the professor supervising the course and the graduate committee. The following information must be furnished:

- Title of the course.
- Detailed syllabus for the course.
- Textbook and references.
- The manner in which the course will be conducted (i.e. meetings, assignments, etc.).
- The manner in which the students are assessed (i.e. how many exams, presentations, reports, etc.).
- The course which it replaces, if appropriate.
- Name(s) of the instructor(s).
- Name(s) of the student(s).
- Reasons for offering this course in a directed readings format.

Transfer Credit

Not more than six hours of graduate credit may be transferred from another recognized graduate school or from another academic unit within UMKC. Transfer credit may be applied toward the master's degree requirements on the approval of the student's graduate advisor and the Master's Committee. No credit hours may be transferred when those hours have been used toward the completion of any other degree program, graduate or undergraduate. The total amount of transfer credit and credit from approved COMP-SCI 400-level classes shall not exceed six hours.

BS/MS Computer Science Program

See the BS/MS section under Computer Science in the undergraduate catalog for information about the program (p. 1357).

Master of Science in Electrical Engineering Program Description

The University of Missouri-Kansas City has created an exciting and uniquely designed program of graduate study leading to the Master of Science in Electrical Engineering. This degree offers several options: thesis or non-thesis, with the latter available with an electric power focus area. In the thesis option, the student has the opportunity to engage in research that builds upon coursework to reach the forefront in the chosen area. This degree option prepares graduates for a wide variety of future opportunities, whether it is in corporate research, product development, management or entrepreneurial endeavors. It also prepares graduates for doctoral studies. The overall goal is to put graduates into a position to be leading technology

developers and innovators. The MSEE degree program provides the student with opportunities to study topics such as wireless communications, signal processing, computer architectures, digital systems, VLSI design, embedded system design, low-power chip design, image processing, computational electromagnetics, antenna theory, computer networking and neural networks. Alternately, the student can select the focus area emphasizing electric power, designed to easily fit into the schedule of full-time working engineers. The various emphasis/focus areas have been developed in consultation with industry, engineering firms and utilities. Contact info: (816) 235-1193, csee@umkc.edu.

Admission Requirements

Applicants for master's level graduate studies in electrical and computer engineering should have a GPA of at least 3.0 on a 4.0 scale for the last 60 semester hours of relevant undergraduate coursework in Electrical Engineering and/or Computer Engineering. However, if the GPA is below 3.0 but more than 2.75, and if other academic indicators promise success in the program, rules may still allow probationary admission. The following documents are required for consideration for admission:

1. Completed application form for graduate (masters) admission.
2. Official transcripts of all college work.
3. Official results of the Graduate Record Examination (GRE) general test. The applicant must score at least 75th percentile in the quantitative portion of the GRE; a 30th percentile score in the verbal portion of the GRE is recommended.
4. For international applicants a minimum test score of 79 (IBT) or 6.5 (IELTS) is necessary. (The older TOEFL and CBT scores will no longer be acceptable.)
5. Two letters of recommendation are needed for applicants with an overall GPA less than 3.0 in the last 60 hours of their undergraduate degree program.

The complete application package is then carefully reviewed by the graduate admissions committee. The decision to admit an applicant to the graduate (MSEE) degree program with or without DISA (Dean's International Scholarship Award) rests on this graduate admissions committee. The chair of the graduate committee communicates the recommendations of the graduate committee to the CSEE department chair, who in turn formally notifies the applicant of the decision.

Applications will be reviewed by the master's committee when all the necessary documents are received. For full consideration for the semester indicated and priority for scholarship applications, it is recommended that completed applications be received by the following dates:

- For fall semester admission (semester starts in August):
 - U.S. students/permanent residents: June 1.
 - International students: January 15.
- For spring semester admission (semester starts in January):
 - U.S. students/permanent residents: November 1 of the preceding year.
 - International students: October 1 of the preceding year.

U.S. citizens or permanent residents may apply online at www.umkc.edu/admissions (<http://www.umkc.edu/admissions/>) or submit application forms and required supporting materials to:

Mailing Address

University of Missouri-Kansas City
Office of Admissions
120 Administrative Center
5100 Rockhill Road
Kansas City, MO 64110-2499

Their telephone number is (816) 235-1111 and their e-mail address is admit@umkc.edu.

International students can apply online at www.umkc.edu/isao (<http://www.umkc.edu/isao/>) or fax application to 573-884-4894 and send all supporting documents to:

Mailing Address

International Student Affairs Office
University of Missouri-Kansas City
Student Success Center, G-04
5000 Holmes Street
Kansas City, MO 64110-2499

Their telephone number is (816) 235-1113 and their e-mail address is isao@umkc.edu.

Prospective students can request additional information or request information regarding their application by contacting UMKC at the above addresses or by sending e-mail to: csee@umkc.edu.

Acceptance or Denial

After thoroughly considering an applicant's record, one of the following actions will be taken:

Normal Acceptance

The student is accepted unconditionally.

Normal Acceptance with Pre-program Requirements

This category applies to an otherwise qualified applicant who has a bachelor of science degree from an approved program, but not in electrical engineering, computer engineering, or a similarly named engineering discipline. The student will be notified in writing of any make-up requirements specified by the master's committee.

Probationary Acceptance

Applicants with marginal credentials may be admitted conditionally. They will have to receive a B or better in each course in the first semester of graduate coursework. In addition, make-up requirements may be set forth by the master's committee.

Non-Acceptance

The student is not admitted. The student will be notified in writing of the admission denial. The letter may specify under what conditions a future application would be more favorably considered.

The master's committee is in charge of handling procedural issues related to the M.S. program in electrical engineering. Any request for exception to the rules should be handled as described below related to petitioning procedures.

Starting the Program

When accepted into the program, the student's first contact is with the electrical engineering principal graduate advisor. At this initial meeting, a review will be made of the student's status in the program and the student will be required to provide a tentative program of study within the first semester. Such a program should reflect the prerequisite courses that have been prescribed and that may have to be taken prior to taking courses for graduate credit.

The most immediate concern is for the courses to be taken in the first semester. The principal graduate advisor will help the student select those initial courses. Within the first semester, the student will be assigned an academic advisor who will be the primary contact for the student until the student graduates under the non-thesis option. If the student decides to follow the thesis option, a thesis advisor will replace the academic advisor. In either case, it is the responsibility of the student to devise, after consultation with their advisors, a program of study using the degree requirements and the course planning worksheet. This should be submitted to the graduate officer, usually by the end of the second semester. The master's committee is in charge of handling procedural issues related to the M.S. program in electrical engineering. Any request for exception to the rules should be handled as described below related to petitioning procedures.

Student Learning Outcomes

Upon graduating, students will have demonstrated that they can apply the core technologies from their chosen concentrations or focus areas within electrical engineering and/or computer engineering. They will have developed an analytical mindset and acquired a skill set with engineering tools to design and implement solutions to overcome engineering challenges in society. They will also have had an opportunity for in-depth course work in the areas of *Computer Engineering, VLSI and Embedded Systems, R.F./Electromagnetics and Mixed-Signal Systems, Telecommunications, Networking, Digital Signal and Image processing, Power Systems Engineering*.

Degree Requirements

Concentration Areas

All students are required to complete courses in a concentration or focus areas. The approved EE-concentration (or focus) areas and the associated courses are listed below. All curricular designations are E&C-ENGR, unless indicated.

Computers, VLSI, and Embedded Systems

Code	Title	Credits
E&C-ENGR 5534	Computer Arithmetic	3
E&C-ENGR 5535	Hdl-Based Digital Systems Design	3
E&C-ENGR 5528	Advanced Embedded Systems	3
E&C-ENGR 5542	Introduction to VLSI Design	3
E&C-ENGR 5635	Vlsi Systems Design	3
E&C-ENGR 5642	Advanced VLSI Design	3

And others

RF/Electromagnetics and Mixed Signal Systems

Code	Title	Credits
E&C-ENGR 5513	Advanced Principles of RF/Microwave Engineering	3
E&C-ENGR 5518	Advanced Radar Systems & Techniques	3
E&C-ENGR 5533	Analog Integrated Circuit Design	3
E&C-ENGR 5537	Mixed-Signal Integrated Circuit Design	3
E&C-ENGR 5572	Antennas & Propagation For Wireless Systems	3
E&C-ENGR 5606	Electromagnetic Scattering and Antenna Theory	3
And others		

Communications and Networking

Code	Title	Credits
E&C-ENGR 477	Introduction to Wireless Networking	3
E&C-ENGR 5570	Principles of Digital Communication Systems	3
E&C-ENGR 5577	Wireless Communications	3
CSEE 5110	Network Architecture I	3
CSEE 5113	Network Routing	3
E&C-ENGR 5318	Dynamical Systems and Complex Networks	3
And others		

Signal & Image Processing, and Biomedical Applications

Code	Title	Credits
E&C-ENGR 5580	Digital Signal Processing	3
E&C-ENGR 5316	Artificial Neural and Adaptive Systems	3
E&C-ENGR 5586	Pattern Recognition	3
E&C-ENGR 5590BP	Special Topics In Electrical And Computer Engineering (Biomedical Signal Processing)	3
E&C-ENGR 5590BB	Special Topics in Electrical and Computer Engineering (Machine Learning with Biomedical Applications)	3
E&C-ENGR 5590IP	Special Topics In Electrical And Computer Engineering (Digital Image Processing)	3
E&C-ENGR 5590B	Special Topics In Electrical And Computer Engineering (Biomedical Imaging)	3
E&C-ENGR 5590CI	Special Topics in Electrical and Computer Engineering (Computational Intelligence)	3
And others		

Focus Areas in Electric Power

The department recognizes a **focus** area in **Electric Power**. The available courses in this *focus* area are as listed below.

Code	Title	Credits
E&C-ENGR 436	Power Electronics I	3
E&C-ENGR 5536	Power Electronics II	3
E&C-ENGR 5556	Advanced Instrumentation and Control	3
E&C-ENGR 5558	Automatic Control System Design	3
E&C-ENGR 5560	Electric Power Distribution Systems	3
E&C-ENGR 5567	Power Systems II	3
E&C-ENGR 5568	Economics of Power Systems	3
E&C-ENGR 5569	Reliability of Electric Power Systems	3
E&C-ENGR 5590EN	Special Topics In Electrical And Computer Engineering (Sustainable Energy Systems for Engineering)	3
E&C-ENGR 5590PQ	Special Topics In Electrical And Computer Engineering (Power Quality)	3
E&C-ENGR 5590SP	Special Topics In Electrical And Computer Engineering (Transmission System Planning & Impact Studies)	3
E&C-ENGR 5664	Lightning and Switching Surges in Power Systems	3
E&C-ENGR 5670	Direct Current Power Systems	3
E&C-ENGR 5672	Power Systems Relaying	3

Degree Requirements

Beginning Fall 2013 all MSEE students (both thesis and non-thesis options) are required to complete the following course requirements:

1. The student has to complete the requirement of 4 courses from one of the 5 areas (4 concentration and one focus area). The list of these fundamental courses from each concentration/focus area is given below.

Code	Title	Credits
Computers, VLSI and Embedded Systems		
E&C-ENGR 5642	Advanced VLSI Design (Computers, VLSI and Embedded Systems)	3
or E&C-ENGR 5528	Advanced Embedded Systems	
Communications and Networking		
E&C-ENGR 5570	Principles of Digital Communication Systems	3
or E&C-ENGR 5577	Wireless Communications	
RF/Electromagnetics & Mixed Signal Systems		
E&C-ENGR 5513	Advanced Principles of RF/Microwave Engineering	3
Signal & Image Processing, and Biomedical Applications		
E&C-ENGR 5580	Digital Signal Processing	3
Focus Areas in Electric Power		
E&C-ENGR 5567	Power Systems II	3

2. The student now has to further choose 2 courses (with the E&C-ENGR designator) from the list in the above concentration/focus areas. (There is room for flexibility on how these ECE courses may be chosen.)
3. The student now has the following options to exercise for either thesis and non-thesis option areas:
- Student may take all the remaining 4 courses that are cross-listed with a CSEE designation and does *not* need any approval from the graduate (MSEE) committee (non-thesis option).
 - Student can take all the remaining 4 courses outside the MSEE degree program in which case they have to be *approved* by the graduate (MSEE) committee (non-thesis option).
 - Student can take up to 2 courses, and depending on advisor's input, one of these two courses can be a directed reading course (thesis option).

Note: a MSEE thesis is a total of 6 credit hours (typically equivalent to 2 instructional/lecture courses).

For any option (thesis or non-thesis) the total number of credit hours needed for completion of the MSEE degree program is 30.

The preceding change in requirements towards completion of the MSEE degree program was approved and voted by the ECE graduate faculty on December 10, 2012. The changes to the degree program requirements were then further approved by the CSEE faculty in January 2013. These changes will be effective Fall 2013.

Thesis Option

The Comprehensive Final Examination is required of all candidates for the Master of Science degree under the thesis option. It is arranged by the graduate faculty advisor. It is to be conducted prior to the deadline date established by the Graduate School for the semester of intended graduation. Prior to the date of the examination, each member of the committee is furnished a copy of the candidate's final thesis for review and discussion at the time of the final examination.

If pursuing the thesis option, the thesis must be submitted in complete typewritten form to the advisor and supervisory committee at least six weeks before the date the advanced degree is to be conferred. Also, the supervisory committee must have access to the thesis at least one week before the date of the defense. Students must comply with all rules and regulations governing theses outlined in the general catalog under General Graduate Academic Regulations and Information.

Directed Readings

Up to three hours of E&C-ENGR 5597 is allowed toward the Master of Science in electrical engineering. Such a course must be approved in advance (i.e., before the student takes the course) by the professor supervising the course and the graduate committee. The following information must be furnished:

- Title of the course.
- Detailed syllabus for the course.
- Textbook and references.
- The manner in which the course will be conducted (i.e. meetings, assignments, etc.).

- The manner in which the students are assessed (i.e. how many exams, presentations, reports, etc.).
- The course which it replaces, if appropriate.
- Name(s) of the instructor(s).
- Name(s) of the student(s.)
- Reasons for offering this course in a directed readings format.

BS/MS Electrical and Computer Engineering/Electrical Engineering

See the BS/MS section under Electrical and Computer Engineering in the undergraduate catalog for information about the Program.

Minor in Computer Science

Student Learning Outcomes

Students graduating from this program will:

- Students will have the ability to apply knowledge of computing and mathematics as appropriate.
- Students will have the ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
- Students will have the ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- Students will have the ability to use current techniques, skills, and tools necessary for computing practice.

Program Requirements

For students to obtain a minor in Computer Science, they must satisfy all University degree requirements (see the General Undergraduate Academic Regulations and Information section in this catalog), satisfy the requirements as set forth by the major degree (major department, major academic unit) and obtain a GPA of 2.0 or higher in the eight courses specified below, with no individual computer science grade below a C (2.0).

There are no other requirements specifically required by the minor, although some of the courses do have prerequisites from outside of SCE. In particular, MATH 110 or higher is a prerequisite for COMP-SCI 101, COMP-SCI 191 and COMP-SCI 303.

Code	Title	Credits
COMP-SCI 101 & 101L	Problem Solving and Programming I and Problem Solving & Programming I Lab	4
COMP-SCI 191	Discrete Structures I	3
COMP-SCI 201R & COMP-SCI 201L	Problem Solving and Programming II and Problem Solving and Programming II - Lab	4
COMP-SCI 281R	Introduction to Computer Architecture and Organization	3
COMP-SCI 291	Discrete Structures II	3
COMP-SCI 303	Data Structures	3
COMP-SCI 3xx/4xx	Two Upper Level Electives	6
COMP-SCI 423	Client/Server Programming and Applications	
COMP-SCI 457	Software Architecture: Requirements & Design	
COMP-SCI 458	Software Testing and Verification	

Total Credits

26

Dual Degree Programs

The School of Computing and Engineering collaborates with other institutions in our dual-degree program which leads to undergraduate degrees in both a liberal arts and sciences major and a professional engineering, computer science or information technology degree. Students enter UMKC SCE following three (or four) years at their first institution. Students who follow the guidelines and meet the admission requirements will earn a degree from their first institution and a degree from UMKC following two years of study at SCE.

Students who complete the dual degree program experience the benefits of a liberal arts and sciences education, allowing them to become better communicators, develop strong study skills and explore additional academic interests, while also finishing a professional degree program.

Admission Requirements

- Completion of a minimum of 60 credit hours of coursework
- Cumulative GPA greater than 3.00

More Information

Students who are interested in the dual degree program should consult the SCE website (<http://sce.umkc.edu>) and discuss the curriculum requirements with their home institution to be sure they are taking the correct coursework. Every program is different, depending on course offerings and general education requirements, so it is important for students interested in these programs to plan ahead.

School of Dentistry

School of Dentistry (<http://www.umkc.edu/virtualtour/sod.asp>)

650 E. 25th Street

(816) 235-2100

Fax: (816) 235-2157

(816) 235-2080 (Admissions)

(800) 776-8652 (Toll-free admissions)

(816) 235-2050 (Division of Dental Hygiene)

dentistry@umkc.edu

<http://www.dentistry.umkc.edu/>

Dean:

Marsha A. Pyle contact information (<https://cf1.umkc.edu/intapps/lookup/?LastName=pyle>)

Associate Dean for Academic Affairs:

Mary Elizabeth Kaz contact information (<https://cf1.umkc.edu/intapps/lookup/?LastName=kaz>)

Director of Business Affairs:

Jeffrey L. Primos contact information (<https://cf1.umkc.edu/intapps/lookup/?LastName=primos>)

Interim Associate Dean for Clinical Programs:

Connie L. White contact information (<https://cf1.umkc.edu/intapps/lookup/?LastName=white>)

Assistant Dean for Student Programs:

Richard H. Bigham contact information (<https://cf1.umkc.edu/intapps/lookup/?LastName=bigham>)

Associate Dean for Research and Graduate Programs:

Mary P. Walker contact information (<https://cf1.umkc.edu/intapps/lookup/?LastName=walker>)

Mailing Address

University of Missouri-Kansas City

School of Dentistry

650 E. 25th St.

Kansas City, MO 64108-2784

Academic Standards (p. 1379)

Academic/Student Support (p. 1382)

Vision, Mission and Goal Statements (p. 1429)

Information and History

General Information

All statements in this section are announcements of present policies, requirements (admission and academic progress), curricula, fees and services. They are subject to change at any time without prior notice. They are not to be regarded as offers to contract.

History

The UMKC School of Dentistry traces its roots to 1881, when the Kansas City Dental College was founded as a department of the Kansas City Medical College. In 1919 the Kansas City Dental College merged with Western Dental College to form the Kansas City Western Dental College. It became the School of Dentistry of the University of Kansas City in 1941. In 1963 the school became the School of Dentistry at UMKC.

Continuous and distinguished service for more than 135 years has established the School of Dentistry as an important institution in the region and throughout the nation.

Over the years, the school's educational standards and opportunities have increased as the school has consistently demonstrated its ability to educate well-qualified dentists and dental hygienists to contribute to the improvement of oral health. As an affirmation of this, the D.D.S., the graduate certificate programs: advanced education in general dentistry, periodontics, oral and maxillofacial surgery, endodontics, and orthodontics and dentofacial orthopedics, and the B.S. in dental hygiene are fully accredited by the Commission on Dental Accreditation of the American Dental Association.

The school is situated on the Health Sciences Campus, where Truman Medical Center, Children's Mercy Hospital and the UMKC Schools of Medicine, Nursing and Health Studies, and Pharmacy are also located.

Degrees Offered

The School of Dentistry offers a four-year professional program leading to the doctor of dental surgery (D.D.S.) degree, and the bachelor of science degree in dental hygiene (B.S.). The School offers graduate programs leading to a master of science degree in oral and craniofacial sciences or in dental hygiene education (M.S.) (http://dentistry.umkc.edu/Future_Students/DHMasterScience.shtml/), and advanced education certificates in recognized dental clinical specialties. In addition, the school participates in UMKC's Interdisciplinary Ph.D. program (p. 1419) through the discipline of oral and craniofacial sciences. Please refer to the School of Graduate Studies section of the catalog for information on admission criteria and degree requirements for the Ph.D program.

Grading System

The grading and grade-point system used by all academic programs in the School of Dentistry is defined by the University. It is outlined in the General Graduate Academic Regulations and Information section of this catalog.

Incomplete Grades

Students may earn an incomplete grade (I) due to illness or other valid reasons beyond the student's control and has been unable to complete the work in a course. A student who receives an incomplete, and who subsequently does not elect to withdraw from the course, must complete the required work by a date specified by the instructor. Failure to complete required work by this date is cause for the incomplete to be changed to an F (failure without credit). This is exclusive of those courses that are considered directed individual studies, internships, special topics, practicums, and research and thesis courses.

An incomplete grade is appropriate when enough work in the course has been completed that the student can finish the remaining work without re-enrolling in the course in question or attending additional classes. Otherwise students should initiate withdrawal (but only with permission).

Students may not re-enroll in a course for which an incomplete remains on their records.

Facilities

Clinic

The dental and dental hygiene clinics have more than 280 operatories with separate areas for pediatric dentistry, oral surgery and radiology. The clinic also contains an Innovation Clinic equipped with different operatory equipment provided by various dental manufacturers so students may practice on various dental delivery systems. Newer technology, such as electric handpieces, integrated ultrasonic units, Cerec acquisition and milling units, digital radiology (both plates and sensors), NOMAD units and axiUm (electronic patient record program) are available in the general clinic for use by students. The school uses an evidence-based approach to the disposables and supplies used in the clinic and recently incorporated an innovative impression system and fabricating milled complete dentures appliances.

The school also offers to Advanced Education Programs in Periodontics, Orthodontics, Endodontics and General Dentistry as well as joint programs in Oral Surgery and Pediatric Dentistry.

Classrooms

Three large lecture halls and five smaller classrooms/seminar rooms. All lecture halls are equipped with networked computers and modern projection systems.

Laboratories

Two state of the art dental preclinical simulation facilities with fully equipped working stations and manikins; an anatomical model laboratory.

Health Science Library

The Health Sciences Library located within the School of Medicine and adjacent to the School of Dentistry supports the curricular, scholarly and research activities of the students, faculty and staff. Extending beyond the library walls through electronic resources are nearly three hundred online databases, over two hundred online journal titles specific to Dentistry and thousands of journals in related Health Sciences, Chemistry, and Engineering that pertain to dental research and practice. Housed within the library physical collection includes over four hundred journal titles and over seventeen thousand monographs. All UMKC students have full access to each of the UMKC libraries as well as the opportunity to establish user

accounts to the Linda Hall Library, the world's foremost independent research library devoted to science, engineering and technology, located adjacent to the Volker campus.

Study Commons

Located on the third floor of the School of Dentistry is a space allocated for students to gather and study. There are seating areas to accommodate varying study habits.. Twenty-eight computers are arranged in a computer lab available for hands-on training.

Community Affiliations

Teaching relationships exist with many area community health centers, area hospitals, including Children's Mercy Hospital, Saint Luke's Hospital, Truman Medical Center and other community organization such as University Academy. Dental student spend time providing care in the Kansas City metro area and at Community Health Centers around the state...

Miscellaneous

The school also supports a full-service Biomedical Communication Department that contributes significantly to its educational and administrative missions. The Health Sciences Bookstore supplies all textbook, and some supply needs of the student body; it is housed on the Health Sciences Campus.

Outreach Programs

In keeping with its goal of developing a sense of professional and societal responsibilities, and an awareness of community needs and problems in its students, the school offers numerous outreach opportunities. Dental and dental hygiene students provide oral health care in over 30 community-based health centers. The dental school also maintains affiliations with groups invested in oral health promotion, including University Academy, Kansas City Free Health Clinic, Give Kids a Smile, Missouri and Kansas Missions of Mercy, and Students Take Action.

Research Programs

Research plays a prominent role in the School of Dentistry. The Interdisciplinary Ph.D. program, M.S. degree programs (Oral & Craniofacial Sciences and Dental Hygiene Education) as well as the advanced dental programs all have strong research components. The intent of these programs is to expose the student to basic and translational research, and clinical application. Research and the scientific method are formal parts of the educational program of all dental school students, contributing to their education, as well as serving to advance science and dentistry. There is significant external grant funding supporting the research efforts. Many of the researchers who have obtained these grants serve as mentors for dental students participating in the Summer Scholars Program. In this selective program, a limited number of students participate in a nine-week research experience in the mentor's area of research interest and present their project results at a national meeting.

Faculty

Kenneth Abramovitch; professor & chair of oral pathology, radiology, and medicine department; D.D.S. (McGill); M.S. Oral Diagnostic Sciences (University of Texas).

Richard J. Ackerman; professor emeritus; D.D.S., M.S., Certificate, Pediatric Dentistry (University of Missouri-Kansas City); Certificate, Orthodontics and Dentofacial Orthopedics (Forsyth Dental Center); Certificate, Postdoctoral Research Fellowship (Harvard University).

Cynthia Amyot^{2,3}; professor emerita; B.S.D.H., M.S., Ed.D. (University of Missouri-Kansas City).

James L. Andrews; professor emeritus; D.D.S., Certificate, Oral and Maxillofacial Surgery (The Ohio State University).

Caryn Baker; clinical assistant professor; B.S. (Pittsburg State University); D.D.S (University of Missouri-Kansas City).

Christina Baker; clinical assistant professor; B.S. Dental Hygiene (University of Missouri-Kansas City), M.Ed Educational, School, & Counseling Psychology (University of Missouri-Columbia).

Pierluigi Balice; clinical assistant professor; D.D.S. (University of Bari); M.D.S. and Certificate, Periodontology (University of Connecticut School of Dental Medicine).

John Ball, clinical professor; B.S., D.D.S. (University of Missouri-Kansas City).

Bruce F. Barker; professor emeritus; D.D.S. (University of Michigan); Certificate, Oral Pathology (University of Southern California).

Gerry J. Barker; professor emerita; B.S. (University of Michigan); M.A. (University of Missouri-Kansas City).

Timothy M. Barry; clinical assistant professor; B.A. Biology (University of Missouri-Columbia); D.D.S. (University of Missouri-Kansas City).

Melanie Simmer-Beck^{2,3}; associate professor; B.S.D.H. (University of Missouri-Kansas City); M.S. (University of Missouri-Kansas City); PhD (University of Missouri-Kansas City).

Daniel Ben Yehuda; clinical assistant professor; B.D.S. (University of Madris); M.S. in Prosthodontics (Boston University).

Neal L. Bilyeu; clinical assistant professor; premedical-Missouri Valley College; (Southwest Missouri State); D.D.S. medical - (University of Missouri-Kansas City).

Robert E. Blundell, Jr., clinical associate professor emeritus; D.D.S., (University of Missouri-Kansas City); Certificate Endodontics (U.S. Navy Postgraduate Dental School, Bethesda, MD)

Brenda S. Bohaty¹; professor; D.D.S. (University of Nebraska); M.S.D., Certificate, Pediatric Dentistry (Baylor College of Dentistry).

Bonnie Branson^{2,3}; professor emerita; B.S. (University of South Carolina); M.S., Ph.D. (Southern Illinois University-Carbondale).

Kimberly S. Bray²; professor; A.A. (Sinclair Community College); B.S.D.H., M.S. (University of Missouri-Kansas City).

Alan R. Brown; associate professor emeritus; D.D.S. (The Ohio State University); Certificate, Oral and Maxillofacial Surgery (Fitzsimmons Army Medical Center).

Erin Bumann; assistant professor; B.S., D.D.S., Postdoctoral Fellowship, Certificate in Pediatric Dentistry, M.S. (University of Michigan, Ann Arbor); Ph.D, Certificate in Training in Clinical Research (University of California, San Francisco)

Edward Cantrell; clinical assistant professor; B.S. (University of Missouri-Kansas City); D.D.S. (University of Missouri-Kansas City).

Barbara R. Clark; professor emerita; Pharm.D. (University of California).

Charles M. Cobb²; professor emeritus; D.D.S., M.S. (University of Missouri-Kansas City); Ph.D. (Georgetown University).

Eileen L. Cocjin; clinical associate professor; D.M.D. (Manila, Philippines); Certificate Pediatric Dentistry (University of Southern California-Los Angeles); D.D.S. (University Missouri-Kansas City).

Kristine Cody; assistant professor; D.D.S. (University of Iowa)

Ann Marie Corry¹; associate professor emerita; B.A. (Washburn University); M.A.L.S. (University of Denver); M.A. (University of Missouri-Kansas City).

John Cottrell; clinical instructor; B.A. (Pittsburg State University); M.A. (University of Northern Iowa).

Tim Cox; professor; endowed chair in mineralized tissue; Ph.D. Molecular Genetics (University of Adelaide)

Tsau-Mau Chou; associate professor emeritus; B.D.S. (Kaohsiung Medical College); D.Sc.D., M.Sc.D., D.M.D. (Boston University).

Robert D. Cowan professor emeritus; D.D.S. (University of Michigan); M.S., Certificate, General Dentistry (University of Texas-Houston).

Sarah L. Dallas^{2,3}; professor; B.S. Anatomical Studies (University of Birmingham); Ph.D. (University of London).

Donna N. Deines; associate professor emerita; A.B. (Drury College); D.D.S., M.S., Certificate, Prosthodontics (University of Missouri-Kansas City).

Charles L. Dunlap; professor emeritus; D.D.S., Certificate, Oral Pathology (University of Missouri-Kansas City).

Shara M. Dunlap; clinical professor; D.D.S. (University of Missouri-Kansas City).

Robert R. Edwards; clinical professor; B.A. (Kansas University); D.D.S. (University of Missouri-Kansas City); General Practice Residency (Veteran's Administration, Portland, OR); Certificate Endodontics and M.S. (Northwestern University, Evanston, IL).

J. David Eick^{2,3}; Curators' professor emeritus; B.S. (University of Michigan); M.S. (George Washington University); Ph.D. (State University of New York).

Dean A. Elledge; associate professor emeritus; B.S. (Missouri Southern State College); D.D.S. (University of Missouri-Kansas City); M.S. (University of Minnesota).

Sally Elledge; interim director of division of dental hygiene, clinical associate professor; B.S. (University of Missouri-Kansas City); M.S. (University of Missouri-Kansas City)

C. Weldon Elrod; clinical professor emeritus; D.M.D. (Medical College of Georgia); Certificate, Prosthodontics (Walter Reed Army Medical Center).

Harvey C. Eplee; associate professor emeritus; B.S. (Kansas State University); D.D.S. (University of Missouri-Kansas City); M.P.A. (University of Kansas); M.J. (Loyola University).

E. Grant Eshelman; clinical associate professor emeritus; A.B. (Franklin-Marshall College); M.S. (University Missouri-Kansas City); D.D.S. (Columbia University).

Philip H. Feil; professor emeritus; B.A. (Sir George Williams University); M.S. (State University of New York); Ed.D. (Indiana University).

Brett L. Ferguson; adjunct associate professor; B.S.(Lane College); D.D.S., Certificate, Oral and Maxillofacial Surgery (University of Missouri-Kansas City).

David J. Ferguson; associate professor emeritus; D.D.S., Certificate Prosthodontics (University of Missouri-Kansas City).

Kenneth Frick; clinical professor; BS (University of California, Davis); DDS (University of Missouri-Kansas City); Certificate General Practice Residency (USAF GPR Barksdale AFB); MS (Marquette University Graduate School); Certificate in Endodontics (Marquette University School of Dentistry).

Lynn Roosa Friesen; clinical assistant professor; B.S. (Kansas State University); D.D.S., Certificate, Periodontics and M.S. (University of Missouri-Kansas City).

Sharon A. Furby; clinical associate professor; RPh, D.D.S. (University of Texas-Houston).

Jared Gerhardt; clinical associate professor; B.A., B.S. (Southwestern College); D.D.S. (University of Missouri-Kansas City)

Tanya Gibson²; clinical assistant professor; BA (Capital University); DDS (Meharry Medical College School of Dentistry); Certificate in Oral and Maxillofacial Pathology (Long Island Jewish Medical Center).

John A. Gilbert; associate professor emeritus; D.M.D. (University of Oregon); (Washington University); M.L.A. (Baker University).

Alan G. Glaros¹; professor emeritus; A.B. (Stanford University); Ph.D. (State University of New York).

Lance Godley, clinical assistant professor; B.S. (Florida State University); D.M.D. (University of Florida).

Jeff Gorski; professor emeritus.

Eric Gottman; clinical associate professor; D.D.S. (University of Missouri-Kansas City); Certificate, Prosthodontics (University of Missouri-Kansas City).

Paul Hansen; clinical professor; D.D.S.

Patrick K. Hardman; professor emeritus; B.S. (Fort Hays State University); D.D.S., M.S., Certificate, Oral Diagnosis/Oral Medicine (University of Missouri-Kansas City).

Terrance B. Harris; associate professor emeritus; B.S. (University of Kansas); D.D.S., M.S., Certificate, Oral Diagnosis/Oral Medicine (University of Missouri-Kansas City).

James K. Hocott; associate professor emeritus; B.S. (Kansas State University); D.D.S. (University of Missouri-Kansas City).

Tamara Jan Hoffman; clinical instructor; B.S.D.H. (University of Missouri-Kansas City).

Lyndal G. Holmes; (<https://cf1.umkc.edu/intapps/lookup/?LastName=holmes>) associate professor emeritus; B.S. (Drury College); D.D.S., M.S., Certificate, Periodontics (University of Missouri-Kansas City).

Lorie Holt; associate professor; B.S., M.S. (University of Missouri-Kansas City).

Robert Hurst; clinical assistant professor; D.D.S. (University of Missouri-Kansas City).

Shirley H. Hung; associate professor emerita; D.D.S. (National Taiwan University); M.S. (University of Missouri-Kansas City); D.D.S. (University of Southern California-Los Angeles).

Gregory Johnson; clinical professor emeritus; B.S. (Fort Hays State University); D.D.S. (University of Missouri-Kansas City); M.A. (Antioch University).

Mark Johnson^{2,3}; professor; B.S. (University of Minnesota-Minneapolis); Ph.D. Biochemistry (University of Minnesota Mayo Graduate School of Medicine-Rochester).

Michael Jurkovich; clinical assistant professor; B.S. (University of Kansas); D.D.S. (University of Missouri-Kansas City); General Practice Residency (St. Francis Hospital, Honolulu, HI); Fellowship (American Association of Hospital Dentists).

Solon Kao vice-chair of oral surgery & hospital dentistry and clinical associate professor; B.E. (Vanderbilt); D.D.S. (University of Tennessee); Certificate, Oral and Maxillofacial Surgery (Medical College of Georgia).

Moid Karwaa; clinical assistant professor; assistant director of AEGD; D.D.S. (University of Missouri-Kansas City); M.S. Biomaterials & Biometrics (NYU).

Jerald O. Katz²; professor emeritus; B.S. (Albright University); D.M.D. (University of Pittsburgh); M.S. (University of Texas).

Mary Elizabeth (Liz) Kaz²; associate dean for academic affairs and professor, clinical associate professor; B.S., M.S. (University of Missouri-Kansas City); EdD (Nova Southeastern University).

Nancy Keselyak²; associate professor; B.S. (University of Maryland); M.A. (Simon Fraser University).

Susan K. Kessler; clinical assistant/associate professor; B.S., D.D.S. (University of Missouri-Kansas City).

John W. Killip; clinical professor emeritus; B.S. (Northern Arizona University); D.D.S. (University of Missouri-Kansas City).

James C. Kulild²; professor emeritus; D.D.S. (University of Missouri-Kansas City); M.S. (George Washington University).

Stefan Lohfeld; assistant professor; Dipl.-Ing. (University of Bremen, Germany); Dr.-Ing. (RWTH Aachen University).

Owen Lonergan; clinical assistant professor; B.S. (University of California, San Diego); M.P.H. (Arizona School of Health Sciences); D.M.D. (Arizona School of Dentistry and Oral Health, AT Still University); M.D., Advanced Education in Oral & Maxillofacial Surgery (University of Missouri-Kansas City).

Alison Louie; clinical assistant professor; B.S., (University of California-Los Angeles), D.D.S., (University of Pacific School of Dentistry-San Francisco)

James W. Lowe; professor emeritus; A.B. (William Jewell College); D.D.S., M.S. (University of Missouri-Kansas City).

Simon R. MacNeill²; professor; B.D.S. (King's College, London); D.D.S. (University of Missouri-Kansas City); Certificates, General Dentistry, General Practice, Periodontics (Louisiana State University).

William E. Mayberry; professor emeritus; A.B. (Washington University); M.S. (Southern Illinois University); Ph.D. (University of Illinois).

Carole P. McArthur^{2,3}; professor emerita; B.Sc., Ph.D. (University of Otago); M.D. (University of Missouri-Kansas City).

***Michael D. McCunniff**²; associate professor emeritus; B.S. (Creighton University); M.S. (University of Iowa); D.D.S. (University of Missouri-Kansas City).

Gary D. McReynolds; clinical assistant professor; B.S., D.D.S. (University of Missouri-Kansas City).

Melynda Meredith; clinical assistant professor; B.S. Biology (University of Missouri-Columbia); D.D.S. (University of Missouri-Kansas City).

Tanya V. Mitchell²; professor; B.S., M.S. (University of Missouri-Kansas City).

David L. Moore; professor emeritus; B.S. (Oklahoma State University); D.D.S., M.A., M.S. (University of Missouri-Kansas City).

Michael Murphy; clinical assistant professor; D.D.S., Advanced Education in General Dentistry (University of Missouri-Kansas City); M.B.A. (Indiana University); M.S. (University of Minnesota).

Jack Nelson; clinical associate professor emeritus; BA (Ottawa University); MPA (University of Missouri-Kansas City); DDS (University of Missouri-Kansas City); Geriatric Oral Health Fellowship Certificate (University of Missouri-Kansas City).

Aparna Naidu; clinical associate professor; B.A. (Saint Louis University); D.D.S. (Northwestern University Dental School, Chicago); Certificate (Southern Illinois University School of Dental Medicine); M.S., Certificate (Baylor College of Dentistry-Texas A&M Health Science Center).

James Stephen Oakson; clinical assistant professor; D.D.S. (University of Missouri-Kansas City).

Gerald Ogilvie; clinical assistant professor; BA (University of Kansas); DDS (University of Missouri-Kansas City).

James Osborne; clinical assistant professor; D.D.S. & Certificate in Orthodontics (University of Missouri-Kansas City).

Pamela R. Overman²; professor emerita; B.S., M.S. (University of Missouri-Kansas City); Ed. D. (University of Kansas).

Tressa Parkinson; clinical professor; D.D.S. (University of Missouri-Kansas City); GPR (VA Leavenworth, KS).

Douglas A. Pearson; clinical assistant professor; B.A. (University of KS); D.D.S. (University of Missouri-Kansas City); Certificate, General Practice Residency (Veteran's Administration, Kansas City, MO).

Cynthia S. Petrie¹; associate professor; D.D.S. (Athens, Greece); D.D.S., M.S., Certificate, Prosthodontics (University of Missouri-Kansas City).

David J. Pippin; associate professor emeritus; B.S., D.D.S., M.S., Certificate, Periodontics (University of Missouri-Kansas City).

Richard G. Prine; clinical assistant professor; B.S., D.D.S. (University of Missouri-Kansas City).

John H. Purk^{2,3}; professor emeritus; B.A. (University of Missouri-St. Louis); D.D.S., M.S., Ph.D. (University of Missouri-Kansas City).

Marsha A. Pyle, dean and professor; D.D.S., (Case Western Reserve University); Certificate General Practice Residency, (Veterans Administration Medical Center, Cleveland, OH); M.Ed., (Cleveland State University).

John W. Rapley²; professor emeritus; B.A. (University of Missouri-Columbia); D.D.S. (University of Missouri-Kansas City); M.S. (University of Texas-Houston); Certificate, Periodontics (Wilford Hall Air Force Medical Center).

Lorraine Forgas Rauckman; associate professor; A.A.S.-DH (Pueblo Community College); B.S.D.H., M.S. (University of Missouri-Kansas City).

G. Juliana Redford; clinical assistant professor; D.D.S. (Universidad Santo Tomas De Aquino); Certificate, Pediatric Dentistry (Bogota, Columbia)

Ingrid Reed; clinical assistant professor emerita; D.D.S., certificate orthodontics, M.S. (SUNY-Buffalo).

Michael J. Reed; professor and dean emeritus; B.Sc. Hons. (University of Durham); B.D.S. (University of Newcastle-upon-Tyne); Ph.D. (State University of New York at Buffalo).

Richard L. Reiff; associate professor emeritus; B.A. (William Jewell College); D.D.S., M.S. (University of Missouri-Kansas City).

Jean-Marc Retrouvey; professor; chair of orthodontics & dentofacial orthopedics; D.D.S. (University of Montreal).

Christopher D. Rice; associate professor emeritus; B.S., D.D.S. (Creighton University); M.A. (University of Missouri-Kansas City).

Ronald Riley; clinical associate professor; B.A. (Wichita State); D.D.S. (University of Missouri-Kansas City).

Thomas Russell; clinical assistant professor; B.S. Biology, D.D.S. (University of Missouri-Kansas City).

Ashley Ryan; clinical assistant professor; B.S.D.H. Dental Hygiene (University of Missouri-Kansas City).

Mabel Salas, ; clinical assistant professor, D.D.S. (San Marcos University, Lima, Peru) certificate periodontology, M.S. (Ohio State University, Columbus, OH).

Keerthana Satheesh²; associate professor; B.D.S. (Sharavathi Dental School, Kuvemp University, Shimoga, India); D.D.S. (University of Missouri-Kansas City), M.S. (University of Minnesota).

Catherine Saylor-Boles; associate professor; B.S.D.H., M.S. (University of Missouri - Kansas City).

JoAnna Scott; assistant professor; B.S. (Missouri Southern State University); M.S. (Missouri State University); M.S., Ph.D. (University of Washington).

Linda S. Seabaugh; clinical assistant professor; D.D.S. (University of Missouri-Kansas City).

Rudane E. Shultz; professor emeritus; B.S., D.D.S. (University of Pittsburgh); Certificate, Oral and Maxillofacial Surgery (Walter Reed Army Medical Center).

Becky Smith; clinical associate professor; B.A., D.D.S. (University of Missouri - Kansas City).

Paulette Spencer³; curators' professor emerita; D.D.S., Ph.D. (University of Missouri-Kansas City); M.S. (Rennselaer Polytechnic Institute).

Narayanan Sreenivasan; clinical associate professor; B.D.S.(The Tamil Nadu Dr. M.G.R. Medical University), M.D.S. Oral & Maxillofacial Surgery (University of Hong Kong)

Austin E. Stiles, Jr.; associate professor emeritus; B.A. (Gettysburg College); D.D.S. (Temple University).

Kelly Suchman; clinical assistant professor; A.B. (Washington University in St. Louis); D.D.S., Advanced Education in General Dentistry Certificate (University of Missouri-Kansas City).

Julie Sutton; assistant professor; B.S., M.S. (University of North Carolina-Chapel Hill).

Chih-Yun Tao; clinical assistant professor; D.D.S., M.S. Periodontics (Tufts University).

Tiffany Tavares clinical assistant professor; D.D.S. (Universidade Federal Fluminense); Certificate and DMSc, Oral Medicine (Harvard School of Dental Medicine/Brigham and Women's Hospital).

Timothy S. Taylor; associate professor emeritus; B.A. (University of Missouri-Columbia); D.D.S. (University of Missouri-Kansas City).

Bharika Thakkar; clinical assistant professor; B.D.S. (KBH MGVS School of Dentistry), Advanced Education in Prosthodontics (Rutgers), Post Graduate Fellow in Prosthodontics (SUNY Buffalo).

David J. Thein; clinical assistant professor; B.A. (Southern Methodist University); D.D.S. (University of Missouri-Kansas City); Certificate, General Practice (Hennepin County Medical Center); M.S.D. (Baylor University).

John W. Thurmond; associate professor emeritus; D.D.S. (Creighton University); M.S. (University of Texas-Houston).

Daniel E. Tira; professor emeritus; B.S. (Benedictine University); Ph.D. (The Ohio State University).

Maxine N. Tishk; professor emerita; A.S. (State University of New York-Farmingdale); B.S.(Boston University); M.S.D.H.E. (University of Michigan).

Yesim Tunkuc; clinical professor, B.D.S. (Istanbul University, Istanbul, Turkey); certificate prosthodontics, M.S. clinical research (New York University College of Dentistry, NYC, NY).

John Uhlenhake; clinical assistant professor; D.D.S.

Christopher J. Van Ness; research assistant professor; B.S. (Missouri Western State University), M.A., certificate clinical research (University of Missouri-Kansas City), Ph.D. General Psychology (Capella University, Minneapolis, MN).

Marsha Voelker; associate professor; B.S.D.H., M.S. (University of North Carolina-Chapel Hill).

Thomas A. Vopat; clinical associate professor; B.S. (Fort Hays State University); D.D.S. (Creighton University).

Mary P. Walker^{2,3}; associate dean for research and graduate programs and professor; M.S., (North Dakota State); D.D.S. (University of Nebraska); Ph.D. (University of Missouri-Kansas City).

Yong Wang^{2,3}; professor; M.S. Polymer Materials Science (University of Science and Technology Chengdu, China); Ph.D. Polymer Science (Sichuan University, China).

Rebeca Weisleder; clinical assistant professor; D.D.S. (Universidad Nacional Autonoma de Mexico); Preceptorship in Endodontics (University of Texas Health Science Center at San Antonio); Certificate in Endodontics (University of North Carolina); Fellowship in Medical Education (University of Texas Health at Houston); Master in Medical Education (University of Houston).

Linda M. Wells; clinical associate professor, B.A. biology, D.M.D. (Temple University School of Dentistry, Philadelphia, PA); certificate general practice residency (Cleveland Metro-Health Center, OH); M.B.A. management (Yale University School of Management, New Haven, CT).

Meghan Wendland; assistant professor; D.D.S. (UCLA), M.P.H. (Dartmouth), Dental Public Health (NYU).

Connie L. White; interim associate dean for clinical programs, associate professor and assistant dean for community relations and communication; B.A., D.D.S., Certificate, Oral Diagnosis/Oral Medicine (University of Missouri-Kansas City).

Brian J. Williams; clinical assistant professor; B.S. (Loyola Marymount University); D.D.S. (University of Missouri-Kansas City).

Derek R. Williams; clinical associate professor; B.S. (Rockhurst College); D.D.S. (University of Missouri-Kansas City); M.S. (University of Iowa).

Robert M. Wilson; clinical associate professor; B.S. (Kansas State University), D.D.S. (University of Missouri – Kansas City).

Gerald D. Woolsey; professor emeritus; B.S. (University of Texas); D.D.S. (Baylor College of Dentistry); M.S. (University of Michigan); Certificate, Fixed Prosthodontics (Broke Army Medical Center).

Ahmed Zarroug; clinical assistant professor; B.D.S. (Tripoli University Faculty of Dentistry); Doctor of Science, Certificate of Advanced Graduate Studies in Advanced Education in General Dentistry (Boston University).

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

⁴ Located at UM-St. Louis campus

Undergraduate Undergraduate Degrees:

- Dental Hygiene Clinical Entry Level program
- Dental Hygiene Degree Completion Program

Graduate Graduate Degrees:

- Master of Science in Oral and Craniofacial Sciences
- Master of Science in Dental Hygiene Education
- Oral and Craniofacial Sciences Interdisciplinary Ph.D.
- Advanced Education Programs

- Advanced Education in General Dentistry
- Endodontics
- Orthodontics and Dentofacial Orthopedics
- Periodontics

Professional

Professional Programs:

- Doctor of Dental Surgery Program

Academic Standards

Professional education in the health sciences manifests characteristics that are unique among advanced educational programs. Academic Standards of the School of Dentistry are established to ensure that the public, whose health will be entrusted to graduates of its programs, will receive care of professionally acceptable quality and that the care will be provided in an ethical and professional manner.

Standards of Scholarship

A. A predoctoral dental or pre-baccalaureate dental hygiene student must maintain at least a 2.5 grade point average each semester in their program. Failure to attain a 2.5 in any semester will result in the student being placed on probation for the next semester. In order for a semester to count toward removing a student from probation, the student must be enrolled full time - at least five hours in summer or 12 hours in fall or spring.

All students who are placed on probation should review their academic progress with the Chair of the Academic Standards Committee or the Coordinator of Academic Support Services and may be asked to appear before the Committee. A second consecutive semester of a below 2.5 grade point average will result in dismissal from the predoctoral or pre-baccalaureate dental hygiene program. A total of three semesters with GPA's below 2.5 will result in dismissal from the students' program. Two semesters separated by a summer session in which the student is enrolled in less than five graded hours will count as consecutive semesters. Two semesters separated by a leave of absence will count as consecutive semesters.

B. The failure of any course (receiving a grade of F or No Credit) will necessitate additional work to remove or replace the F or No Credit. This will consist of repeating the course the next time it is offered at the School of Dentistry or completion of a remediation plan. The course of action that is offered a student will be determined by the Academic Affairs Dean in consultation with the course director. If a course is repeated at UMKC, the student will receive whatever grade he or she earns in the repeated course. Both grades will appear on the student's transcript and will be included in the student's grade point average. With the approval of the course director, the Academic Affairs Dean may approve a plan to repeat a comparable course at another school.

If a remediation plan is to be developed, the plan will be developed by the course director with the approval of the Academic Affairs Dean. Remediation plan examples include :

1. Independent study for a number of weeks followed by an examination.
2. Remedial summer laboratory project followed by pre-clinical laboratory examination/s.
3. A series of written exercises followed by an examination.
4. Clinical mentoring followed by competency assessment
5. Other appropriate instructional assignments

If a student successfully completes a remediation plan his or her grade of F or No Credit will be changed to a grade of D (no credit to credit). A failure or No Credit in the remediated or repeated course/s will result in dismissal from the program.

A failed course may result in an altered curriculum plan which may result in an extension of the student's academic program. This altered curriculum will be arranged with the approval of the Academic Affairs Dean in consultation with the course director/s. Students who fail (F or NC) more than one course in any semester will be dismissed from their academic program.

C. A DDS student who fails a National Dental Board Examination three times will be dismissed from the DDS program.

D. UMKC has a Latin Honors system of recognition of graduating undergraduate and first professional students. This recognizes those students who, in the opinion of the faculty, have met the Standards of Professional Conduct, as well as the Academic Standards of the School of Dentistry for each program. Effective Fall 2012, the GPA requirements for Latin Honors for dental hygiene students are as follows: Summa Cum Laude: 3.975-4.0 GPA; Magna Cum Laude: 3.950-3.974 GPA; Cum Laude: 3.900-3.949 GPA as of the end of the fourth term of the dental hygiene program. The academic requirements for dental students for Latin Honors are as follows: Summa Cum Laude: graduating in the top 5% of the class; Magna Cum Laude: graduating in the top 6-10%; Cum Laude: graduating in the top 11-20% (based on the GPA at the end of the ninth term of study in the dental program. All dental students so recognized must attain at least a GPA of 3.75 or beyond. This will be noted on the graduate's transcript and diploma.

E. Academic standards for advanced education students will be established and monitored through the Advanced Education Committee.

Standards of Professional Conduct

Preamble

Through decades of experience, education, and service, the dental and dental hygiene professions have earned the trust of patients and the public at large. This trust represents a unique relationship which, when valued and upheld, establishes the very real bond that exists when a dental professional is asked to provide patient care. Trust demands the dentist and dental hygienist place the needs of the patient ahead of their own interests. The beginnings of this intrinsic trust are developed at the University of Missouri-Kansas City School of Dentistry.

The University of Missouri-Kansas City School of Dentistry is committed to providing excellent dental care. Students* in the dental, dental hygiene and advanced education programs at the University of Missouri-Kansas City School of Dentistry are expected to conduct themselves in accordance with the high ethical standards required of health professionals. Graduates will be required to take responsibility for the health and well-being of their patients and are expected to demonstrate patterns of behavior that are consistent with professional standards and deserving of the public's trust.

These Standards of Professional Conduct are drawn from the Principles of Ethics and Code of Professional Conduct of the American Dental Association, and the American Dental Hygienists' Association Code of Ethics. Students should aspire to meet the high ideals of their professions, which may exceed their legal duties, but must meet the baseline standards expressed in the School of Dentistry's Standards of Professional Conduct. The School of Dentistry faculty should be effective advisors and mentors in the process of growth in this vital area. **The matriculation process affords the opportunity to learn together, support one's colleagues and encourage growth through challenges.**

The following Standards of Professional Conduct articulate expectations of UMKC School of Dentistry students during the time you spend in the school as you transition into your practice of the profession of dentistry or dental hygiene. Maturation, discernment, and wisdom will be needed as you assume the role of dentist or dental hygienist.

1. **Nonmaleficence – Do No Harm**: the student strives to first do no harm.

- a. Patients are treated according to the School of Dentistry's Standards of Care, and their preferences and desires must be considered in treatment decisions.
- b. No harm or potential harm is done to the patient either through intent, ignorance, lack of preparation for the patient encounter, lack of skill, or personal impairment of any kind.
- c. No patient is "abandoned," which is defined as discontinuance of care without just cause and without giving the patient adequate notice and the opportunity to obtain the services of another provider.

2. **Veracity & Fidelity**: the student maintains high standards of academic and professional honesty and integrity.

- a. The student is honest during didactic, preclinical, and clinical communications, assignments and evaluations.
- b. The student will not engage in, facilitate or permit unfair advantage by utilizing unauthorized aids or by assisting another student during a didactic, preclinical, or clinical evaluation in a manner not prescribed by the instructor.
- c. The student will not alter, forge, falsify, or fabricate information, documentation, or service.
- d. The student maintains confidentiality of patient information.
- e. The student strives to attain high levels of competence, admit errors and faulty treatment to faculty, and does not knowingly mislead others or promote oneself at the expense of others.
- f. The student comes to class, lab, and clinic prepared so that the time can be maximized and patient care is optimally provided.

3. **Responsibility and Sense of Duty**: the student fulfills duties and obligations of the profession of dentistry and dental hygiene which are expected by the public.

- a. The student becomes familiar with and adheres to the codes of ethics promoted by the American Dental Association, and the American Dental Hygienists' Association
- b. The student's responsibility parallels the responsibility of professional practitioners who maintain high professional standards by holding each other accountable.
- c. The student maintains professional provider-patient relationships.
- d. The student is dedicated to helping patients, colleagues, the profession, and society to reach their maximal potential.
- e. The student maintains quality of care while addressing conflicts of interest.
- f. The student engages in personal and professional conduct that reflects positively on the UMKC School of Dentistry and the profession.

g. The student strives to uphold the dignity and respect of the profession of dentistry by his or her dress, personal appearance, conduct, and conversation.

4. Justice and Respect for the Rights of Others: the student respects the rights, privileges, and property of other members of the School of Dentistry, the University, and the professions of dentistry and dental hygiene.

- a. The student deals with faculty, staff, peers, and patients in a dignified, considerate manner and with a spirit of cooperation.
- b. The student views and treats all people encountered in an academic, clinical or cyberspace capacity equally in regards to liberties, rights, respect, acceptance, and opportunities.
- c. The student places the patient's welfare (i.e., the provision of competent and timely delivery of dental care within the bounds of clinical circumstances as presented by the patients, such as needs, desires and values) as paramount, taking precedence above all else. This also includes the obligation to a) identify and report perioral or other signs of abuse and neglect, and to consult with faculty to report suspected cases to proper authorities as required by law; and b) report instances of faulty treatment, whether intentional or not, to the appropriate faculty member.
- d. All standards and requirements of patient care established by the School of Dentistry are followed at all times.
- e. The student submits his or her own original work in a manner prescribed by the instructor and with the expectation that the grade reflects only that student's achievement.
- f. The student is respectful toward the learning process and to those involved with it.
- g. No student shall create a disruption in the learning process through behaviors that are not conducive to an academic and patient care environment.
- h. The student respects the ideas and words of others by attributing the quoted or paraphrased portions to their original sources.

In addition to the conduct detailed in the preceding sections, a student is subject to the University of Missouri Student Conduct Code (Section 200.010) as administered by the Office of the Provost and the Vice Provost for Student Affairs / Dean of Students (except for provisions dealing with academic dishonesty which fall within the School of Dentistry Standards of Professional Conduct).

Anyone who has reasonable cause to believe that a student has acted unethically, or is in violation of law or policy, is obligated to take action by asking the violator to refrain from the behavior, and/or if not satisfactorily addressed by the violator or severity calls for further action, to bring the matter forward to a supervisor, or the Associate Dean for Student Programs or his/her designee. The Assistant/Associate Dean for Student Programs or his/her designee will follow the process identified in the *Procedures for Violations of the Standards of Professional Conduct*, to determine whether there has been a violation and whether charges/sanctions should be brought. Violations for advanced education or graduate students in regards to the Standards of Professional Conduct will be monitored through the Associate Dean for Research & Graduate Programs and the Advanced Education Committee.

*Student Defined: In this document, "student" shall refer to any person having once been admitted to the School of Dentistry who has not completed a course of study and who intends to or does continue a course of study in or through the School of Dentistry. For the purpose of these rules, student status continues whether or not the University's academic programs are in session. *Portions of the above standards language is adapted with permission from the Creighton University School of Dentistry Honor Code, ©2015-2016*

Participation in Graduation Ceremony Policy

The Doctor of Dental Surgery Degree requirements include satisfactory completion of the program including the demonstration of competencies expected of a graduating student and satisfactory completion of all program requirements. In addition, graduates must attain a passing score on Part I and Part II of the National Board of Dental Examinations (Class of 2023 and thereafter, Integrated National Dental Board Examination), a cumulative grade point average of 2.5 or higher for the student's period as a dental student, and a demonstrated ability to meet the Standards of Professional Conduct.

In the event a student will not successfully meet all of the above requirements by the spring commencement date, the student will be precluded from participation in the spring DDS graduation ceremony. Fourth year students who have not met these requirements and who the faculty, in their discretion, have determined will be unable to complete all program requirements by the end of the subsequent summer semester, will not be allowed to walk during the spring graduation ceremony. Fourth-year students will receive official notification from the Academic Dean not later than April 15th of their fourth year, should their progress in meeting the program requirements preclude them from participation in spring graduation ceremonies.

Students who are notified that they are precluded from participating in spring graduation ceremonies may request a meeting with the Dean of the School of Dentistry to explain why their extraordinary circumstances should be considered in allowing them to walk. The Dean's decision on whether the student is allowed to walk shall be final.

Students that extend into the fall semester to complete program requirements will be invited to attend the following spring commencement ceremony.

Academic/Student Support Services

Academic Support Services

The School of Dentistry provides a comprehensive academic support program which includes time management, study strategies, and test taking skills. An interceptive system of continuous academic monitoring is in effect. Students who may be experiencing academic difficulty during a term are identified and advised. This results in an individualized plan of action to overcome any deficiencies. In addition, personal counseling assistance is available to all students who state or demonstrate a need.

Office of Student Programs

The Dental School's Office of Student Programs is concerned with four primary areas of focus and responsibility:

- Admissions/recruitment
- Diversity Programming
- Student records
- Student support services

The majority of student services are provided by this office. In other cases, the student is referred to the appropriate University student affairs offices if necessary. Student Support Services provide financial aid (initial assistance and referral), counseling services (initial assistance and referral), a housing file and referral, and other services.

Financial Aid

Financial assistance is available from a number of sources, primarily those programs supported by federal legislation (such as the Federal Direct Loan programs and Health Professions Student Loan). Information on most financial aid programs available to School of Dentistry students may be found in the School of Dentistry section of the Financial Aid Charts at <http://www.umkc.edu/finaid/>. Additional information may be gathered from

Office of Student Programs
School of Dentistry
(816) 235-**2080**

or from

University of Missouri-Kansas City
Financial Aid and Scholarships Office
101 AC
5100 Rockhill Road
Kansas City, MO 64110-2499
(816) 235-**1154**

or from

University of Missouri-Kansas City
Financial Aid and Scholarships Office
1418 Health Sciences Building (HSB)
2464 Charlotte
Kansas City, MO 64108-2718
(816) 235-**6783**

The student should apply for aid as soon as possible after acceptance into the particular program of study.

Advanced Education Programs

Chair, Advanced Education Committee:

Mary P. Walker, DDS, PhD, Associate Dean for Research and Graduate Programs

The School of Dentistry offers curricula leading to advanced education dental certificates in each of four clinical dental specialty areas (Endodontics, Orthodontics and Dentofacial Orthopedics, and Periodontics) and a certificate in Advanced Education in General Dentistry (AEGD). In addition, the School of Dentistry offers curricula leading to Master of Science graduate degrees in either Oral and Craniofacial Sciences or Dental Hygiene Education. The School participates in the Interdisciplinary PhD program through the Department of Oral and Craniofacial Sciences (OCS). The OCS department research focus areas are: Biomaterials/Bioengineering of Biological Tissues & Replacements, Mineralized Tissue Biology and Translational and Clinical Research.

Application Information & Deadlines

Application Information

All applicants to the advanced education certificate programs (Advanced Education in General Dentistry, Endodontics, Orthodontics and Dentofacial Orthopedics, and Periodontics) require the Postdoctoral Application Support Services (PASS) application available at www.adea.org (<http://www.adea.org/>). All sections of the PASS application should be completed fully. Official dental school transcripts should be submitted directly to PASS. A minimum dental school 3.0 GPA is required for applicants to all Advanced Education programs. Official National Dental Board Exam scores should be submitted directly to PASS. Since the NBDE scores are reported on the PASS application, official scores do not need to be sent to UMKC.

The GRE is required for all applicants applying to the Orthodontics program and is highly recommended for those applying to the Periodontics program. (For any Periodontics or Endodontics selected applicants interested in applying later for concurrent enrollment in the OCS MS program, the GRE will be required.) Applicants to the Endodontics program are required to take the Advanced Dental Admission Test (ADAT). The ADAT is preferred but not required for the Advanced Education in General Dentistry; and for Periodontics programs. Across programs, scores should be self-reported (GRE) or Official scores submitted directly (NBDE & ADAT) on the PASS application. Official GRE scores should be submitted directly to UMKC (GRE code is 6872). Be aware that approximately three weeks are required by the service to process PASS applications and deliver them to the designated programs. The length of this processing period should be considered by the candidate in order to meet relevant application deadlines. **An applicant copy of the PASS application should not be sent to UMKC.**

Applicants applying to any of the advanced education programs must be a U.S. citizen or permanent resident. Applicants must also submit evidence of graduation from a school of dentistry accredited by the American Dental Association or the Canadian Dental Association.

Residents accepted into the Endodontics, Orthodontics, and Periodontics programs must successfully complete a U.S. regional or equivalent Canadian clinical licensure exam prior to or no later than the end of the first year of residency.

All applicants are required to submit the **Institutional Evaluation AND Professional Evaluation Form (PEF)** as part of their completed PASS application. A minimum of three professional evaluators (dental faculty) are required to submit evaluations for the PEF. Additional letters of recommendation should not be sent to UMKC.

Additional information, as identified below, must be submitted directly to the UMKC School of Dentistry, Office of Research and Graduate Programs, 650 East 25th Street, Kansas City, MO 64108.

- A copy of permanent resident card (if applicable).
- A UMKC application and application fee are required of all applicants. Upon receipt of your PASS materials you will be emailed a link to the general UMKC application

Additional resumes, CVs, personal photos, or information not received as part of the PASS application will be destroyed upon receipt.

The advanced education certificate programs in Periodontics or Orthodontics & Dentofacial Orthopedics participate in the **National Matching Services (MATCH)** process. Candidates to these programs must also register for this service within the ADEA PASS applicant portal (www.adea.org (<http://www.adea.org/>)). There are two phases of the MATCH process, each with its deadline date for receipt of Rank Order List forms from applicants. The Phase I deadline (typically toward the end of November each year) is for applicants to the Periodontics or Orthodontics & Dentofacial Orthopedics program.

General admissions questions concerning advanced education programs should be directed to the Office of Research and Graduate Programs at (816) 235-6342. However, specific questions regarding any advanced education program should be directed to the pertinent program director. Advanced education program directors along with their telephone numbers are identified in a subsequent section.

Application Deadline

Application deadline dates for advanced dental certificate programs are as follows:

Advanced Education in General Dentistry	October 1
Endodontics	August 1
Orthodontics	August 15
Periodontics	August 1

The deadline date for receipt of applications at the school is one year before the anticipated enrollment in program.

Financial Assistance

Please be advised that the information provided here is of a general nature only.

Newly admitted advanced dental education students (such as AEGD, Endodontics, Orthodontics, and Periodontics) will receive information regarding financial aid. Students who are interested in obtaining financial aid are advised to contact the Hospital Hill Financial Aid Office for more details and guidance.

Hospital Hill Financial Aid Office - Location Address: 1418 Health Sciences Building on UMKC Hospital Hill Campus.
 Office Hours: 8:00am-5:00pm Monday-Thursday
 (816) 235-6783
 FinAidHospitalHill@umkc.edu

There are three types of financial aid for advanced education students:

1. Federal Stafford Unsubsidized Loans
2. Federal Graduate PLUS Loans
3. Private Student Loans

Separate financial aid applications are required for the summer term and for the fall/spring terms. Students apply for loans via the FAFSA website www.fafsa.gov (<http://www.fafsa.gov/>). It advised that students consult the Hospital Hill Financial Aid Office for the priority application deadline and guidance in the application process.

Enrollment Fees

Typical credit hour enrollment for advanced education students is 5 credits in the Summer semester and 6 credit hours in the Fall and Spring semesters. This enrollment model applies for AEGD, Endodontics, Orthodontics and Dentofacial Orthopedics, and Periodontics certificate programs.

When taking 6 credit hours or fewer each semester, Missouri non-residents are not required to pay the out-of-state tuition rate. To estimate costs for attendance, please visit the cashier's website: <http://www.umkc.edu/finadmin/cashiers/dentistry-tuition-fee-rates.asp>.

Academic Standards/Procedures: Advanced Education Students

The following academic standards and the procedures to be used in dealing with cases of academic difficulty apply to students in all advanced education/graduate programs of the School of Dentistry.

Standards of Scholarship

1. Advanced education students, regardless of classification, must maintain a 3.0 (B) GPA for all coursework taken at UMKC.
2. Advanced education students must maintain a 3.0 (B) GPA in their dental certificate specialty coursework.
3. Any materials pertaining to patient records, program records, and any materials produced in relation to an Advanced Education or Graduate Program are the property of the University. Such materials include photos, study models, case presentations, research proposal, research data, thesis, research-related presentations and must be saved and preserved at designated storage sites. While students can have copies of presentations, data, and written documents for their records, students should not remove or delete these files and associated information from school computers and server spaces. Compliance with this policy is mandatory for continued program participation and graduation and will be monitored.

Probation Policy

Whenever the overall GPA for UMKC courses taken for credit by an advanced education student of any classification falls below 3.0 (B), the student's status for the next term becomes "On probation - See principal graduate advisor." The principal graduate advisor will review the student's progress and provide counsel, and the following conditions apply:

1. Any advanced education or graduate student on probation who is not restored to good academic standing by the end of two successive semesters will be declared ineligible to re-enroll.
2. While on probation, an advanced education or graduate student must achieve a 3.0 term GPA to enroll for the ensuing term.
3. An advanced education or graduate student on probation will not be restored to good standing until a cumulative graduate-credit GPA of at least 3.0 is achieved.

Dismissal

Following Academic Probation

1. An advanced education or graduate student who is on probation and fails to attain an overall GPA of at least 3.0 by the end of two successive semesters will be dismissed from the program.
2. An advanced education or graduate student who is on probation and fails to attain a 3.0 term GPA for the succeeding term will be dismissed.
3. An advanced education or graduate student who receives more than four credit hours of 2.0 (C) grades or a D or F grade in any course will be dismissed.

Due to Unsatisfactory Progress or Performance

When an advanced education program, irrespective of a student's grade-point average, considers an advanced education student's performance to be unsatisfactory, the Program Director may recommend to Associate Dean for Research & Graduate Programs that the student be declared ineligible for further study. The Associate Dean reviews the recommendation and discusses with the Advanced Education Committee prior to notifying the student of the decision.

Appeal

Any student who is dismissed from the program has the right to appeal that decision. Appeals shall be made in writing to the Associate Dean for Research and Graduate Programs within one week from the time the student received a notice of dismissal. The Associate Dean for Research and Graduate Programs in conjunction with the Chair of the Advanced Education Committee shall select a hearing panel of five members of the Advanced Education Committee to hear the student's appeal. At least one member of the hearing panel will be a student. The program director of the program in which the appealing student is enrolled shall be ineligible to sit on the panel. The Hearing Panel will be chaired by the Associate Dean for Research and Graduate Programs. A meeting of the Hearing Panel will be scheduled within two weeks of the receipt of the student's appeal. During the time the appeal process is being conducted the student shall be allowed to continue in the program. The Hearing Panel shall be provided with written statements from the student and the Program Director as well as all relevant records and documents. Both the Program Director and his or her designee and the appealing student must attend the hearing to provide additional information and answer questions from the Hearing Panel. Other individuals who have information relevant to the situation may be invited to present their information and answer questions for the committee. The student may have an advisor present to advise the student, but this advisor shall be limited to providing advice to the student.

After reviewing the information and conducting the hearing, the Hearing Panel shall make its recommendation regarding disposition of the case to the Dean. All five appointed members of the hearing panel shall have a vote. In case of a tie, the Associate Dean for Research and Graduate Programs shall cast the deciding vote. The Dean of the School of Dentistry will make the final decision and communicate that decision to the student and the Program Director.

Students in Cooperative Programs

Students enrolled in programs operated jointly by the School of Dentistry, School of Medicine, and other institutions, such as Children's Mercy Hospital and Truman Medical Center, must remain in good standing with both organizations cooperating in the program. A student who is dismissed by either of the cooperating institutions is ineligible to continue in the program.

Graduate

Advanced Education Certificate Programs

- Dental Advanced Education Certificate Programs:
 - Advanced Education in General Dentistry
 - Endodontics
 - Orthodontics and Dentofacial Orthopedics
 - Periodontics

Biological Sciences Courses

BIO-SCI 5700 Biomaterials Teaching Credits: 2

Through this course, students will acquire teaching experience in graduate and undergraduate biomaterials.

BIO-SCI 5706 Growth and Development I Credit: 1

A course designed to teach the general principles of normal and abnormal physical, psychological and social growth and development of children and adolescents. The growth and development of the craniofacial structures is emphasized. The diagnosis of malocclusions is stressed. Consideration is given to possible approaches to their treatment.

BIO-SCI 5707 Growth and Development II Credits: 1-2

A comprehensive study of the genetical aspects of growth and development with special analysis of the molecular control of these processes by both intrinsic and epigenetic factors.

Prerequisites: BIO-SCI 5706.

BIO-SCI 5710 Genetics and Biochemistry of Cranial Facial Biology Credits: 2

Biochemistry of oral structures and the effect of oral diseases on these structures. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline-specific requirements for the Interdisciplinary Ph.D. programs.

BIO-SCI 5739 Biomaterials for the Dental Specialist Credit: 1

Discussion of basic biomaterials principles and terminology including explanation of physical, mechanical and surface chemical properties, metallurgy, polymer chemistry, ceramics and composites. Clinical examples of how these principles apply to Prosthodontics, Endodontics and Orthodontics will be presented. Students cannot take both this course and BIO-SCI 5742 for credit.

BIO-SCI 5740 Oral Pathology I Credits: 2

A study of the clinical and histopathologic features of oral diseases, including inflammatory, degenerative, metabolic, and neoplastic diseases and developmental disturbances.

BIO-SCI 5742 Biomaterials for the Restorative and General Dentist Credits: 2

A thorough discussion of basic biomaterials principles and how they apply to the practice of general and restorative dentistry. Students cannot take both this course and BIO-SCI 5739 for credit.

BIO-SCI 5743 Advanced Seminar in Dental Biomaterials Credits: 1-2

The use and behavior of dental biomaterials in Pediatric Dentistry, Prosthodontics, Orthodontics, and Restorative Dentistry will be discussed in depth. Current basic and clinical literature related to these areas will be discussed and research information to improve dental practice will be presented.

Prerequisite: BIO-SCI 5739 (or BIO-SCI 5742).

BIO-SCI 5747 Research Instrumentation Used in Dental Biomaterials Credits: 2-4

A discussion and laboratory use of instrumentation employed in dental biomaterials research. Practical hands-on experience will include calibration and use of specific research equipment including the Instron, metallurgical mounting and polishing equipment, measuring microscope, metallograph, and contact angle goniometer.

BIO-SCI 5750 Special Problems in Dental Biomaterials Credits: 2-4

The student will select or be assigned a special research problem including appropriate literature reviews of a special topic in dental biomaterials. Emphasis will be placed on the correlation between basic and clinical research. The design and conduct of clinical research will be discussed.

BIO-SCI 5751 Elements of the Scientific Method Credits: 1-2

Through individualized instruction with thesis committee chair, student will conduct a literature review in preparation for developing a research question leading to the thesis research proposal. Students will select and rotate through a minimum of four laboratories in the Department of Oral Biology conducting a short research project in each. At the end of the semester, a report is required reviewing the research project and the instrumentation in each laboratory. Students are also required to attend the weekly Department of Oral Biology Seminar Series and the monthly Professional Development Seminar Series. Research presentations cover a variety of biological, engineering and psychological disciplines relevant to oral science education and the oral health care profession. Presentations will be by faculty, students, and invited guest lecturers.

BIO-SCI 5752 Research Methods in Oral and Craniofacial Sciences Credits: 1-5

Student will write the thesis research proposal in consultation with committee chair and members plus obtain appropriate IRB and/or IACUC approvals. For the MS degree qualifying exam, the student will write the research proposal, present the research proposal at a committee meeting, and answer related questions. Following the successful completion of the qualifying exam, the research proposal is the basis of the MS thesis project. As the student identifies a research focus for the dissertation project, they will begin reviewing the literature.

BIO-SCI 5759 Special Problems in Pharmacology Credits: 2

Pharmacologic and therapeutic problems of special interest in the practice of dentistry.

BIO-SCI 5760 Physiology of Oral Mineralized Tissues Credits: 2

A study of the physiology of the oral hard tissues with emphasis on the mechanisms of the growth, remodeling, and healing of maxillomandibular bones and on the mechanism of dentinogenesis. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline-specific requirements for the Interdisciplinary Ph.D. program.

BIO-SCI 5780 Teaching Of Dentistry Credits: 1-2

A consideration of the problems of teaching in dental schools. Each department of the School of Dentistry will report on its teaching methods. The student will observe lectures and laboratory teaching in each department.

BIO-SCI 5790 Directed Research In Oral and Craniofacial Sciences Credits: 1-6

Student utilizes beginning research skills to design, conduct and report an individual research project under the direction of the faculty.

BIO-SCI 5799 Research And Thesis Credits: 1-9

The satisfactory completion of an original research project. Results of the research and critical review of the pertinent literature are incorporated into a thesis. Credit is awarded after the student's thesis is successfully defended and accepted by the School of Graduate Studies.

BIO-SCI 5801 Readings in Immunology Credits: 1-3

A detailed study of special topics in immunology. Specific topics to be arranged with the instructor. This course may be repeated by doctoral students for a maximum of 3 credit hours.

Prerequisites: BIOLOGY 435.

BIO-SCI 5802 Immunopathology Credits: 2

A detailed study of selected topics in immunopathology with emphasis on physicochemical barriers such as cutaneous and mucosal immune systems.

Prerequisites: BIOLOGY 435.

BIO-SCI 5805 Molecular Biology of Oral Microflora Credits: 2-3

Lecture and discussion. The course will provide an overview of the ecology of oral microbial flora and its role in oral health and disease. Students will examine the taxonomy and ecology of normal and pathogenic oral microbial flora, acquisition of the oral microbiota and the formation of dental plaque as a biofilm. The course will also explore other aspects of microbial biology, such as; bacterial virulence factors and pathogenesis; host defense mechanisms; systemic complications of periodontal disease; antibiotics and antibiotic resistance. The second part of the course will review the effect of recent advances in molecular biology and protein biochemistry on oral diagnosis and treatment.

BIO-SCI 5830 Structural Characterization of Dental Biomaterials Credits: 3

A detailed study of the techniques commonly used to determine the composition and structure of dental biomaterials. Surface and near-surface characterization techniques will be emphasized. The student will be expected to complete laboratory projects on the scanning and transmission electron microscopies available in the School of Dentistry.

BIO-SCI 5899 Required Graduate Enrollment Credit: 1

Endodontics Courses

ENDO 5701 Endodontology 1 Credits: 1-6

This course is designed to introduce the first year endodontic postgraduate student to the field of advanced endodontics. It will provide introductory information and guidance which will serve as a basis for follow on course work in ENDO 5702 through ENDO 5706.

ENDO 5702 Endodontology 2 Credits: 1-6

This course is designed to continue the transition of the general dentist into a first year endodontic postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.

ENDO 5703 Endodontology 3 Credits: 1-6

This course is designed to complete the transition of the general dentist into a first year endodontic postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.

Prerequisites: ENDO 5701, ENDO 5702.

ENDO 5704 Endodontology 4 Credits: 1-6

This course is designed to transition the first year into a second year postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.

Prerequisites: ENDO 5701, ENDO 5702, ENDO 5703.

ENDO 5705 Endodontology 5 Credits: 1-6

This course is designed to continue the transition of the general dentist into a more proficient second year postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.

Prerequisites: ENDO 5701, ENDO 5702, ENDO 5703, ENDO 5704.

ENDO 5706 Endodontology 6 Credits: 1-6

This course is designed to complete the transition of the general dentist into a fully independently practicing endodontist. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.

Prerequisites: ENDO 5701, ENDO 5702, ENDO 5703, ENDO 5704, ENDO 5705.

General Practice Courses

G-PRAC 5721 General Practice Clinic I Credits: 1-10

G-PRAC 5722 General Practice Clinic II Credits: 1-10

G-PRAC 5723 General Practice Clinic III Credits: 1-10

G-PRAC 5728 Dental Implantology Credit: 1

The course is designed to include the following topics: history of implantology, implant materials and designs, fibroosseous and osseointegration theories, bioinert and bioactive retention, indication and case selection, technique methodology, anatomical considerations and reasons for failure, prosthetic considerations using several systems and necessary radiographic aids, surgical stent and laboratory with simulated insertion of an implant.

Oral Biology Courses

OR-BIO 5699 Dissertation Research Credits: 1-12

Ph.D. dissertation research.

OR-BIO 5702 Biomechanics of Mineralized Tissue Credits: 3

The physical principles underlying mineralized tissue biomechanics will be presented at multiple hierarchies. Details of bone, tooth and joint (with a special emphasis on the TMJ) anatomy and function will be outlined as related to mechanical loading.

Orthodontics Courses

ORTHOD 5704 Orthodontics And Dentofacial Orthopedics I Credits: 1-6

Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

ORTHOD 5705 Orthodontic and Dentofacial Orthopedics II Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5704.

ORTHOD 5706 Orthodontics and Dentofacial Orthopedics III Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5705.

ORTHOD 5707 Orthodontics and Dentofacial Orthopedics IV Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5706.

ORTHOD 5708 Orthodontic and Dentofacial Orthopedics V Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5707.

ORTHOD 5709 Orthodontic and Dentofacial Orthopedics VI Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5708.

ORTHOD 5710 Orthodontic and Dentofacial Orthopedics VII Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5709.

ORTHOD 5711 Orthodontics and Dentofacial Orthopedics VIII Credits: 1-6

Clinical orthodontics with relevant didactics and seminars. Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

Prerequisites: ORTHOD 5710.

ORTHOD 5726 Cephalometric I Credits: 2

An introductory lecture and laboratory course in the principles of radiographic cephalometry and integrated cephalometric analysis.

ORTHOD 5727 Cephalometric II Credits: 2

An advanced lecture and laboratory course with emphasis on the use of a computer in cephalometric analysis.

Periodontics Courses

PERIO 5701 Periodontal Residency I Credits: 1-6

Clinical Periodontics with Related Didactics and Seminar. This first year course introduces the incoming advanced education student to the principles and techniques in the field of advanced periodontics.

PERIO 5702 Periodontal Residency II Credits: 1-6

Clinical Periodontics with Related Didactic and Seminar. This first year course continues the instruction of the advanced education student to the principles and techniques in the field of advanced periodontics.

Prerequisites: PERIO 5701.

PERIO 5703 Periodontal Residency III Credits: 1-6

Clinical periodontics, with related didactics and seminar. This first year course continues the instruction of the advanced education student to the principles and techniques in the field of advanced periodontics, and builds upon the material taught in previous courses as well as introduces new information.

PERIO 5704 Periodontal Residency IV Credits: 1-6

Clinical periodontics with related didactics and seminar. This second year course is designed to transition the first year student into a second year advanced education student and builds upon the material taught in previous courses as well as introducing new information.

Prerequisites: PERIO 5701, PERIO 5702, PERIO 5703.

PERIO 5705 Periodontal Residency V Credits: 1-6

Clinical Periodontics with Related Didactics and Seminar. This second year course continues the instruction of the advanced education student to the principles and techniques in the field of advanced periodontics, and builds upon the material taught in previous courses as well as introducing new information.

Prerequisites: PERIO 5704.

PERIO 5706 Periodontal Residency VI Credits: 1-6

Clinical Periodontics with Related Didactics and Seminar. This second year course is designed to build upon the In-depth knowledge base of the advanced education student, as well as introducing new information, transitioning the student into a more proficient student in advanced periodontics.

Prerequisites: PERIO 5705.

PERIO 5707 Periodontal Residency VII Credits: 1-6

Clinical Periodontics with Related Didactics and Seminar. This third year course serves to transition the student into a clinician who by repeated action exhibits in depth levels of knowledge and skill. It builds upon material previously taught.

Prerequisites: PERIO 5706.

PERIO 5708 Periodontal Residency VIII Credits: 1-6

Clinical Periodontics with Related Didactics and Seminar. This third year course builds upon information previously taught and completes the transition of the student into a proficient specialist in Periodontology.

Prerequisites: PERIO 5707.

PERIO 5709 Periodontal Residency IX Credits: 1-6

Clinical Periodontics with Related Didactics and Seminar. This third year course is designed to build upon the in-depth information and knowledge base previously taught and completes the transition of the student into a proficient specialist in periodontology.

Prerequisites: PERIO 5708.

PERIO 5719 Implantology Credits: 2

This 2 credit hour seminar is designed for a student in the Advanced Education Program in Periodontology to develop in-depth knowledge of the concepts and theories of implant dentistry as they relate to periodontist. It will provide basic and advanced information and guidance which will serve to complement course work in PERIO 5702 through PERIO 5709, and the clinical implant dentistry experience offered in the program, at a minimum to a level of competency.

PERIO 5720 General Anesthesia Credit: 1

A rotation to the Department of Anesthesiology of K.C. Veterans Administration Medical Center. Students become familiar with operating room procedures, medical emergencies, venipuncture, airway maintenance and pharmacophysiology of sedative, analgesic and anesthetic agents as well as drug interactions.

PERIO 5799 Research And Thesis Credits: 1-6

PERIO 5899 Required Graduate Enrollment Credit: 1

Research Methodology-Dentistry Courses

RES-ME 5700 Introduction To Research Methodology Credits: 2-3

This lecture/discussion course will facilitate student's understanding of terminology and key concepts of research methodology and design. Assigned exercises are designed to demonstrate application of research design principles, and to increase advanced education students' competency in evaluating and planning scientific studies. This knowledge is indispensable for conducting meaningful research in advanced education certificate, masters of doctoral level programs.

RES-ME 5703 Thesis Writing Credit: 1

The methods of preparing, organizing, and presenting research findings using scientific writing format will be reviewed for completing a thesis. This course is required for the Master of Science degrees in Oral Biology and Dental Hygiene Education.

RES-ME 5704 Introduction to Biostatistics Credits: 2-3

A lecture/seminar course required for students pursuing a master's degree. This course focuses on an in-depth coverage of statistical designs commonly found in dental research, statistical techniques associated with these designs, application to them via the use of a computer based statistical software analysis package, and the interpretation of statistical tests.

Prerequisites: RES-ME 5700.

Advanced Education Certificate Programs

An advanced education certificate program is offered in each of the following areas:

- Advanced Education in General Dentistry (p. 1390)
- Endodontics (p. 1391)
- Orthodontics and Dentofacial Orthopedics (p. 1394)
- Periodontics (p. 1396)

General Nature of Programs

Each certificate program curriculum is designed to prepare the student for specialty practice and to help the student meet the educational training requirements for examination by the appropriate American dental specialty board. All programs begin with the summer term (the first week of July). Programs vary in length from 12 to 35 months.

Admission to an advanced education dental certificate program is competitive. Primary focus is on the applicant's academic record while in dental school (minimum 3.0 GPA), including national board scores. Emphasis is also placed on information gathered from PASS application materials and professional evaluations (such as quality of professional practice experience, continuing education experience, research activities, leadership and

involvement and participation in professional societies and community service). Another fundamental source of information is supplied by a personal on-site interview that is required of most programs and is by invitation.

Applicants to an advanced education dental certificate program must hold a D.D.S. degree or equivalent from a program accredited either by the Commission on Dental Accreditation (CDA) or the Canadian Dental Accrediting Commission (CDAC).

Admission

The Advanced Education Committee (AEC) serves as the admission review board for each of the advanced education dental certificate programs. Each program has its own admission review board. At a minimum, the admission review board consists of the respective program director and at least two other full-time faculty members.

Each program's admission review board submits its recommendations for acceptance to the AEC for consideration. Recommendations for acceptance include those identified as prime candidates (equal in number to the number of available residencies in the program) and those who serve as "alternates." Acceptance or denial of each recommended candidate is made by the AEC.

Certificate in Advanced Education in General Dentistry

Program Description:

Director:

Kelly Suchman, DDS

Faculty:

Bhavika V. Thakkar, DDS; David A. Jackson, DDS; Steven J. Prstojevic, MD, DDS; Bruce C. Cummings, DDS.

The advanced education in general dentistry residency program is a 12-month Commission on Dental Accreditation (CODA) accredited program that begins July 1st of each year for six residents. The program is designed to refine and advance knowledge, skills, clinical competency, and proficiency in the practice of comprehensive general dentistry. The program bridges the gap between dental school and dental practice. Clinical instruction is offered in all of the clinical disciplines. The didactic component provides postgraduate training in the basic and behavioral sciences, as well as the clinical sciences and practice management. Upon completion of this program a certificate in "Advanced General Dentistry" will be awarded.

Eligibility

An applicant for this program must be a citizen of the United States or a foreign national having a visa permitting permanent residence in the United States. Applicants must also submit evidence of graduation from a school of dentistry accredited by the Commission on Dental Accreditation or the Canadian Dental Accrediting Commission, or verification from the dean of an accredited dental school that the applicant will graduate during the current academic year. A minimum dental school 3.0 GPA is required for all applicants. The Advanced Dental Admission Test (ADAT) is preferred but not required. Scores should be self-reported on the PASS application.

Tuition and Fees

Estimated school tuition and fees can be found on the dental school's Research & Graduate Programs Office (816-235-6342), umkcodedpgms@umkc.edu. If selected for the program there is a \$500 nonrefundable acceptance fee which must be paid within 2 days of acceptance of the position. There is also a partial tuition waiver. More information will be provided to the applicant once he/she is accepted into the program.

Financial Assistance

Up-to-date additional information on financial assistance can be obtained at <http://www.sfa.umkc.edu/>

Stipend

Residents will receive an annual stipend of \$49,000

Applications

Application to this program is through the ADEA PASS program. Use the link Important Information for Applicants (<https://dentistry.umkc.edu/wp-content/uploads/2018/06/Advanced-Ed-Program-Application-Process.pdf>) for greater detail. The deadline for receipt of application at the school is Oct. 1 of the year prior to planned enrollment.

Interview

Competitive applicants will be invited to Kansas City for an interview with the program director and other selected faculty and staff. If invited, the interview is a required part of the application process and funding is the responsibility of the applicant.

Point of Contact

To request further information, contact the Research & Graduate Programs at (816) 235-6342 or umkcsodadvedpgms@umkc.edu; or the program director, Dr. Kelly Suchman, at 816-235-2199 or suchmank@umkc.edu.

Student Learning Outcomes

Residents on completion of the AEGD program will have the knowledge and experience to provide comprehensive multidisciplinary oral health care at a level of skill and competency beyond that achieved in their pre-doctoral training. It is expected that they will be able to provide this care to a broad and diverse patient population which includes the medically compromised and those with special needs.

The mission of the Advanced Education in General Dentistry (AEGD) Residency Program is to continue the professional development of oral health care providers in-keeping with the UMKC School of Dentistry's core values of excellence, compassion, integrity, and justice. The Standards of the Commission of Dental Accreditation (CODA) is the accrediting body that provides the structure and educational outcomes required for its graduates to provide comprehensive oral health care to a wide range of population groups.

The objectives of the didactic and clinical experiences is to broaden and strengthen the scope and level of residents' competencies and proficiencies in the practice of dentistry.

Student Learning Outcomes include:

1. Functions as a patient's primary and comprehensive oral health care provider.
2. Consistently recommends treatment that is appropriate for the patient's diagnosis, sequences the treatment appropriately and refers to a specialist as necessary.
3. Demonstrates understanding the value community service for oral health care for at risk populations provides.

Educational formats used are: formal courses, lectures, seminars, literature reviews, assigned readings, hands-on courses, case presentation, attendance at continuing education, guest speakers, treatment planning conferences, clinical demonstrations and chairside clinical teaching.

Program Requirements

Code	Title	Credits
G-PRAC 5721	General Practice Clinic I	1-10
G-PRAC 5722	General Practice Clinic II	1-10
G-PRAC 5723	General Practice Clinic III	1-10
PERIO 5719	Implantology	2
BIO-SCI 5742	Biomaterials for the Restorative and General Dentist	2

Graduation Requirements

Requirements for a Certificate in Advanced Education in General Dentistry (AEGD)

Successful completion includes:

1. Maintaining a 3.0 GPA for all assigned didactic and clinical course work
2. Maintenance of all required clinical documentation
3. Document clinical cases for presentation at treatment planning seminars
4. Progressively increase resident's scope of practice and increase clinical competencies beyond that of a graduate of a four year D.D.S. (D.M.D.) program
5. Provide dental care to a diverse population in an ethical, competent, compassionate and professional manner
6. Achieve established program "goals and objectives" established by the Council of Dental Accreditation (CODA) of the American Dental Association
7. Coordinate and participate in community service projects
8. Comply with all policies established by UMKC and the School of Dentistry.

UMKC is An Equal Opportunity/Access/Affirmative Action/Pro Disabled & Veteran Employer

Certificate in Endodontics

Program Description:

Director:

Kenneth J. Frick, DDS, MS, Diplomate, American Board of Endodontics.

Faculty:

Rebeca Weisleder Urow, DDS, Med, Diplomate, American Board of Endodontics Ron Riley, DDS, Diplomate, American Board of Endodontics; Robert Edwards, DDS, Diplomate, American Board of Endodontics

Program Overview

The endodontic advanced education program is designed to prepare a dentist for a career in clinical endodontics, research and teaching. The overall goal is to educate dentists to become competent clinical endodontists who will serve the public and the profession at a high level of excellence. It stresses the importance of knowledge and skills in the diagnosis, prevention, and treatment of diseases associated with the dental pulp and related periapical tissues. Didactic and clinical training is also conducted in other related areas within the scope of practice of the field of endodontics as established by the Endodontic Standards of the Commission on Dental Accreditation. The correlation of basic sciences and clinical sciences is an integral part of the program. A research project is required and comprehensive oral examinations must be successfully completed. The program is also designed to prepare the graduate endodontist to challenge the requirements for certification as a Diplomate by the American Board of Endodontics. Individuals who successfully complete this advanced education program will be awarded a Certificate in Endodontics. Concurrent enrollment for an MS degree in Oral and Craniofacial Sciences (OCS) is also possible. The MS program requires a separate application after the student has been accepted into the Endodontics program. An additional time commitment of three to six months is likely required to complete the MS degree.

Accreditation

The program in endodontics is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of "approval without reporting requirements". The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611.

Eligibility

An applicant for this program must be a citizen of the United States or permanent resident in the United States. **Applicants must also submit evidence of graduation from a school of dentistry accredited by the Commission on Dental Accreditation or the Canadian Dental Accrediting Commission.** A minimum dental school 3.0 GPA is required for all applicants. Applicants are required to take the Advanced Dental Admission Test (ADAT); scores should be submitted on the PASS application. Successful completion of a U.S. regional or equivalent Canadian clinical licensure exam is required prior to or no later than the end of the first year of residency. Application to the optional Oral & Craniofacial Sciences MS program requires successful completion of the GRE.

Program Duration

Beginning July 1st, the certificate program runs 24 months over six continuous semesters. Enrollment in the optional OCS MS program may require an additional three to six months to complete.

Number of Residents

There are two first-year and two second-year residents.

General Applicant Information

Application to this program is through the ADEA PASS program. The deadline for receipt of application at the school is **August 1st** of the year prior to planned enrollment, however, applicants are highly encouraged to complete their applications by the earliest possible date, **as interviews may be scheduled before this date**. Detailed application information is available at Important Information for Applicants (<https://dentistry.umkc.edu/wp-content/uploads/2018/06/Advanced-Ed-Program-Application-Process.pdf>).

Graduate Medical Education (GME) Stipends

Currently, residents are eligible for GME stipends of approximately \$21,000 per year. This is a federal, not School of Dentistry, program and is subject to current federal guidelines.

Program Stipend

Endodontic residents will receive an annual stipend of \$20,000.

Tuition and Fees

Estimated school tuition costs can be found in the Fees section of this catalog. If selected for the program, there is a \$1,000 nonrefundable acceptance fee which must be paid within two days of the time of acceptance of the position. More information will be provided to the applicant once he/she is accepted into the program. There is also a partial tuition waiver.

Instruments and Equipment

Residents will be required to lease their dental instruments through the school and purchase some other instruments and equipment. The school employs a centralized sterilization program for the lease of instruments and surgical dental operating microscope. Additionally, each resident is required to purchase an SLR camera body to be attached to the microscope (Recommended: Sony a7 Full-Frame Mirror-less Digital Camera). A list of other required instruments and textbooks will be provided when an applicant is selected to attend the program. Estimated cost for purchases for the 24-month program are approximately \$5,000. All of these purchases go with the resident when he/she graduates from the program. Estimated

lease expenses are: Dental instruments - approximately \$8,800 for the 24-month program, \$2,200 per each fall and spring semesters; Microscope—approximately \$1500 per semester (six semesters total).

Advanced Education Endodontic Clinic

The advanced education endodontic clinic is a true state-of-the-art facility made possible by the generous donations of Mrs. Virginia Stowers, Dr. Ben Johnson, and other benefactors. All rooms are equipped with *Zeiss Pico microscopes*. Each room has its own x-ray head, 50" video monitor, Adec track light system, and ASI dental unit carts complete with air-driven high and low speed fiber optic handpieces, *electric handpiece*, *ultrasonic handpiece*, dual micro irrigators, micro air syringes, and curing light. The program is linked into the all-electronic paperless patient record management system which also integrates the digital x-ray sensors available in each operatory. Please see <https://dentistry.umkc.edu/about-us/> for more information about faculty, residents and staff.

Study Areas

Residents have dedicated office space with high-speed computer and printer support connected to a high-speed LAN. The program also has a dedicated seminar room for literature reviews, case presentation, lectures, etc.

Financial Assistance

Up-to-date additional information on financial assistance can be found in the School of Dentistry portion of the Financial Aid Charts at <http://www.sfa.umkc.edu> (<http://www.sfa.umkc.edu/>)

Interview

Selected applicants will be invited to Kansas City for an interview with the program director and other selected faculty and staff. If invited, the interview is a required part of the application process, and travel expenses are the responsibility of the applicant. **Preference is given to those applicants who have both general practice experience and completion of an AEGD or GPR program.**

Point of Contact

To request further information, please contact either the Research & Graduate Programs Office at (816) 235-**6342** or umkcsodadvedpgms@umkc.edu or the program director, Dr. Kenneth J. Frick, at (816) 235-**2479** or frickk@umkc.edu

Student Learning Outcomes

Students graduating from this program will:

- 1. The student will demonstrate advanced clinical skills in the treatment of a variety of endodontic clinical conditions, and demonstrate an understanding of the current and classical endodontic literature.
- 2. The student will demonstrate the ability to prepare and execute a research project.
- 3. The student will demonstrate skills of communication through examples to peers, faculty, and public presentations.

Program Requirements

Code	Title	Credits
ENDO 5701	Endodontology 1	1-6
ENDO 5702	Endodontology 2	1-6
ENDO 5703	Endodontology 3	1-6
ENDO 5704	Endodontology 4	1-6
ENDO 5705	Endodontology 5	1-6
ENDO 5706	Endodontology 6	1-6
BMS 9701	Clinical Anatomy of Head and Neck	2
BIO-SCI 5740	Oral Pathology I	2
RES-ME 5700	Introduction To Research Methodology	2
RES-ME 5704	Introduction to Biostatistics	2
BIO-SCI 5760	Physiology of Oral Mineralized Tissues	2
BIO-SCI 5759	Special Problems in Pharmacology	2
BIO-SCI 5739	Biomaterials for the Dental Specialist	1
BIO-SCI 5805	Molecular Biology of Oral Microflora	2-3

Graduation Requirements

1. Satisfactory completion of all clinical and basic science core courses as outlined for the endodontic curriculum.
2. Satisfactory completion of all endodontic courses and seminars.

3. Achievement of clinical competency in endodontics.
4. Advanced Endodontics residents must maintain a 3.0 GPA for all coursework taken at UMKC. Courses that are audited will require 100% attendance and residents will be required to complete the final exam. Failure by any resident to meet the 100% attendance requirement for any audited courses will result in written and/or oral examinations in those courses at the discretion of the Program Director. Residents are entitled to due process in accordance with guidelines contained in the Student Handbook on Academic and Other Policies.
5. The goal for each resident is to complete at least 250 clinical endodontic cases. These cases will include, but not be limited to, the following: nonsurgical, surgical, retreatment, and incomplete endodontic therapies; vital pulp treatment, apexification, trauma, endo-perio, restoration of endodontically treated teeth, and bleaching. The cases treated should include as many and as varied types of cases, in order to give the broadest exposure and experience necessary to graduate as the best qualified endodontist. A list of all cases will be maintained by the resident. The completed cases will be reviewed and graded on a weekly and monthly basis by the Program Director.
6. Preparation of an Electronic Capstone Portfolio. This portfolio of endodontic cases will showcase the resident's best work. It will be presented in the ABE Portfolio format, with twenty cases selected according to the guidelines published by the ABE. The Portfolio will also contain a dental implant case report made from observations in the Advanced Education in Periodontics clinic. Finally, a copy of the resident's research manuscript will be included. Each portfolio will include a written self-assessment by the resident, and a completed faculty assessment rubric on demonstrated CODA clinical standards.
7. Documented research*. A suitable project approved by the Research Advisors and the Program Director, conduct of the research, collection of data, analysis of results, and preparation of a manuscript suitable for submission to a refereed journal must be completed before the conclusion of the program. If, for whatever reason, a waiver is granted by the Program Director for an extension of the submission deadline date, the resident may forfeit the right of first-authorship. A request to submit the research findings as an oral presentation at the Annual Session of the AAE or a poster board presentation at the Midwest Dental Conference is required.

*For those residents dually-enrolled in the Oral and Craniofacial Sciences program, they will complete their research requirements via the MS degree process with the degree conferred by the School of Graduate Studies.

1. Attendance at all scheduled classes, seminars, clinics, and meetings is mandatory. Attendance is also required for all consultant lecturers established by the Program Director or the person he has delegated this responsibility. This may involve an occasional evening or weekend event. Absences will only be allowed under special pre-arranged conditions and may result in additional assignments such as written literature review reports.

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Certificate in Orthodontics and Dentofacial Orthopedics

Program Description:

Director:

R. Scott Conley, DMD

Faculty:

Jean-Marc Retrouvey, DMD, MSc, Chair; James Osborne, DDS; Steve Billings, DDS; Dustin Burleson, DDS; Frank Crist, DDS, MS; Scott Hamilton, DDS, MSD; Steve Malmstrom, DDS; Brad Smith, DDS; Cameron Walker DDS, MS, PhD; Don Wilson, DDS; Dan Ranjibar, DDS; Genavieve Hendrickson, DDS, MS; Heather Hendricks, DDS, MSO.

Program Overview

The advanced education program in orthodontics and dentofacial orthopedics has existed since 1946. UMKC Orthodontics Alumni are located in many states and some foreign countries.

This is a full-time, 30 month program that begins July 1st. It is designed to prepare the student for community practice of orthodontics and dentofacial orthopedics. Curriculum emphasis is placed on the edgewise technique and on interceptive and functional treatment. Management of craniofacial anomalies is taught didactically and clinically in association with the craniofacial team at Children's Mercy Hospital. Objective inquiry and statistical validation are emphasized in all aspects of this program. Completion of an original research project and paper is required. The computerized clinic facility is a working-research model that simulates the private practice environment. Courses, clinics, and dedicated research time are organized to facilitate the completion of an MS or PhD degree in Oral and Craniofacial Sciences. A separate application is required for the MS or PhD program.

Application and Acceptance

An applicant for this program must be a citizen of the United States or permanent resident in the United States. Applicants must also submit evidence of graduation from a school of dentistry accredited by the Commission on Dental Accreditation or the Canadian Dental Accrediting Commission. A minimum dental school 3.0 GPA and completion of the GRE is required for all applicants. Minimum GRE Scores: Verbal-155, Quant-150, Analytical Writing-4.0.

Applications are considered from the following groups:

- Fourth-year dental students from American Dental Association (ADA) or Canadian Dental Association (CDA) Accredited schools who are in the top 50 percent of their graduating class.
- Graduates of ADA or CDA accredited dental schools who ranked in the top 50 percent of their graduating classes and have satisfactorily completed a general practice residency or other dental specialty program prior to application.
- Graduates of a School of Dentistry who ranked in the top 50 percent of their class and have been in general practices.

Selection of candidates is a twofold process. First, candidates are stratified on the basis of academic and professional performance: passing the national board examinations, GRE scores, class standing, other specialty program education, practice experience, leadership roles in organized dental groups, dental school teaching, research experience and recommendations are considered. Preferences will be given to individuals who limit their applications to programs participating in MATCH.

Secondly, applicants meeting screening criteria are invited for interviews. All interviews are conducted at the School of Dentistry on the same day and all invited candidates must attend this session to be eligible for final selection into the class. If offered a position in a class, this offer, like all offers from the University, is contingent upon a successful background screening. In order to begin the background screening, you must complete a Disclosure form and return it to Human Resources within two business days. Three residents are accepted into this program annually. Accepted residents must successfully complete a U.S. regional or equivalent Canadian clinical licensure exam prior to or no later than the end of the first year of residency.

Application for admission **MUST** be through the ADEA PASS program and completed on or before August 15 of the year prior to planned enrollment. For more information, check the website Important Information for Applicants (<https://dentistry.umkc.edu/wp-content/uploads/2018/06/Advanced-Ed-Program-Application-Process.pdf>).

Stipend

Orthodontic residents will receive an annual stipend of \$20,000 paid on a monthly basis.

Tuition and Fees

Estimated tuition and fee costs may be found on the cashier's website. There are additional costs for books, laptop computer and required meeting attendance associated with this program.

Instruments

Residents are required to pay an "instrument usage" fee to the school. All instruments are provided and are maintained by the Central Sterilization program of the school.

Financial Assistance

Up-to-date information on additional financial assistance may be found in the school financial aids charts at <https://finaid.umkc.edu/>.

Student Learning Outcomes

Residents enrolled in the Orthodontics and Dentofacial Orthopedics Advanced Education Program must meet the following student learning outcomes:

1. Demonstrate diagnostic skills:
 - 1.1 Assemble diagnostic data to enable determination of the degree to which skeletal and dentoalveolar discrepancies contribute to the morphology of the craniofacial complex in three dimensions
 - 1.2 Show competency in the use and application of the American Board of Orthodontics Discrepancy Index
2. Demonstrate the ability to synthesize treatment plans, and implement appropriate therapeutic modalities:
 - 2.1 Correctly determine the appropriate use of dentofacial orthopedics and demonstrate clinical skills in management
 - 2.2 Demonstrate an ability to correctly plan and implement mechanotherapies for correction of dentoalveolar malocclusions
 - 2.3 Develop and implement the appropriate plans for 2 phase mechanotherapy
 - 2.4 Successfully promote interdisciplinary treatment plans
3. Demonstrate the ability to analyze treatment outcomes:
 - 3.1 Report assessments of skeletal changes related to growth and treatment
 - 3.2 Accurately describe dentoalveolar treatment outcomes
 - 3.3 Demonstrate proficiency in evaluation of soft tissue effects of therapy

3.4 Formulate an assessment of case difficulty and treatment outcomes using the American Board of Orthodontics (ABO) Index of treatment difficulty, and ABO index of treatment outcome

Program Requirements

The following learning outcomes have been developed and adopted by the faculty. These goals, skills and knowledge every graduate must demonstrate to qualify for graduation. The Department of Orthodontics and Dentofacial Orthopedics require these outcomes be assessed in the classroom, the laboratory, and through treatment of clinical cases over the 30-month program. Their competencies are assessed through examinations, presentations of papers, and clinical treatment comprehensive examinations.

1. Demonstrate a commitment to learning, professionalism, societal responsibility, and contributing to generalizable knowledge through research
2. Demonstrate a commitment to the addressing the concerns of patients and the delivery of quality care.
3. Demonstrate the level of proficiency expected of an orthodontic specialist in the areas of diagnosis, treatment planning, and analysis of treatment outcomes.

Required Core Curriculum

Code	Title	Credits
BIO-SCI 5706	Growth and Development I	1
BIO-SCI 5707	Growth and Development II	1
ORTHOD 5726	Cephalometric I	2
ORTHOD 5727	Cephalometric II	2
ORTHOD 5704	Orthodontics And Dentofacial Orthopedics I	1
ORTHOD 5705	Orthodontic and Dentofacial Orthopedics II	1
ORTHOD 5706	Orthodontics and Dentofacial Orthopedics III	1
ORTHOD 5707	Orthodontics and Dentofacial Orthopedics Iv	1
ORTHOD 5708	Orthodontic and Dentofacial Orthopedics V	2
ORTHOD 5709	Orthodontic and Dentofacial Orthopedics Vi	1
ORTHOD 5710	Orthodontic and Dentofacial Orthopedics Vii	2
ORTHOD 5711	Orthodontics and Dentofacial Orthopedics Viii	2
BIO-SCI 5739	Biomaterials for the Dental Specialist	1
BIO-SCI 5740	Oral Pathology I	2
BIO-SCI 5760	Physiology of Oral Mineralized Tissues	2
BMS 9701	Clinical Anatomy of Head and Neck	2
RES-ME 5700	Introduction To Research Methodology	2
RES-ME 5704	Introduction to Biostatistics	3
BIO-SCI 5751	Elements of the Scientific Method	1
BIO-SCI 5752	Research Methods in Oral and Craniofacial Sciences	2
BIO-SCI 5799	Research And Thesis	6
RES-ME 5703	Thesis Writing	1
Total Credits		39

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Certificate in Periodontics

Program Description:

Director:

Mabel Salas, DDS, MS, Diplomate, American Board of Periodontology

Faculty:

Keerthana Satheesh, BDS, DDS, MS, Department Chair, Diplomate, American Board of Periodontology; Pierluigi Balice, DDS, MS, Board Eligible; Mark C. Edwards, DDS, Diplomate, American Board of Periodontology; Simon R. MacNeill, BDS, DDS, Diplomate American Board of Periodontology; Audra Ward, DMD, MS, Diplomate American Board of Periodontology; Nancy Newhouse, DDS, MS, Diplomate, American Board of Periodontology; Jonathan Thomas, DDS, Diplomate, American Board of Periodontology; Lisa Tao, DDS, MS, Board eligible, Ann Fay, DDS, Diplomate American Board of Periodontology, Kiran Arora BDS, DDS, Diplomate American Board of Periodontology, Larry Jacobson, DDS.

Program Overview

The periodontics advanced education program is designed to prepare a dentist for a career in clinical periodontics, research and teaching. It enables the resident to acquire an in depth understanding in oral biology; to become acquainted with the problems in the biology and pathology of oral tissues, and to adequately treat these problems with the most current evidence and techniques. Program students will be encouraged to use interdisciplinary approaches to solve research and clinical problems. The program is designed to provide for the profession and the community, competent bio-clinicians who will become key professionals in clinical practice, research, and teaching. Didactic and clinical training will also be conducted in other related areas within the scope of practice of the field of periodontics as established by the Periodontic Standards of the Commission on Dental Accreditation. A research project is required and comprehensive examinations must be successfully completed. The program is also designed to prepare the graduate periodontist to challenge the requirements for certification as a Diplomate of the American Board of Periodontology. Individuals who successfully complete this advanced education program will be awarded a Certificate in Periodontics. Concurrent enrollment for an MS degree in Oral and Craniofacial Sciences (OCS) is also possible. The MS program requires a separate application after the student has been accepted into the Periodontics program.

Eligibility

Eligible applicants for this program must be citizens of the United States or a foreign national having a visa permitting permanent residence in the United States. Applicants must also submit evidence of graduation from a school of dentistry accredited by the Commission on Dental Accreditation or the Canadian Dental Accrediting Commission, or verification from the dean of an accredited dental school that the applicant will graduate during the current academic year. *Successful completion of a U.S. regional or equivalent Canadian clinical licensure exam is required prior to or no later than the end of the first year of residency.*

Program Duration

This is a full-time, 35-month program that begins July 1.

Number of Residents

Two residents are typically accepted into the program each year.

General Applicant Information

Application to this program is through the ADEA PASS program. The deadline for receipt of application at the school is **August 1st** of the year prior to planned enrollment. All applicants are required to submit the Institutional Evaluation AND Professional Evaluation Form (PEF) as part of their completed PASS application. A minimum of three professional evaluators (dental faculty) are required to submit evaluations for the PEF. The Advanced Dental Admission Test (ADAT) is optional but not required. Scores should be self-reported on the PASS application. For those interested in concurrent enrollment in the Oral and Craniofacial Sciences MS program, GRE scores will be required. Scores should be self-reported on the PASS application; official GRE scores should be submitted directly to UMKC (GRE code is 6872.) Detailed application information is available at Important Information for Applicants. (<https://dentistry.umkc.edu/wp-content/uploads/2018/06/Advanced-Ed-Program-Application-Process.pdf>)

The advanced education certificate program in Periodontics participates in the **National Matching Services (MATCH)** process. Candidates to these program must also register for this service within the ADEA PASS applicant portal (www.ahea.org (<http://www.ahea.org/>)). There are two phases of the MATCH process, each with its deadline date for receipt of Rank Order List forms from applicants. The Phase I deadline (typically towards the end of November each year) is for applicants to the Periodontics program.

Selection is based on academic standing in dental school (grade-point average, class standing and National Board scores) and experience (years in practice, teaching or research, advanced training or degrees, publications, activity in organized dentistry and participation in continuing education). Preferences will be given to individuals who limit their applications to programs participating in MATCH.

Stipend

Periodontics residents will receive an annual stipend of \$20,000 paid on a monthly basis.

Tuition and Fees

Estimated school tuition and fees can be found on the cashier's website. If selected for the program, there is a \$1000 nonrefundable acceptance fee which must be paid within two days of the time of acceptance of the position. More information will be provided to the applicant once he/she is accepted into the program.

Instruments and Equipment

Residents are required to lease their dental instruments through the Infection Control Instrument Management System of the School and will also be required to purchase some additional equipment including a clinical camera.

Financial Assistance

Up-to-date additional information on financial assistance can be obtained at <https://finaid.umkc.edu/>.

Interview

Competitive applicants will be invited to Kansas City for an interview with the program director and other selected faculty and staff. If invited, the interview is a required part of the application process and funding is the responsibility of the applicant.

Accreditation

The advanced education program in periodontics is fully accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-2500 or at 211 East Chicago Avenue, Chicago, IL 60611. Their website is: <http://www.ada.org/en/coda>. (<http://www.ada.org/en/coda/>)

Study Areas

Residents have a dedicated office space with computer and printer support connected to a high-speed LAN. The program also has a dedicated seminar room for literature reviews, case presentation, lectures, etc.

Point of Contact

To request further information, contact the Research & Graduate Programs at (816) 235-6342 or umkcsodadvedpgms@umkc.edu; or the program director, Dr. Mabel Salas, at 816-235-2147 or salasmartinezm@umkc.edu. (salasmartinezm@umkc.edu)

Student Learning Outcomes

The following learning outcomes have been developed and adopted by the faculty. These goals, skills, and knowledge must be demonstrated by every graduate to qualify for graduation. The Department of Periodontics assess these outcomes in the classroom, the laboratory, and through treatment of clinical cases over the length of the program, using examinations, presentation of papers, and review of clinical treatment.

Residents enrolled in the Periodontics Program must meet the following student learning outcomes:

1. Understand the periodontium in an evidence-based manner and at a mastery level.
2. Demonstrate comprehensive diagnostic skills.
3. Demonstrate the ability to perform advanced periodontic therapy.
4. Demonstrate the ability to evaluate the outcomes of treatment.
5. Understand the scientific method as it relates to the field of periodontics.

Program Requirements

Residents enrolled in the Periodontics Advanced Education Program must maintain a 3.0 (B) grade point average for all coursework taken for graduate credit at UMKC. Below is a list of required courses.

Required Core Curriculum

Code	Title	Credits
PERIO 5701	Periodontal Residency I	1-6
PERIO 5702	Periodontal Residency II	1-6
PERIO 5703	Periodontal Residency III	1-6
PERIO 5704	Periodontal Residency IV	1-6
PERIO 5705	Periodontal Residency V	1-6
PERIO 5706	Periodontal Residency VI	1-6
PERIO 5707	Periodontal Residency VII	1-6
PERIO 5708	Periodontal Residency VIII	1-6
PERIO 5709	Periodontal Residency IX	1-6
PERIO 5719	Implantology	2
PERIO 5720	General Anesthesia	1
PERIO 5799	Research And Thesis	1-6
BMS 9701	Clinical Anatomy of Head and Neck	2
BIO-SCI 5740	Oral Pathology I	2
RES-ME 5700	Introduction To Research Methodology	2
BIO-SCI 5710	Genetics and Biochemistry of Cranial Facial Biology	2
RES-ME 5704	Introduction to Biostatistics	2
BIO-SCI 5805	Molecular Biology of Oral Microflora	2
BIO-SCI 5760	Physiology of Oral Mineralized Tissues	2

BIO-SCI 5759	Special Problems in Pharmacology	2
BIO-SCI 5802	Immunopathology	2

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Dental Hygiene Program

Dental School, Room 415
(816) 235-2050

Academic Standards

Professional education in the health sciences manifests characteristics that are distinct from other advanced educational programs. Academic standards of the School of Dentistry are established to ensure that the public, whose health will be entrusted to graduates of the school's programs, will receive care of professionally acceptable quality and that the care will be provided in an ethical and professional manner. The School's Academic Requirements are described in the following two sets of standards, one for scholarly achievement and one for professional conduct, located in the Student Handbook.

Attendance

Regular attendance at all classes and clinical sessions is required during the professional program. The student is responsible for familiarization with all classroom and clinical requirements and assignments.

Scholastic Honesty

The Division of Dental Hygiene assumes all students are enrolled to learn. Any cheating is contradictory to the purposes of students and this institution. Any dishonesty detected in a course (including during examinations or in submitting plagiarized material) may result in an F grade in the course, and may be cause for dismissal or suspension from the Division of Dental Hygiene.

Repeated Courses

A dental hygiene student who wishes to repeat a course must submit a course repeat form to the UMKC Registration Office no later than the end of the fourth week of the term if that repeat is to be included in GPA calculations. Students who are repeating a course must have prior approval of the director of the Division of Dental Hygiene.

Advanced Placement

The general examination offered by the College Level Examination Program (CLEP) will not be accepted for degree credit. However, credit received through specific or subject examinations will apply toward a bachelor of science degree in dental hygiene. Although hours of credit may be received in natural sciences, it is preferred that an applicant to the dental hygiene program complete the specific science prerequisites.

For more information regarding admission to either the clinical entry level or degree completion program in dental hygiene, contact the Division of Dental Hygiene.

Undergraduate

- Bachelor of Science in Dental Hygiene
- Degree Completion Program (p. 1412)

About the Undergraduate Dental Hygiene Program

Dental hygiene is a rapidly growing and increasingly dynamic allied health profession for qualified persons who wish to participate as active members of a health field. Service to mankind is the primary purpose of health professions. The dental hygienist with a baccalaureate degree accomplishes this objective through a variety of challenging and rewarding opportunities.

There is informal evidence that a nine-month dental hygiene program existed at UMKC (then the Kansas City Western Dental College) in 1922-23, as did a one-year program during the '30s. However, concrete documentation indicates that the official program began in 1952.

The program in dental hygiene is accredited by the Commission on Dental Accreditation, a specialized accrediting body recognized by the Council on Post-Secondary Accreditation and the U.S. Department of Education.

The student at UMKC can earn a bachelor of science degree in dental hygiene in two ways. The first alternative offers an opportunity for the student who has completed two academic years of liberal arts pre-requisites at any accredited community/junior college, college or university to matriculate

into the entry level clinical dental hygiene program. The second alternative provides for the licensed dental hygienist with a certificate or associate degree an opportunity to earn a baccalaureate degree (degree completion).

D.D.S. Program & B.S.D.H. Entry-Level Program Time Limits (March 2019)

Continuous enrollment is required for D.D.S. and B.S.D.H. entry-level students every semester (fall/spring/summer) from the time of matriculation until degree conferral except for cases with an approved Leave of Absence (as defined in the UMKC SOD Student Handbook).

The normal timeframe for completion of required coursework for the D.D.S. degree is four (4) academic years and two (2) academic years for the B.S.D.H. entry-level degree. In the event of academic and or personal difficulties, a student may require additional time. In such situations, the Academic Standards Committee may establish a schedule for that student which departs from the norm. Regardless of the rationale for extended time limits, the D.D.S. program must be completed within six (6) years and the B.S.D.H. entry-level program must be completed within three (3) years of initial matriculation.

Failure to complete the work with the periods specified may include but not limited to reevaluation of the student's entire program and/or notice of dismissal from the School of Dentistry.

Expenses (Basic Preparation)

Approximate expenses for the basic preparation dental hygiene program are listed below. These do not include room and board, expenses for personal items or educational fees.

Instrument rental and supplies (entire program)	\$4,075
Textbooks (entire program)	\$2,663
Uniforms, lab coats, etc. (entire program)	\$ 600
National, regional and state licensure fees	\$1,500
Professional association fee	\$90

Note: Fees are subject to change without notice. An advance deposit of \$100 is required on admission to the program. This payment shall be credited to the student's educational fee upon enrollment. The fee is non-refundable except by special order of the dean of the School of Dentistry and as approved by the director of admissions.

Financial Assistance

In addition to the University's financial aid services, the UMKC Dental Hygienists' Alumni Association (UMKC DHAA) has several scholarship funds and grants for dental hygiene students who are in need of financial assistance and who qualify academically. For more information, see Scholarships and Awards.

Job Opportunities

The major responsibilities of the dental hygienist are preventive in nature. In the private dental office, the dental hygienist may be responsible for providing patient education, exposing and processing dental radiographs, conducting head and neck examinations, as well as providing a thorough oral prophylaxis, non-surgical periodontal therapy, local anesthesia, diet analysis and other services as delegated by the licensed dentist. In some large offices the dental hygienist may serve as a manager of office procedures. Dental hygiene services vary from state to state according to the laws that govern the practice of dental hygiene.

In public health and community agencies, the dental hygienist is concerned with the oral health of the community being served. Major responsibilities may be assessing the oral health of a given population or developing and implementing a dental health program. In hospitals and nursing homes, the dental hygienist may function as a health educator, a clinician or a resource person. In other instances, hygienists are employed for clinical and descriptive research projects.

Although the majority of dental hygiene graduates are involved in private practice, the following practice settings may also be available:

- Federal, state and local health departments.
- Hospitals and nursing homes.
- School districts.
- Health maintenance organizations.
- Educational programs for dental, dental hygiene and dental assisting students.
- Private and public centers for pediatric, geriatric and other special needs groups.

Graduates can take advantage of the Dental School's job placement assistance service. The School of Dentistry maintains an extensive database of job opportunities in several states. Faculty members are available for job-placement counseling to assist graduates with placement decisions.

Professional Associations

The School of Dentistry encourages students to participate in professional association activities. Dental hygiene students are required to join and participate actively in the Student American Dental Hygienists' Association, the UMKC Dental Hygienists' Alumni Association and the American

Dental Education Association. Through participation in these associations, students can network with and become familiar with the professional opportunities and activities of area dental health professionals.

Scholarships and Awards

In addition to the University and federal financial aid opportunities, the Division of Dental Hygiene has numerous scholarship sources available to dental hygiene students. Students must meet financial and academic qualifications. Contact the division for more information. The Free Application for Student Aid (FAFSA) is required for application for Division scholarships. The Division will provide scholarship information to admitted and enrolled students.

During the last semester of the program, dental hygiene students who have distinguished themselves are eligible to be selected from the graduating class to become members of Sigma Phi Alpha, a national dental hygiene honor society. Students who receive this honor exhibit outstanding character and leadership during the professional program.

The Greater Kansas City Dental Hygienists' Association sponsors a Community Service Award; the Missouri Dental Hygienists' Association sponsors the Outstanding Dental Hygiene Graduate Award; and the UMKC Dental Hygienists' Alumni Association sponsors the Outstanding Clinician Award. These awards are presented annually to graduating seniors.

Licensure Examinations

To practice dental hygiene legally, the student must take and successfully pass a computer-based examination, the National Board Dental Hygiene Examination. This examination is administered to all dental hygiene students in the country. The student also must successfully complete a clinical examination and an examination on the dental laws of the desired state of licensure. After written and clinical examinations have been completed, the graduate may apply for licensure in any state. Additional information regarding these examinations and the licensure process is given during the dental hygiene program.

Graduate/Professional

Master of Science - Dental Hygiene Education (p. 1415)

Director:

Tanya V. Mitchell, RDH, MS

About the Program

The Master of Science Degree program in Dental Hygiene Education at the University of Missouri - Kansas City (UMKC) prepares students for careers in dental hygiene education. The 36 credit hour graduate program and core curriculum is offered through online teaching and learning modalities. Missouri non-resident students may apply for the School of Dentistry Non-Resident Award. This award covers the out of state difference of tuition. The Award is renewable yearly upon review of the student's continued satisfactory performance within the program. Up to five (5) awards are available each year for incoming students.

The curriculum provides academic experiences based on the career goals and interest of the graduate student. Although the curriculum is focused on preparing the student for a career in dental hygiene education, elective courses may be taken through a personalized approach – pursuing excellence together.

The completion of an original research project (manuscript ready for publication) is required as part of the graduate student's academic program. The core curriculum is completed online.

- Requirements for Admission (p.)
- Tuition and Fees Schedule
- Scholarships
- Educational Goals (p.)
- Vision Statement (p.)
- Mission Statement (p.)
- Program and Graduation Requirements

Requirements for Admission

Applicants must meet the following criteria:

- Must have graduated from an accredited dental hygiene program
- Have a Baccalaureate degree in dental hygiene or related field from an accredited college or university
- Have a current dental hygiene state license
- Present a satisfactory academic record with at least a 3.0 cumulative GPA

- Submit three references from college faculty members/administrators (one must be from the dental hygiene program director where you earned your degree)

The deadline for applications is April 15 (summer start) or July 15 (fall start); classes begin in the summer or fall semester of each year.

Questions about this program may be answered by contacting the program director's office at (816) 235-2049 or villalpandot@umkc.edu.

Apply online via the following website: <https://futureroo.umkc.edu/apply/>

Tuition and Fees Schedule

Master of Science Degree Program in Dental Hygiene Education

Click here for Fee and tuition rates (<https://dentistry.umkc.edu/wp-content/uploads/2019/11/Tuition-Schedule-2019-2020-DH-Master-program-with-AWARD.pdf>)

Educational Goals

1. Career Opportunities

Graduates will assume roles in a variety of employment opportunities including education, research, and administration.

2. Research

Graduates will develop the foundational skills necessary to contribute to the body of knowledge in dental hygiene research.

3. Lifelong Learning

Graduates will demonstrate the skills of reflective thinking, problem-solving, scholarly inquiry, and evidence-based decision making in an effort to promote lifetime learning.

Vision Statement

The UMKC School of Dentistry Graduate Dental Hygiene Program will serve as a model dental hygiene graduate program that increases the education of the dental hygienist unrelated to geographic location.

Mission Statement

The UMKC School of Dentistry Master of Science in Dental Hygiene Education (MSDHE) provides a comprehensive education of both theory and practical applications and prepares the dental hygienist to assume a variety of employment opportunities where leadership in advanced communication skills, critical thinking, problem-solving, evidence-based decision making, and lifelong learning are needed.

Courses

DENT-HYG 3000 Dental Morphology And Occlusion Credits: 2

Designed to provide the dental hygiene student with a sound knowledge base in dental morphology and occlusion through discussion and laboratory experiences. Students will learn to identify anatomical structures of each tooth and be able to communicate these findings effectively with colleagues and patients in both verbal and written forms. The clinical application and relevance of dental morphology in the practice of dental hygiene will be emphasized. Special consideration will be given to root morphology as it relates to periodontal instrumentation. Activities will include: identification of extracted teeth, terminology exercises, dental charting experiences and identifying classifications of occlusion.

DENT-HYG 3020 Dental Radiology Credits: 2

Lecture and clinical practice of dental radiographic procedures. Topics included are radiation hygiene, taking and developing radiographs, processing and mounting films, and radiographic interpretation. Clinical experience is required throughout the remaining semesters.

DENT-HYG 3030 Introduction to Histopathology of Oral Tissues Credits: 2

A comparison of the microscopic anatomy of healthy and diseased oral tissues. The major goal of this course is to integrate basic sciences (embryology, descriptive histology, and cell biology of oral tissues) with clinical sciences. The gap between the basic and clinical sciences is not always easy to bridge; this course is designed to bridge the "gap." This course provides students with an introduction to orofacial histology and embryology and pathology that may arise from the tissues of the head, neck, and oral cavity.

Prerequisites: Dental hygiene student.

DENT-HYG 3080 Introduction to the Preventive Practice of Dental Hygiene Credits: 4

This course will introduce theories and rationales for basic clinical dental hygiene care (infection control, oral examination and fundamentals of instrumentation) in diverse populations. Practical application of specific clinical skills will be introduced in the classroom and applied in the clinical setting.

DENT-HYG 3080L Preclinical Dental Hygiene Credits: 2

This course emphasizes the practical application of the fundamental concepts and principles of patient care in a diverse society discussed in DENT-HYG 3080. Emphasis is placed on patient assessment and techniques of instrumentation for examination and dental hygiene treatment. After the student has mastered basic skills, he/she will begin to provide direct dental hygiene services.

DENT-HYG 3200 General and Oral Pathology Credits: 2-3

An introduction to the principles of general pathology and organ system pathology including inflammation, immunity and diseases of immune origin, genetic diseases, neoplasia with emphasis on oral cancer, and diseases of selected organ systems including pulmonary, cardiovascular, hematopoietic, endocrine, skeletal, gastrointestinal, hepatic, pancreatic and other systems as time permits.

DENT-HYG 3210 Applied Nutrition and Biochemistry Credits: 2

This course introduces biochemistry and nutrition, encouraging identification of sources and application of specific nutrients for health. Contents familiarize students with roles of nutrition and places emphasis on the hygienist's role as nutritional educator- utilizing skills of recognition, prevention and treatment of related disease(s) and support of good oral health. Topics build on previous knowledge of chemistry, biology and physiology in application to health, coupled with deficient/optimal nutrition. Students will utilize motivational interviewing pertaining to counseling to help patients assign values, prioritize, and meet agreed upon goals. The format will include face-to-face lectures, online supplements, short labs, and group assignments/presentations.

Prerequisites: CHEM 211 and CHEM 211L; LS-PHYS 217.

DENT-HYG 3220 Dental Biomaterials Credits: 2

This course is designed to provide the dental hygiene student with a sound knowledge base in the science and manipulation of dental biomaterials. Through lectures and laboratory session, the student's ability to make clinical judgments regarding the application of dental biomaterials and the ways in which materials react to the oral environment will be enhanced.

DENT-HYG 3260 Principles Of Periodontics Credits: 2

This course in Periodontics will cover the biological and clinical aspects of periodontal health and pathology. An introduction to the supporting structures of the teeth will provide the foundation of understanding pathogenesis, histopathology and subsequent therapeutic treatment of periodontal diseases. The dental hygienist's role in recognition, prevention and treatment of periodontal diseases and maintenance of periodontal health is examined.

DENT-HYG 3280C Dental Hygiene Clinic I Credits: 3

Students will further develop clinical skills and techniques learned in DENT-HYG 3080L and previous courses by providing services to patients.

DENT-HYG 3285 Seminar In Dental Hygiene I Credits: 2-3

This course expands on theory and background presented in DENT-HYG 3080. Topics include expanding dental hygiene skills required for the care of patients and continued development of problem solving abilities and critical thinking skills as they relate to the provision of dental hygiene care. Provide students with a more insightful view of the role of the dental hygienist in the delivery of comprehensive patient care.

DENT-HYG 3300 Radiographic Interpretation Credits: 0.5

The purpose of the course is to introduce interpretation of radiographic anomalies and pathology just prior to the clinical experience. Since there was little time for an emphasis on radiographic interpretation during your second year radiology course, this lecture and participation course supplement clinic instruction in diagnosis of the patient's oral needs and formulation of a treatment plan. Upon completion of this course, the student should be able to recognize simple pathology and radiographic anomalies.

DENT-HYG 3320 Oral Health Behavior Change Credits: 3

The purpose of this hybrid course is to prepare the junior dental hygiene student to effectively assess and individualize preventive oral health care through the use of brief motivational interviewing. The course will include evidenced based information in dental caries and caries risk assessment, caries preventive measures, introduction to periodontal disease, dental stains, and management of xerostomia, halitosis, and dentinal sensitivity, oral healthcare products and how to care for an oral appliance. The student will subsequently apply course concepts to facilitate patient behavior change in the clinical setting. Recommended preparation: a course in General Psychology.

DENT-HYG 3340 Principles Of Public Health Credits: 2

This course introduces the student to principles of public health, the field of epidemiology, health care delivery systems, public health terminology and teaching methodologies to use in culturally diverse community settings. Students will have the opportunity to assess a target population, plan, implement and evaluate appropriate programs. Students will also apply theories and skills of communication and education while preparing and presenting oral health education programs for various population groups.

DENT-HYG 3620 Civic Engagement Credits: 0.25

Service learning experiences expose students with different opportunities to engage the community. Students can choose from approved experiences and participate based on their interest and skill level. Students will research, participate, and reflect on their experiences.

DENT-HYG 4001 Clinical Oral Radiology Credit: 1

Clinical application of radiology principles taught in preceding terms. To provide clinical skills to safely make and interpret radiographic images for the provision of oral health care.

DENT-HYG 4020 Local Anesthesia And Pain Control Credits: 3

This course is designed to prepare dental hygiene students for the safe, effective administration of local anesthesia and nitrous oxide sedation. Included are content areas in anatomy, physiology, pharmacology, and emergency management as they relate to the administration of local anesthetics, nitrous oxide, and pain control. Laboratory sessions are structured to develop actual experiences in administration of local anesthetics and nitrous oxide. Various mechanisms for pain control are also covered. Methods of presentation include lecture, large group discussion, laboratory and clinical participation.

DENT-HYG 4040 Foundations of Teaching Credits: 2

This course provides an introduction to the evidence-based best practices in course design for students who are preparing for a career in teaching and for those who simply wish to learn more about classroom instruction. Students will explore outcomes centered course design and practical and effective instructional strategies. Content application activities include syllabus development, writing objectives, constructing lesson plans, preparing presentations and developing course management sites.

DENT-HYG 4050 Periodontics II Credit: 1

This course in Periodontics will provide an introduction to Phase II and III therapy. Periodontal decision making will be emphasized. The dental hygienists' role in recognition, prevention and treatment of periodontal diseases and maintenance of periodontal health is further examined.

Prerequisites: DENT-HYG 3260.

DENT-HYG 4060C Dental Hygiene Clinic II Credits: 2

The student will continue to develop competency in basic dental hygiene skills. Principles of periodontal techniques, such as non-surgical periodontal therapy, supportive treatment procedures and comprehensive patient care in a diverse society will be emphasized. The student will be asked to demonstrate professional management skills and productivity.

DENT-HYG 4065 Seminar in Dental Hygiene II Credit: 1

This seminar course is offered in conjunction with DENT-HYG 4060C, and expands upon theory and background presented in other dental hygiene courses within the curriculum which will involve further development of their critical thinking/problem solving skills regarding patient care. Students will be provided with further instruction regarding advanced instrumentation, cultural diversity, motivational interviewing and other technological advancements utilized in dental hygiene care.

Co-requisites: DENT-HYG 4060C.

DENT-HYG 4080 Introduction to Research and Evidence Based Decision Making Credits: 2

This is a lecture/discussion course with assigned exercises in the research process and evaluating scientific studies. Students will apply basic principles of research design and methodology to the critical analysis of contemporary oral health related literature focusing on the review and evaluation of literature as it relates to the practice and profession of dentistry and dental hygiene with the intent of utilizing an evidence-based approach to care.

DENT-HYG 4100 Pharmacology Credits: 3

An overview and introduction to the major drug groups and common drugs taken by dental outpatients. Course includes the basic principles and general theories of drug action, basic pharmacokinetics, their mechanisms of action and therapeutic uses and the relative dental significance of each.

DENT-HYG 4110 Introduction to Research Methodologies Credits: 2

This is a lecture/discussion course with assigned exercises in the research process and evaluating scientific studies. Students will learn the basic principles involved in research design and methodology and will apply those principles to the critical analysis of contemporary health related literature. Focus on the review and evaluation of literature as it relates to the practice and profession of dentistry with the intent of utilizing an evidence-based approach to care will be stressed.

DENT-HYG 4115 Practicing in the Dental Hygiene Public Health Safety Net Credits: 3

The course is designed to increase the knowledge base of the practicing dental hygienist in the area of public health dentistry, including health promotion, disease prevention, current legislation, evidence based treatment, school based portable dentistry, coalitions, treating the geriatric and disabled populations, as well as how to write and secure.

DENT-HYG 4120C Dental Hygiene Clinic III Credits: 4

The student will continue to develop competency in intermediate dental hygiene skills. Principles of periodontal techniques, such as root planning, pain control and supportive techniques will be stressed. Comprehensive treatment planning and implementation of comprehensive care to a diverse patient population will be the focus of this course. Continued development of professionalism, management and critical thinking skills will be emphasized.

DENT-HYG 4125 ECP III Training Course Credits: 2

The ECP III Training Course is designed to prepare a registered dental hygienist to apply for the Kansas Extended Care Permit III. Hygienists with the ECP III certificate can practice under the sponsorship of a dentist in a variety of public health settings including schools and long term care facilities in Kansas.

DENT-HYG 4130 Introduction to Instructional Technologies and Online Learning Credit: 1

The web-based multimedia course will examine the mediated communication process using Internet tools and is designed to help the incoming student become prepared to succeed in their degree program using online technologies. Students will examine the changes and challenges associated with mediated synchronous and asynchronous technologies. The course will be delivered in four different modules.

DENT-HYG 4150 Portfolio Capstone Credit: 1

The capstone course serves as the culminating experience for students in the BSDH Degree Completion Program. During the Capstone course, students will create a coherent and cohesive body of work reflective of attainment of the competencies for the BSDHDC program—in the form of an e-Portfolio.

DENT-HYG 4210 Practice Management Credits: 3

Current relevant issues impacting dental hygiene practice are discussed. Dental practice economics, communicating and management in a diverse society are included. Also included in this course is the study of jurisprudence as it relates to the practice of dental hygiene.

DENT-HYG 4220 Interdisciplinary Community Oral Health Field Experiences Credits: 3

Students will practice skills/principles learned in Anchor I-II by participating in interdisciplinary community projects and clinical activities targeting Kansas City's urban and surrounding rural environments. Students will use strategies of assessment, program planning, implementation and evaluation to improve existing, develop new, and reflect on service projects' purposes, methods, and consequences. This course is taught with DENT-HYG 4120. Major emphases include team collaboration/leadership of civic action, community programming to enact measurable and meaningful change, respectful communication considering health literacy and associated disparities among patients and health care providers, to express ideas supporting wellness through improved oral health.

Co-requisites: DENT-HYG 4120.

DENT-HYG 4240 Ethics In Professional Practice Credit: 1

Study of ethics and ethical issue related to the practice of dental hygiene within a diverse society. Includes application of ethical principles to real-life situations.

DENT-HYG 4260 Senior Seminar Credits: 2

This course serves as a means of synthesizing information from all courses in the dental hygiene curriculum and applying content to patient cases and practice management issues. Case-based learning (CBL) will be utilized to review significant content areas as well as to introduce subjects not previously encountered during previous clinical experiences. Case based/problems based learning (PBL) with faculty facilitation will assist students in managing patient cases. This course is also designed to assist in preparing senior dental hygiene students for the written and clinical examinations required for licensure.

DENT-HYG 4260C Dental Hygiene Clinic IV Credits: 4

The student will have the opportunity to reach competency in all clinical skills. Emphasis will be placed on decision-making, problem-solving, critical thinking, appointment and time management. The course will focus on comprehensive dental hygiene care to a diverse population.

DENT-HYG 4320 Special Patient Care Practicum Credits: 2-4

Through outside agency affiliation, students will have the opportunity of applying the course content from Principles of Public Health, Dental Health Education and DHE-Practicum. Sites for participation include hospitals, nursing homes, and residential and day activity centers for developmentally disabled.

DENT-HYG 4340 Community Dentistry Practicum Credits: 2-4

The community dentistry practicum provides the student with an opportunity for personal exploration of the many settings of community dentistry. These experiences may lead the students into clinical activities or design and implementation of dental health educational programs. The student will have the opportunity to work with various community health professionals in the Kansas City area. The student will need reliable transportation and should expect some experiences to require travel.

DENT-HYG 4350 Periodontal Therapy Practicum Credits: 1-4

This course is designed for the dental hygiene student who desires increased experience with periodontal skills. The course involves practical experience in the graduate periodontics clinic working with a periodontology resident. Two clinic sessions per week; one seminar scheduled weekly.

DENT-HYG 4360 Practice Management Practicum Credits: 3

Current relevant issues impacting dental hygiene practice are discussed. Dental practices, economics, communication and management are included. Practical application of course would include the development of a dental office operating manual.

DENT-HYG 4380 Research Practicum Credits: 2-4

This course provides an opportunity to apply the content in the previous course Introduction to Research Design. The protocol identified may be a basic science, clinical or community dental hygiene problem. The field experience may deal with a basic or applied, descriptive or explanatory research question.

DENT-HYG 4500 Seminar on Issues in Higher Education for Health Professionals Credits: 2-4

This course is designed to introduce the student to matters encountered in higher education. specific to dental hygiene education. Weekly readings, assignments, and sessions will familiarize the student in topics such as: writing resumes and cvs, case-based learning, accreditation, promotion and tenure, and assessment.

DENT-HYG 4600 Evidence Based Decision Making in the Clinical Practice of Dental Hygiene Credits: 2-4

This course is designed for the graduate and degree completion dental hygiene student and expand on the student's basic knowledge of the dental hygiene process of care. Utilization of evidence based decision making skills will be explored in an effort to incorporate current scientific literature, personal clinical experience and patient preferences as it relates to the delivery of comprehensive patient care. Skills taught in this course will enhance background knowledge related to the dental hygiene process of care and help to foster an attitude of critical analysis and lifelong learning.

DENT-HYG 4620 Introduction to Educational Methodology Credits: 3

This course is designed to introduce the student to basic educational methodologies and to provide participants with a better understanding of the teaching/learning process. The course includes units on instructor/student relationships, educational approaches, educational ethics and professionalism, the scholarship of teaching and learning and curriculum theory.

DENT-HYG 4625 Dental Hygiene Administration Credits: 2

This course is designed for the post-certificate dental hygiene student. Major topic areas include accreditation of dental hygiene programs, the impact of National and State Board examinations on curriculum planning, selective admissions policies and procedures, faculty evaluation, promotion and tenure and students' rights.

DENT-HYG 4630 Practicum in Dental Hygiene Administration Credits: 2-4

Under the supervision of the Director of Dental Hygiene, the student will gain actual experiences in the daily administration of a dental hygiene program. The student may contract for responsibilities such as admissions, budget preparations, course scheduling, report writing and student academic counseling.

DENT-HYG 4635 Practicum In Clinical Supervision Credits: 2-4

Under the supervision and permission of the Dental Hygiene Clinical Supervisor, the student will gain actual experience in the duties involved in coordinating the clinical education of a dental hygiene student. The student may contract for responsibilities such as, coordinating mock board examinations, maintaining student clinical records, developing faculty and student clinic schedules and report writing.

DENT-HYG 4640 Student Teaching and Conference I Credits: 2-4

Under the direction of a supervising professor, the student may select teaching experience in the classroom areas of their choice. The student develops behavioral course objectives, comprehensive lesson plans, test and examination items, classroom presentations, and prepares student evaluations in the selected classroom teaching areas. The student may select teaching assignments in one of the developed externship student teaching programs. Conferences will be held in conjunction with the course.

Prerequisites: DENT-HYG 4040, DENT-HYG 4620.

DENT-HYG 4650 Student Teaching and Conference II Credits: 2-4

The student will continue to develop teaching skills in laboratory and/or classroom areas as selected by the student under the direction of a supervising professor.

Prerequisites: DENT-HYG 4640.

DENT-HYG 4660 Independent Study in Dental Hygiene Credits: 1-4

This course is designed for the dental hygiene student who desires independent study of a particular problem or area of interest in dental hygiene education.

DENT-HYG 4680 Dental Hygiene Clinical Instruction I Credits: 2-4

Continued development of competency as a clinical instructor under the supervision of the dental hygiene faculty. Requires a half-day in clinic student instructor.

Prerequisites: DENT-HYG 4640.

DENT-HYG 4685 Dental Hygiene Clinical Instruction II Credits: 1-4

A continuation of DENT-HYG 4680. Under the supervision of the dental hygiene faculty, students may continue to develop skills as a dental hygiene clinical instructor.

Prerequisites: DENT-HYG 4680.

DENT-HYG 5500 Introduction to Educational Methodology Credits: 3

This course is designed to introduce the student to basic educational methodologies and to provide participants with a better understanding of the teaching/learning process. The course includes units on instructor/student relationships, educational approaches, educational ethics and professionalism, the scholarship of teaching and learning and curriculum theory.

DENT-HYG 5502 Foundations of Teaching Credits: 2

This course provides an introduction to the evidence-based best practices in course design for students who are preparing for a career in teaching and for those who simply wish to learn more about classroom instruction. Students will explore outcomes centered course design. Content application activities include syllabus development, writing objectives, constructing lesson plans, preparing presentations, developing course management sites, and test development.

Prerequisites: Must be a student enrolled in the MSDHE program.

DENT-HYG 5510 Student Teaching and Conference I Credits: 2-4

Student teaching experience in classroom areas as selected by the student under the direction of a supervising professor. The student develops behavioral course objectives, test and examination items, classroom presentations, and prepares student evaluations in the selected classroom teaching areas. The student may select teaching assignments in one of the developed externship student teaching programs. Conferences will be held in conjunction with the course.

Prerequisites: DENT-HYG 4040, DENT-HYG 5500.

DENT-HYG 5512 Student Teaching and Conference II Credits: 2-4

This course is designed to provide the graduate dental hygiene student with additional experience in classroom teaching. Student teaching experiences will be selected by the student under the direction of and in conference with a supervising professor.

DENT-HYG 5516 Special Issues in Higher Education for Health Professional Credits: 3

This course is designed to introduce the student to matters encountered in higher education - specific to dental hygiene education. Weekly readings, assignments, and sessions will familiarize the student in topics such as: writing resumes and CVs, motivational interviewing, accreditation, promotion and tenure, and social media.

DENT-HYG 5530 Clinical Instruction and Conference I Credits: 2-4

Students will actively participate in clinical instruction under the supervision of a dental hygiene faculty member. Topics relative to clinical teaching will be discussed in weekly seminars. Students will be encouraged to apply knowledge gained in DENT-HYG 4620 and DENT-HYG 5500 during clinical instructional experiences. Additionally the student must participate in at least 1 day of clinic per week to equal another credit hour of course work.

DENT-HYG 5532 Clinical Instruction and Conference II Credits: 2-4

This course is a continuation of DENT-HYG 5530. Under the supervision of the dental hygiene faculty, the student will continue to develop skills as a dental hygiene clinical instructor.

Prerequisites: DENT-HYG 5530.

DENT-HYG 5553 Evidence Based Decision Making in the Clinical Practice of Dental Hygiene Credits: 2-4

This course is designed for the graduate and degree completion dental hygiene student and will expand on the student's basic knowledge of the dental hygiene process of care. Utilization of evidence based decision making skills will be explored in an effort to incorporate current scientific literature, personal clinical experience and patient preferences as it relates to the delivery of comprehensive patient care. Skills taught in this course will enhance background knowledge related to the dental hygiene process of care and help to foster an attitude of critical analysis and life-long learning.

DENT-HYG 5560 Practicum in Clinical Supervision and Management Credits: 2-4

Practical experience in functioning as a Clinic Supervisor. Clinical managerial projects will be assigned according to students' interests and goals by agreement between student and instructor.

DENT-HYG 5565 Advanced Special Patient Care Practicum I Credits: 1-4

This course is designed to familiarize the student with general principles of cancer therapy and the role of the dental team in the multidisciplinary care of patients undergoing oncology treatments. Special emphasis will be placed on the treatment of the patient with head and neck cancer, and preventive and palliative dental interventions for control of the oral complications associated with all cancer therapies. Cancer prevention issues and the psychosocial and economic impact of cancer diagnosis will also be discussed.

DENT-HYG 5566 Advanced Special Patient Care Practicum II Credits: 1-4

This course will provide the graduate dental hygiene student with the opportunity to explore the relationship of an oncology dental program to medical health care facilities.

DENT-HYG 5570 Administrative Practicum Credits: 1-4

Practical experience in administration. The student selects areas of responsibility based on their goals and interests in administration. Possible areas of involvement are: recruitment, admissions, curriculum and course development, course scheduling, grant and report writing and student advising.

DENT-HYG 5575 Practicing in the Dental Hygiene Public Safety Net Credits: 3

This course is designed to increase the knowledge base of practicing dental hygienists in the area of public health dentistry, including health promotion, disease prevention, current legislation, evidence based treatment, school based portable dentistry, coalitions, treating the geriatric and disabled populations, as well as how to write and secure grant monies. In addition, the course will expose dental hygienists to a variety of public health settings in which they can practice with an Extended Care Permit (in KS) or the Dental Hygiene Designation (in MO). Information on how to apply for the permits will also be shared.

DENT-HYG 5576 Extended Care Permit (ECP) III Training Course Credits: 2

The Extended Care Permit (ECP) III Training Course is designed to prepare a registered dental hygienist to apply for the Kansas Extended Care Permit III. Hygienists with the ECP III certificate can practice under the sponsorship of a dentist in a variety of public health settings including schools and long term care facilities in Kansas.

Prerequisites: Must be a student enrolled in the MSDHE program.

DENT-HYG 5585 Portfolio Capstone Course Credit: 1

This capstone course serves as the culminating experience for students in the MS in Dental Hygiene Education (MS in DHE). During the Capstone course, students will create a coherent and cohesive body of work reflective of attainment of the competencies for their respective programs - in the form of an e-Portfolio. This course should be taken in the semester of anticipated completion/graduation of the MS In DHE program.

DENT-HYG 5590 Independent Study Credits: 1-4

Independent study of a particular topic or area of interest to the student in dental hygiene/dentistry and/or higher education.

DENT-HYG 5595 Writing in Science Credits: 1-2

This seminar course is designed to provide advanced education students in the health professions the skills necessary to write and communicate in science. Course activities and topics include: critical analysis of the literature, literature summary tables, structure and organization of documents, style and usage, drafting, revising and finishing. Participants will practice the craft of scientific writing not only as the writer but also as the reader providing correction and reorganization where appropriate. While this course examines many writing tasks, exercise culminate with the development of a research protocol or scientific article.

DENT-HYG 5599 Research And Thesis Credits: 1-6

This course is designed to support the research process from protocol development through data collection and report of results. Research committee chairperson typically serves as the course director.

Bachelor of Science in Dental Hygiene

Student Learning Outcomes

The Division of Dental Hygiene at the UMKC School of Dentistry offers two routes to a Bachelor of Science degree in Dental Hygiene: The B.S. Clinical Entry-Level program and the RDH to BSDH B.S. Degree Completion program. The following Clinical Entry Level program competencies are deemed by the faculty in the Division of Dental Hygiene as the skills, knowledge and values every entry level graduate must be able to consistently and independently demonstrate to qualify for graduation. The School of Dentistry, Division of Dental Hygiene assessment plan calls for these competencies to be assessed throughout the classroom, laboratory and patient care experiences during the student's tenure in the program in the form of papers, case study presentations, student portfolios, clinical competency examinations, community assessment and other appropriate assessment measures.

The UMKC dental hygiene graduate will be competent in:

- Core competence for ethical practice, adherence to regulations, evidence-based decision making, and self assessment.
- Assessing persons of all ages and stages of life in a diverse society.
- Treatment care planning and case presentation for persons of all ages/stages of life in a diverse society.
- Health education strategies for the prevention of disease and the promotion of health.
- Provision of preventive and therapeutic dental hygiene services for persons of all ages/stages of life.
- Health and safety provisions
- Management procedures (emergency management, communication, etc.)
- Community oral health strategies in a culturally diverse society.
- Utilization of information technology to assist in evidence-based decision making.

Program Requirements

The dental hygiene program begins in August of each year and continues for two academic years with a summer session between years. For more information, contact the program director.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (Satisfied in program requirements below)		
Math Pathway (Satisfied in program requirements below)		
Critical Thinking in the Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE; Satisfied in program requirements below)		
Total Credits		21

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Program Prerequisites

A minimum grade of 'C' must be earned in all prerequisite science coursework.

Code	Title	Credits
Please choose one of the following:		3
BIOLOGY 102	Biology and Living	
BIOLOGY 108	General Biology I	
BIOLOGY 109	General Biology II	
Please choose one of the following course sequences:		6-8
BIOLOGY 218 & LS-PHYS 217	Introductory Anatomy and Human Physiology	
HLSC 120 & HLSC 160	Anatomy & Physiology I and Anatomy and Physiology II	
BIOLOGY 112	Microbiology and Living	3
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
COMM-ST 110 or COMM-ST 140	Fundamentals Of Effective Speaking And Listening (satisfies GE Oral Communication requirement) Principles Of Communication	3
MATH 110 or MATH 120	Precalculus Algebra (or any 200-level or above MATH/STAT course; satisfies GE Math Pathway) Precalculus	3
PSYCH 210	General Psychology	3
SOCIOL 101	Sociology: An Introduction	3
Total Credits		29-31

Professional Degree Requirements

Code	Title	Credits
BMS 93065	Anatomy of the Head & Neck	2
DENT-HYG 3000	Dental Morphology And Occlusion	2
DENT-HYG 3020	Dental Radiology	2
DENT-HYG 3030	Introduction to Histopathology of Oral Tissues	2
DENT-HYG 3080	Introduction to the Preventive Practice of Dental Hygiene (satisfies GEFSE course, if not previously completed)	4
DENT-HYG 3080L	Preclinical Dental Hygiene	2
DENT-HYG 3200	General and Oral Pathology	2
DENT-HYG 3210	Applied Nutrition and Biochemistry	2

DENT-HYG 3220	Dental Biomaterials	2
DENT-HYG 3260	Principles Of Periodontics	2
DENT-HYG 3280C	Dental Hygiene Clinic I	3
DENT-HYG 3285	Seminar In Dental Hygiene I	2
DENT-HYG 3300	Radiographic Interpretation	0.5
DENT-HYG 3320	Oral Health Behavior Change	3
DENT-HYG 3340	Principles Of Public Health	2
DENT-HYG 4020	Local Anesthesia And Pain Control	3
DENT-HYG 4050	Periodontics II	1
DENT-HYG 4060C	Dental Hygiene Clinic II	2
DENT-HYG 4065	Seminar in Dental Hygiene II	1
DENT-HYG 4080	Introduction to Research and Evidence Based Decision Making	2
DENT-HYG 4100	Pharmacology	3
DENT-HYG 4120C	Dental Hygiene Clinic III	4
DENT-HYG 4210	Practice Management	3
DENT-HYG 4220	Interdisciplinary Community Oral Health Field Experiences (satisfies GECUE course)	3
DENT-HYG 4240	Ethics In Professional Practice	1
DENT-HYG 4260	Senior Seminar	2
DENT-HYG 4260C	Dental Hygiene Clinic IV	4
LS-PHYS 3070	Oral Physiology	3
Dental Hygiene Elective (choose one of the following)		2
DENT-HYG 4320	Special Patient Care Practicum	
DENT-HYG 4340	Community Dentistry Practicum	
DENT-HYG 4350	Periodontal Therapy Practicum	
DENT-HYG 4380	Research Practicum	
DENT-HYG 4630	Practicum in Dental Hygiene Administration	
DENT-HYG 4660	Independent Study in Dental Hygiene	

Total Credits

66.5

GPA Minimum: 2.5

Total credit hours: 120

Admission Requirements

This clinical entry level program is for the individual who wants to go into the field of dental hygiene. The primary goals of the basic preparation bachelor of science degree program in dental hygiene are to prepare dental hygienists to perform competently in clinical practice and to perform competently in clinical practice and/ or community oral health program planning, clinical teaching, special patient care, practice management and research.

Admission to the Clinical Entry Level Program

Admission is on a selective basis and requires more than simply meeting certain course or GPA requirements. Factors considered in the selection process are the candidates' academic credentials, letters of evaluation, a personal interview, motivation and all other information submitted by the candidates. Formal applications for admission to the dental hygiene program must be submitted no later than December 1st. Classes formally begin each year at the end of August. Minimum requirements and credentials for application are all of the following:

1. Graduation from an accredited high school or its equivalent.
2. Satisfactory completion of approximately two academic years or 60 semester hours of college. (The 60 semester hours must satisfy the general education requirements, which are specified later in this section. All general education requirements must be completed prior to entrance into the dental hygiene program.)
3. Application to UMKC.
4. Supplemental application for admission to the Division of Dental Hygiene.
5. College transcripts of all college coursework.
6. A cumulative college GPA of at least 2.75.
7. A college science prerequisite GPA of 2.75. Preferred GPA for admission is 3.3.
8. Three reference forms.

9. Personal interview.
10. For international applicants, a satisfactory TOEFL score (at least 550 on the paper test or 213 on the computer-based version).

Notification of Admission

Applications for admission are reviewed by the School of Dentistry Dental Hygiene Student Admissions Committee. After a decision is reached on an application, notification of acceptance is made by mail. The applicant has 30 days from the date of the acceptance letter to make a required non-refundable \$100 deposit. This deposit is applied to enrollment fees.

Several applicants are placed on an alternates list. In the event that a position becomes available, an applicant from this list is chosen to fill the vacancy. Alternates may be accepted through the first week of the program.

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 102, 108, or 109 ^{CC}	3	BIOLOGY 112	3
ENGLISH 110	3	CHEM 211 & 211L	5
GEFSE 101 (required for all pre-Dental Hygiene students)	3	ENGLISH 225	3
MATH 110	3	GECRT-SS 101	3
GECRT-SC 101	3		
	15		14

Second Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 218 or HLSC 120 ^{CC}	3-4	LS-PHYS 217 or HLSC 160 ^{CC}	3-4
PSYCH 210 ^{CC}	3	SOCIOL 101 ^{CC}	3
COMM-ST 110 or 140	3	HISTORY 101, 102, or POL-SCI 210	3
GECRT-AH 101	3	GECRV 201	3
	12-13		12-13

Third Year

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
DENT-HYG 3000	2	DENT-HYG 3030	2	DENT-HYG 4020	3
DENT-HYG 3020	2	DENT-HYG 3200	2	DENT-HYG 4060C	2
DENT-HYG 3080	4	DENT-HYG 3210	2	DENT-HYG 4065	1
DENT-HYG 3080L	2	DENT-HYG 3220	2		
DENT-HYG 3320	3	DENT-HYG 3280C	3		
BMS 93065	2	DENT-HYG 3285	2		
LS-PHYS 3070	3	DENT-HYG 3260	2		
		DENT-HYG 3300	0.5		
		DENT-HYG 3340	2		
	18		17.5		6

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
DENT-HYG 4100	3	DENT-HYG 4210	3
DENT-HYG 4120C	4	DENT-HYG 4260	2
DENT-HYG 4050	1	DENT-HYG 4260C	4
DENT-HYG 4080	2	DENT-HYG 4001	1
DENT-HYG 4240	1	DENT-HYG Major Elective	2
DENT-HYG 4220	3		
	14		12

Total Credits: 120.5-122.5

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

UMKC School of Dentistry, Dental Hygiene Division

816-235-2050

dh@umkc.edu

RDH to BSDH Degree Completion Program

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate effective communication and interpersonal skills allowing them to communicate with diverse individuals and groups.
- Demonstrate effective management of information technology.
- Utilize critical thinking and problem-solving skills to facilitate decision-making.
- Demonstrate the ability to locate, evaluate, organize and use research materials from a broad range of sources to support the use of scholarly inquiry in the dental hygiene process of care.
- Assume responsibility for professional actions and care based on ethical and professional behavior, accepted scientific theories and accepted standards of care.
- Demonstrate the ability to manage themselves and others and work as a team member.

The competencies above have been adopted by the faculty to assure our RDH to BSDH graduates are adequately prepared to succeed in the dynamic job market of their chosen area of expertise. The assessment plan provides direct and indirect measures of these competencies through multiple measures.

Students must complete 30 credit hours in residence and have a minimum of 120 semester credit hours to earn a baccalaureate degree in dental hygiene. Students must also complete 36 credit hours of 300/400 level coursework to earn a bachelors degree. The particular choice of study will be determined by each student in consultation with the director of the RDH to BSDH degree completion program.

All students enrolled in the RDH to BSDH degree completion program must complete the general education requirements of the University prior to completion of the baccalaureate degree. Courses that the student has not completed will be included in the individual program of study for that student.

An individual program of study will may be developed for each student depending on the number of college hours completed previously.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE; Satisfied in program requirements below)		
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (Satisfied in program requirements below)		
Math Pathway (Satisfied in program requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC; Satisfied by RDH License)		
Critical Thinking in Social & Behavioral Sciences (GECRT-SS; Satisfied in program requirements below)		
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		15

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		
CJC 364	The Supreme Court And The Criminal Process	3
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Program Prerequisites

Code	Title	Credits
Mathematics:		
MATH 110 or MATH 120	Precalculus Algebra (or any 200-level or above MATH/STAT course; satisfies GE Math Pathway) Precalculus	3
Public Speaking:		
COMM-ST 110 or COMM-ST 140	Fundamentals Of Effective Speaking And Listening (satisfies GE Oral Communications) Principles Of Communication	3
Social and Behavioral Sciences (satisfies GECRT-SS course requirement):		
SOCIOL 101	Sociology: An Introduction	3
PSYCH 210	General Psychology	3
Biological and Physical Sciences:		
Please select one of the following:		3
BIOLOGY 102	Biology and Living	
BIOLOGY 108	General Biology I	
BIOLOGY 109	General Biology II	
BIOLOGY 112	Microbiology and Living	3
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
Please choose one of the following sequences:		6-8
BIOLOGY 218 & LS-PHYS 217	Introductory Anatomy and Human Physiology	
HLSC 120 & HLSC 160	Anatomy & Physiology I and Anatomy and Physiology II	
Total Credits		29-31

Professional Degree Requirements

Code	Title	Credits
Required		
DENT-HYG 4040	Foundations of Teaching	2
DENT-HYG 4110	Introduction to Research Methodologies	2
DENT-HYG 4130 & DENT-HYG 4620	Introduction to Instructional Technologies and Online Learning and Introduction to Educational Methodology (satisfies GEFSE course requirement)	4
DENT-HYG 4150	Portfolio Capstone	1
DENT-HYG 4500	Seminar on Issues in Higher Education for Health Professionals	3
DENT-HYG 4600	Evidence Based Decision Making in the Clinical Practice of Dental Hygiene	2
Total Credits		14

Code	Title	Credits
General Electives		59

GPA Minimum: 2.75

Total Credit Hours: 120

Admission Requirements

This program is designed for students who have completed an accredited dental hygiene program at another educational institution and desire to continue their education toward a baccalaureate degree (completion of RDH satisfies the GECRT-SC course requirement).

Formal applications for admission to this program are accepted on a rolling basis. The program may be completed on a full- or part-time basis. Basic requirements and credentials for admission are all of the following:

1. Graduation from an accredited dental hygiene program.
2. Results and successful completion of the National Board Examination for dental hygiene.
3. High school transcripts.
4. Complete college transcripts.
5. Satisfactory grade point average.
6. Application for admission to UMKC.
7. Supplemental application for admission to the Division of Dental Hygiene.
8. Three reference forms (including one from the director of the accredited dental hygiene program attended).
9. An interview with the admissions committee
10. An admissions narrative

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Master of Science: Dental Hygiene Education

Student Learning Outcomes

The Graduate Dental Hygiene Program at the University of Missouri – Kansas City School of Dentistry builds upon the foundation of the baccalaureate degree dental hygienist. Upon completion of the 36 credit hours necessary for graduation, the student will be able to do the following:

1. Our graduates will produce original and scholarly research projects and communicate their findings in manuscript form.
2. Our graduates will utilize computer technology to advance teaching and education.
3. Our graduates will be able to explain the relationship between higher education and oral health care policy (issues) in dental hygiene.
4. Our graduates will have the knowledge to demonstrate through behavior, high standards of ethics, integrity, and responsibilities in professional situations.
5. Our graduates will have the ability to teach and organize courses and curriculums in dental hygiene educational programs.
6. Our graduates will be leaders in their communities, organizations, institutions and work environments.

Required Courses

Code	Title	Credits
DENT-HYG 4130	Introduction to Instructional Technologies and Online Learning	1
DENT-HYG 5502	Foundations of Teaching	2
DENT-HYG 5500	Introduction to Educational Methodology	3
DENT-HYG 5510	Student Teaching and Conference I	2-4

DENT-HYG 5516	Special Issues in Higher Education for Health Professional	3
DENT-HYG 5530	Clinical Instruction and Conference I	2-4
DENT-HYG 5553	Evidence Based Decision Making in the Clinical Practice of Dental Hygiene	2
DENT-HYG 5595	Writing in Science	2
DENT-HYG 5599	Research And Thesis	1-6
RES-ME 5700	Introduction To Research Methodology	3
RES-ME 5704	Introduction to Biostatistics	3
DENT-HYG 5585	Portfolio Capstone Course	1
Total Credit Hours		27-36

It is highly recommended that the student take the following:

Code	Title	Credits
DENT-HYG 5512	Student Teaching and Conference II	2-4
DENT-HYG 5532	Clinical Instruction and Conference II	2-4

For students who do not reside in the Kansas City area (online students) some courses (DENT-HYG 5510 Student Teaching and Conference I and DENT-HYG 5530 Clinical Instruction and Conference I) require teaching (didactic or clinically) at a college/university setting other than UMKC. In those cases, an affiliation agreement is required. It is the student's responsibility to get permission from the sponsoring institution to teach in their facility. Once the student has initiated contact, the UMKC program director will contact the program director of the sponsoring institution.

The total number of credit hours required for completion of the Master of Science Degree Program in Dental Hygiene Education is 36 credit hours.

Graduation Requirements

1. A minimum of a 3.0 GPA.
2. Successful completion of 36 credit hours and the completion of an original research project, manuscript ready for publication..
3. All other requirements for graduation as stated in the General Graduate Academic Regulations and Information section of the UMKC General Catalog. For more information - please visit www.umkc.edu/sgs (<http://www.umkc.edu/sgs/>)
4. Design and disseminate to other professionals appropriate to your area of research a scholarly presentation at a regional, state, or national conference with other health professionals.
5. Successful completion of a portfolio as presented in DENT-HYG 5585. The final portfolio must be turned into the program director 6 weeks prior to the student's anticipated graduation date.

UMKC is An Equal Opportunity/Access/Affirmative Action/Pro Disabled & Veteran Employer

Department of Oral and Craniofacial Sciences

Applicants can view tuition/fee information here: <http://www.umkc.edu/adminfinance/finance/cashiers/dentistry-tuition-fee-rates.asp>

Oral & Craniofacial Sciences Department Chair:
Mark L. Johnson, PhD

Director of Oral & Craniofacial Sciences Graduate Programs:
Mary P. Walker, DDS, PhD

Faculty:

Mark Johnson, Ph.D; Mary Walker, D.D.S., Ph.D.; Erin Bumann, D.D.S., Ph.D., M.S.; Timothy Cox, Ph.D.; Sarah Dallas, Ph.D.; Jeffrey Gorski, Ph.D. (emeritus); Stephan Lohfeld, Ph.D.; Carole McArthur, M.D., Ph.D. (emerita); Yong Wang, Ph.D.; Melanie Simmer-Beck, Ph.D.

- Master of Science: Oral and Craniofacial Sciences (p. 1417)
- Interdisciplinary Ph.D. (p. 1419)

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Applicants can view tuition/fee information here: <http://www.umkc.edu/adminfinance/finance/cashiers/dentistry-tuition-fee-rates.asp>

Faculty

Oral and Craniofacial Sciences Department Chair:
Mark L. Johnson, Ph.D.

Director of Oral and Craniofacial Sciences Graduate Programs:

Mary P. Walker, D.D.S., Ph.D.

Faculty:

Mark Johnson, Ph.D.; Mary Walker, D.D.S., Ph.D.; Erin Bumann, D.D.S., Ph.D., M.S.; Timothy Cox, Ph.D.; Sarah Dallas, Ph.D.; Jeffrey Gorski, Ph.D. (emeritus); Stephan Lohfeld, Ph.D.; Carole McArthur, M.D., Ph.D (emerita); Yong Wang, Ph.D.; Melanie Simmer-Beck, Ph.D.

Master of Science in Oral and Craniofacial Sciences

General Nature of the Program

Program Overview

The overall goals of the Oral & Craniofacial Sciences (OCS) MS program are: 1) to produce graduates knowledgeable in advanced concepts and principles of biomaterials and oral & craniofacial biology; 2) train students to critically evaluate and apply scientific literature; 3) provide students basic research skills; and 4) produce graduates who will advance scientific knowledge in oral and craniofacial health sciences.

This program includes advanced work in basic, behavioral and clinical sciences relating to dentistry. The OCS MS program is designed for students who are concurrently enrolled in advanced dental residency certificate programs. Those interested in applying for a residency program (Orthodontics, Periodontics, Endodontics) and also interested in a Master of Science degree should note that an application to the OCS MS program would be subsequent to their acceptance into the residency program.

The coursework and thesis present an opportunity for the student to cross traditional departmental lines and undertake an interdisciplinary approach to the study of problems related to oral and craniofacial sciences. On successful completion of all necessary coursework and thesis requirements, the student is awarded a Master of Science degree in Oral & Craniofacial Sciences.

Admission Information

Master of Science Admission Requirements

- A DDS/DMD or equivalent degree.
- A minimum cumulative GPA of 3.0 for all undergraduate work, including dental school.
- The TOEFL is required for all international applicants, who must have a score of at least 80. An IELTS score of 6.0 or above may be accepted in place of the TOEFL.
- Graduate Record Examination (GRE), with the following minimum scores:

GRE	Score Scale
Quantitative	150
Verbal	155
Analytical Writing	4.0

Application Procedures

The OCS MS programs is designed for applicants, who will be concurrently enrolled in a dental residency program. To be eligible for dental specialty program, you must be a US citizen or permanent resident with a DDS or DMD degree from an institution accredited by the Commission on Dental Accreditation or the Canadian Dental Accrediting Commission.

Application to the OCS MS program should occur after you have been accepted into the dental residency program (Endodontics, Orthodontics, Periodontics). After you have been accepted, if you are interested in applying, please contact Dr. Mary Walker (walkemp@umkc.edu) regarding your interest. From there, you will receive specific guidance on the application process. Items for the OCS MS application will include:

- Official transcripts from all colleges attended
- Official GRE scores
- Two letters of recommendation *
- Personal Statement: indicating your past research experience, your reason for pursuing the Oral and Craniofacial Sciences MS degree and your possible research interests.
- Resume/CV

*Note on Recommendation Letters

Recommendation letters should be addressed to:

Dr. M.P. Walker, Director of Oral & Craniofacial Sciences Graduate Programs
UMKC School of Dentistry
650 East 25th Street
Kansas City, MO 64108-2795

Student Learning Outcomes and Curriculum

Student Learning Outcomes

Upon successful completion of the Oral & Craniofacial Sciences MS Program, the student will be able to do the following:

1. Demonstrate a deeper understanding of the link between scientific research and clinical health care practice
2. Conduct thorough literature reviews based on an understanding of periodical databases and scholarly journals in the health sciences; have the aptitude to assess the validity of literature and determine how it may be applied in both research and clinical settings
3. Demonstrate the ability to conduct original research projects, drawing on an understanding of the current literature, appropriate study design, methodologies, and data analysis
4. Develop the capability to produce written materials that are clear, well-organized, insightful, and drawn from evidence-based research
5. Employ the communications skills needed to successfully convey important scientific and clinical concepts in oral presentations and communications
6. Apply professional ethics with the highest standards of integrity in all facets of research

The candidate enrolled in this program must complete a minimum of 30 semester hours of coursework. These courses must be listed on the Master's Degree Program of Study form (available from the Department of Oral and Craniofacial Sciences office).

Curriculum

Code	Title	Credits
Required Core Curriculum		
BIO-SCI 5751	Elements of the Scientific Method	1 credit hour
BIO-SCI 5752	Research Methods in Oral and Craniofacial Sciences	2-3 credit hours
BIO-SCI 5799	Research And Thesis	6 credit hours
RES-ME 5700	Introduction To Research Methodology	2-3 credit hours
RES-ME 5703	Thesis Writing	1 credit hour
RES-ME 5704	Introduction to Biostatistics	2-3 credit hours

Additional Courses

Some examples of additional courses applicable to the program:

BIO-SCI 5710	Genetics and Biochemistry of Cranial Facial Biology
BIO-SCI 5739	Biomaterials for the Dental Specialist
BIO-SCI 5740	Oral Pathology I
BIO-SCI 5743	Advanced Seminar in Dental Biomaterials
BIO-SCI 5747	Research Instrumentation Used in Dental Biomaterials
BIO-SCI 5759	Special Problems in Pharmacology
BIO-SCI 5760	Physiology of Oral Mineralized Tissues
BIO-SCI 5802	Immunopathology
BIO-SCI 5805	Molecular Biology of Oral Microflora
BIO-SCI 5830	Structural Characterization of Dental Biomaterials

Program Requirements

Thesis Research & Writing

To successfully graduate from the Oral & Craniofacial Sciences MS program, students must complete a minimum of 30 semester hours of graduate coursework as outlined on their program of study while maintaining a minimum 3.0 GPA. In addition to coursework, there are four major stages of the Oral & Craniofacial Sciences (OCS) MS program that students must successfully complete:

1. Qualifying Exam: Written Component-Research Proposal and Oral Component-Presentation/Exam
2. Research Project
3. Thesis
4. Thesis Defense

The OCS Graduate Program Director will serve as the student's academic advisor throughout the program and will assist with the selection of a thesis committee chair. The selection process will be based on the student's research interests, the various research opportunities, and meetings with potential MS degree advisors. Once the committee chair is selected, the chair and the OCS Graduate Program Director will assist the student with selecting two or three additional faculty members to serve on the thesis committee.

Qualifying Exam: Research Proposal and Oral Presentation/Exam

The Research Proposal is the written component of the Qualifying Exam that also includes an oral component, a student presentation about the proposed project followed by questions about the proposal, associated literature, and applicable coursework.

The required courses, BIO-SCI 5751 Elements/Scientific Methodology and BIO-SCI 5752 Research Methods in Oral & Craniofacial Sciences, are the foundation for writing the Research Proposal for the MS thesis project. These courses are individualized instruction with the Program Director and your thesis committee chair. As part of the Research Proposal development process, IRB and/or IACUC protocol approvals must be obtained as needed with the assistance of the Thesis committee chair.

The Oral Component of the Qualifying Exam is scheduled once the committee has reviewed the written proposal. The oral exam consists of the student doing a presentation about the proposal in addition to answering related questions.

Research Project

The student will enroll in BIO-SCI 5799 Research & Thesis (6 credit hrs). Credit hours will be distributed across various semesters. Until the thesis is successfully completed and defended, a grade of incomplete (I) is given for each term of enrollment in this course. Upon successful defense and completion of the thesis, incomplete grades will be changed to an appropriate letter grade. The thesis committee members will advise and guide the students in the successful completion of their research project.

Thesis

Following completion of the research project, the student will write a master's thesis. Original research will be used to construct a formal thesis conforming to the standards set by the School of Graduate Studies. The thesis chair and committee members will provide guidance in this process. Following initial approval by the chair, the thesis will be submitted to the entire committee for review.

Thesis Defense

School of Dentistry regulations require students to defend their thesis at a university-wide seminar on their research. The Thesis Defense Examination will be scheduled following preliminary thesis approval by the committee. After a successful Thesis Defense Examination and pending any thesis revisions based on committee feedback, the student will work closely with the School of Dentistry Librarian on thesis formatting procedures and policies as part of RES-ME 5703 Thesis Writing.

Other Requirements

Students will be expected to comply with all rules, regulations and requirements specified in the General Graduate Academic Regulations and Information section of this catalog

Oral and Craniofacial Sciences Interdisciplinary Ph.D.

The Ph.D. program at UMKC is interdisciplinary. This program is described in more detail in the Oral and Craniofacial Sciences Interdisciplinary Ph.D. Program (p. 1594) within the Graduate Studies section of this catalog.

Students interested in studies at the doctoral level in the discipline of oral and craniofacial sciences should apply to the Interdisciplinary Ph.D. program in the School of Graduate Studies.

Detailed information on the general and discipline-specific admission requirements for the Ph.D. can be found in the School of Graduate Studies section of this catalog.

Faculty

Oral and Craniofacial Sciences Department Chair:

Mark L. Johnson, Ph.D.

Director of Oral and Craniofacial Sciences Graduate Programs:

Mary P. Walker, D.D.S., Ph.D.

Faculty:

Mark Johnson, Ph.D.; Mary Walker, D.D.S., Ph.D.; Erin Bumann, D.D.S., Ph.D., M.S.; Timothy Cox, Ph.D.; Sarah Dallas, Ph.D.; Jeffrey Gorski, Ph.D. (emeritus); Stephan Lohfeld, Ph.D.; Carole McArthur, M.D., Ph.D. (emerita); Yong Wang, Ph.D.; Melanie Simmer-Beck, Ph.D.

Courses

OR-BIO 5699 Dissertation Research Credits: 1-12

Ph.D. dissertation research.

OR-BIO 5702 Biomechanics of Mineralized Tissue Credits: 3

The physical principles underlying mineralized tissue biomechanics will be presented at multiple hierarchies. Details of bone, tooth and joint (with a special emphasis on the TMJ) anatomy and function will be outlined as related to mechanical loading.

Doctor of Dental Surgery Program

The UMKC School of Dentistry educates competent and caring oral health care providers through a dental curriculum that combines the best of the classroom and clinic. Preclinical dental and biomedical courses give our students the solid conceptual foundation they will need to successfully practice dentistry. Beginning early in the first year and increasing throughout the four-year program, students work with peers and faculty to master the clinical skills required to deliver comprehensive oral health care. Students treat their assigned patients within a "team" system of clinic organization, which is a hallmark of this program.

If you are a college student with at least 90 hours of college credit or a college graduate, you may apply for admission to the D.D.S. program. Applicants are strongly encouraged to complete a baccalaureate degree prior to starting their dental education. As a public institution financially supported by the state of Missouri, our first obligation is to qualified residents of **Missouri**. Additionally we have long-standing agreements with the states of **Kansas, Arkansas, New Mexico, and Hawaii** to accept qualified residents of those states to our program. Applications from other states are welcome and are considered on an individual basis for highly qualified candidates. A limited number of students are also considered through an agreement with the State of Kuwait.

To apply for the D.D.S. program, you must submit an application through the American Dental Education Association's application service (AADSAS (<http://www.adea.org>)). Although the UMKC deadline for application submission is October 1, early applications are strongly recommended. A preference is given to applications received in the Office of Student Programs of the School of Dentistry prior to September 1. Keep in mind that AADSAS can take up to six weeks to process and deliver an application. Therefore, it is extremely important that you apply in June or July of the year prior to anticipated entry into dental school.

The admission process is a selective one. A number of variables will be considered: academic credentials, Dental Admission Test scores, letters of recommendation, investigation of dentistry, community service, personal attributes and your written responses to a series of questions. In addition, an "invitation only" interview is a part of the selection process. To be sure you fully understand the admissions process, applicants are encouraged to thoroughly review the additional admissions guidelines available here (http://dentistry.umkc.edu/Future_Students/DDSAdmissions.shtml/).

This four-year program begins in August and culminates with a doctor of dental surgery degree. Click here to view the curriculum in detail. (p. 1425)

A suggested pre-dental schedule of activities can be downloaded here (http://dentistry.umkc.edu/Future_Students/asset/pdfs/SuggestedPredentalSchedule.pdf).

D.D.S. Program & B.S.D.H. Entry-Level Program Time Limits (March 2019)

Continuous enrollment is required for D.D.S. and B.S.D.H. entry-level students every semester (fall/spring/summer) from the time of matriculation until degree conferral except for cases with an approved Leave of Absence (as defined in the UMKC SOD Student Handbook).

The normal timeframe for completion of required coursework for the D.D.S. degree is four (4) academic years and two (2) academic years for the B.S.D.H. entry-level degree. In the event of academic and/or personal difficulties, a student may require additional time. In such situations, the Academic Standards Committee may establish a schedule for that student which departs from the norm. Regardless of the rationale for extended time limits, the D.D.S. program must be completed within six (6) years and the B.S.D.H. entry-level program must be completed within three (3) years of initial matriculation.

Failure to complete the work with the periods specified may include but not limited to reevaluation of the student's entire program and/or notice of dismissal from the School of Dentistry.

Dental Education Curriculum Mission

The mission of the Doctor of Dental Surgery program is to graduate a dentist who delivers patient care with a scientific basis and in a caring and compassionate manner. Through integration of the biomedical, behavioral, and clinical sciences, the graduate dentist will effectively lead the oral health care team to provide comprehensive oral health care for diverse populations in a rapidly changing society.

Graduates will use critical thinking and self-assessment so that behaviors and practices are derived from established standards of care. They will demonstrate professional ethics and values associated with lifelong learners, directing their professional growth during and beyond the educational program. (rev. March 2018)

Student Organizations/Activities

For students interested in extracurricular activities, there are a variety of student organization with a focus on professional service and development. Most are affiliated with national dental organizations. Students may also participate in other non-dentistry oriented organizations.

Active student organizations within the school include:

- Academy of LDS Dentists
- American Academy Cosmetic Dentistry
- American Academy of Pediatric Dentistry
- American Association for Dental Research-Student Research Group
- American Association of Women Dentists
- American Student Dental Association
- Christian Medical-Dental Association
- Delta Sigma Delta Fraternity
- Hispanic Dental Association
- Interfraternity Council
- Psi Omega Fraternity
- Student American Dental Hygienist's Association
- Student National Dental Association
- Student Professionalism & Ethics Association
- Students Take Action
- UMKC Chapter of the Academy of LDS Dentists
- UMKC Student Council
- Xi Psi Phi Fraternity

Admission Information

Any college student or graduate can apply for admission to the four-year doctor of dental surgery program. A student should be a U.S. citizen or permanent resident of the U.S. (the only exception is for students considered through the school's agreement with the State of Kuwait). Priority is given to Missouri residents. The School also has contractual or other agreements with the states of Kansas, Arkansas, New Mexico and Hawaii to consider qualified residents for acceptance from those states. Applications from other states are welcome and are considered on an individual basis for highly qualified candidates.

Candidates may be considered for acceptance after successful completion of a minimum of 90 hours of college credit. After completion of a minimum of 120 hours of college credit, the accepted applicant will be eligible to enroll in the School of Dentistry. All candidates for this program are encouraged to complete a baccalaureate degree before entry. In fact, college degree-holders with a broad educational background are the preference of the Dental Student Admission Committee.

Admission is on a selective basis and requires more than meeting course or college-hour requirements. Factors considered in the selection process are the candidates' academic credentials, including Dental Admission Test (DAT) scores, letters of evaluation, personal interview, evidence of the subjective criteria identified in a later section, and all other information submitted by the candidates. Approximately 109 candidates are admitted to the D.D.S. program annually.

Those who want to apply for admission must apply online through the AADSAS Application Service administered by the American Dental Education Association at <http://www.adea.org/>. Candidates must submit applications no later than Oct. 1 of the year prior to desired enrollment. **Sept. 1 is the UMKC preference deadline date for UMKC to receive application materials.** Be aware that approximately 4-8 weeks are required by AADSAS to process applications and deliver them to the dental school.

Counseling by the School of Dentistry's admissions staff is available to those interested in applying for admission. It is advisable to seek this counseling early in the undergraduate program.

Cost Estimates

The estimated cost (exclusive of living costs) for the four-year D.D.S. curriculum at the School of Dentistry is \$188,600. The amount is based on fees established and costs existing at the time of printing. This is itemized by type of expense and by year.

Note: Educational fees and books/equipment costs are subject to change without notice.

First Year (Fall and Spring Semesters)

Books, Equipment and Supplies	\$10,340
Educational Fees (Resident)	\$33,207
First-Year Total	\$43,547

Second Year (Fall and Spring Semesters)

Books, Equipment and Supplies	\$10,080
Educational Fees (Resident)	\$33,320
National Dental Board Exam-Part I	\$395
Second-Year Total	\$43,795

Third Year (one 13-week Summer term plus Fall and Spring Semesters)

Books, Equipment and Supplies	\$8,662
Educational Fees (Resident)	\$41,064
Third-Year Total	\$49,726

Fourth Year (one 13-week Summer term plus Fall and Spring Semesters)

Books, Equipment and Supplies	\$8,062
Educational Fees (Resident)	\$41,030
National Dental Board Exam-Part II/Clinical Board Exam	\$2,440
Fourth-Year Total	\$51,532

Four-Year Total	\$188,600
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Non-resident students are assessed an additional \$15,679 each fall and spring semester and \$7,840 for each of the two summer terms.

Agreements are in place for residents of Kansas, Arkansas, New Mexico and Hawaii to receive waivers of the non-resident fees.

Tuition/Fee Policy for Elective Coursework Outside the School of Dentistry

The dental "flat-rate" tuition and fees only applies to required courses within the DDS program. Dental students who elect to enroll in courses other than those required as part of the DDS curriculum will pay tuition and fees for those courses.

A dental student's primary academic responsibility is successfully meeting the curricular expectations of the DDS program. Any coursework taken outside the curriculum requires that a student is in good standing and must be pre-approved by the Associate Dean for Academic Affairs.

Elective enrollment in coursework outside the School of Dentistry is not suggested during fall & spring semesters in years 1 & 2. Additionally enrollment in courses other than dental courses during preparation for National Board Part I (Spring D2) and National Boards Part II (Fall D4) should be limited.

Dental students considering course work outside the dental curriculum should also consider the financial aid implications of the additional course work. Students should work closely with the Student Financial Aid Office. The student would only be eligible for DDS financial aid, although Grad Plus loans may be available to select students.

Candidate Subjective Criteria

When considering candidates for possible admission, the UMKC School of Dentistry's Dental Student Admission Committee (DSAC) reviews the entire scope of information that is available on each applicant. For each candidate the sources of this information include the academic record (i.e., overall GPA, science GPA and Dental Admission Test scores), AADSAS essay, responses to items on the UMKC School of Dentistry's Application Survey, letters of reference, interview assessment, and any other information provided by the candidate (e.g., personal statement). Specifically, the committee will expect evidence of the following factors in making the difficult choices among candidates:

1. Demonstrated investigation of the profession of dentistry. It is strongly suggested that candidates observe in a minimum of five different dental offices (the offices of general dentists and specialists) and acquire a minimum of 80-100 hours of dental office observation, preference is given to candidates who have worked in a dental office.
2. Evidence of social conscience and compassion (i.e., caring attitude, sensitivity to those in need, significant community activities). It is strongly suggested that this be active and ongoing participation in volunteer activities.
3. Indication of fundamental personal character (i.e., integrity, maturity, self-reliance, leadership skills).
4. Evidence of critical thinking and problem solving ability (e.g., performance in courses requiring this skill such as in laboratory segments, in formal logic or in research experiences).
5. Significant and sustained level of academic achievement based on full course loads with evidence of a broad science and liberal arts education (i.e., fine arts, business, mathematics, humanities, computer science, etc.).
6. Established effective interpersonal/communication skills (i.e., an ability to communicate orally and in writing, a capacity to listen, a personality conducive to forming personal and/or professional relationships, an involvement in a range of extracurricular activities, especially those in which significant leadership roles have been taken).
7. Demonstrated ability to balance full academic schedules with extracurricular involvement and/or employment (i.e., effective/efficient management of time).

Because the Dental School Admission Committee looks closely at information from all sources included in an applicant's file, it is in the candidate's best interest that this information is consistent among sources. This is especially true with information supplied directly by the candidate (i.e., AADSAS essay, UMKC School of Dentistry's Application Survey, interview and/or personal statement). You are strongly encouraged to review all written materials for consistency and accuracy before submission.

Finally, before developing these written materials, the candidate is strongly encouraged to honestly and critically assess himself/herself on all the qualities identified. Following this process, the candidate is urged to review drafts of these documents collectively (e.g., to check for completeness, accuracy and consistency) and to evaluate himself/herself comprehensively as if he/she were a member of the Dental Student Admission Committee. Where the candidate feels a question may arise from Committee review, the applicant is encouraged to address this in a personal statement/letter to the Committee.

Dental Admission Test

All dental school applicants must take the Dental Admission Test (DAT) administered by the American Dental Association. The DAT is given throughout the year by computer at designated testing centers, and a score must be submitted to be fully considered.

DAT scores are based on a range of 1 to 30, with 19.0 generally being the national average of accepted dental students. The Dental Student Admission Committee requires a minimum DAT score of 16, but prefers that a candidate's DAT scores be 17 or higher to be considered for admission.

For more information or to request a DAT application go to <http://www.ada.org> (<http://www.ada.org/>). Contact the School of Dentistry's Office of Student Programs at (816) 235-2080 (local) or (800) 776-8652 (toll-free) to learn about our online **DAT Prep Course**.

Disability Services

Federal law prohibits UMKC and the School of Dentistry from making pre-admission inquiry about disabilities. Information regarding disabilities given voluntarily or received inadvertently will not adversely affect any admission decision. Any accepted applicant requiring special services because of disability should notify the Office of Services for Students with Disabilities for accommodation services (816-235-5696).

GPA/College Hour Minimums

The following are the Dental Student Admission Committee's guidelines for GPA/college semester credit hour/Dental Admission Test (DAT) minimums and preferences:

- Preference will be given to candidates with 90 or more semester hours of college credit at the time of application with a science GPA of 3.40 or higher and/or a DAT academic average of 17 or higher.
- A candidate with 90 or more semester hours of college credit at the time of application with a science GPA of 3.00 and a DAT academic average of 16 or higher can be considered for an interview.
- It should be noted that no more than 60 hours of college credit can be earned at a community college and preference will be given to candidates who complete the science prerequisites at a four-year institution.

A broad liberal education culminating in a bachelor's degree is strongly encouraged of applicants seeking admission into this program. Recent history indicates that admission of a candidate who does not have a B.S./B.A. degree or who is not likely have one at the time of enrollment in the D.D.S. program is rather rare.

Minority Recruitment Program

The School of Dentistry has an active recruitment program to encourage and assist qualified minority students, particularly those from under-represented groups in the dental profession, to pursue careers in dentistry. Native Americans, African Americans and Hispanics are strongly encouraged to seek admission to the school. Students desiring information should contact John Cottrell or cottrellj@umkc.edu, the Director of Minority Recruitment and Special Programs within the Office of Student Programs (816) 235-2080.

Notification of Admission

Applications for admission are reviewed by the Dental Student Admission Committee. In accordance with the guidelines of the American Dental Education Association, no notification of the admission decision is made to a candidate before Dec. 1 of the current admissions cycle..

Formal Notification

After a decision is reached on an applicant, notifications will be sent to each candidate. Accepted candidates have 30 days from the date of an acceptance letter to make a required nonrefundable \$500 deposit. If notification of acceptance is made after Feb. 1, the candidate must submit the deposit within 15 days of the date of acceptance.

Several individuals are placed on a list of alternates. In the event that a position becomes available, an applicant from this list is chosen to fill the vacancy.

Denied applicants who are interested in reapplying should make an appointment with the School of Dentistry director of admissions to discuss the reason for the denial. Advice will be offered to applicants to enhance their future applications.

Personal Interview

A personal interview at the School of Dentistry is required of applicants completing the necessary college hours, grade-point average and DAT requirements. The interview is by invitation only, an applicant for admission may not request it.

Pre-Dental Course Requirements

There is no required college major for admission to the School of Dentistry. However, certain courses are required prior to entering. Strong academic performance is expected with minimal acceptable performance of a 'C' in lectures and labs.

Biology

A minimum of four semesters of biology with labs. In particular, we require general biology I, anatomy, physiology and cell biology. Other courses that have counterparts in the dental curriculum (i.e., histology, neuroscience, microbiology) are strongly recommended.

Chemistry

A minimum of two semesters of general chemistry with labs (Chemistry I and Chemistry II).

A minimum of two semesters of organic chemistry with labs (Organic Chemistry I and Organic Chemistry II).

A minimum of one semester of biochemistry (lab is recommended but not required).

Physics

A minimum of two semester of physics with labs (Physics I and Physics II).

English

A minimum of 6 credit hours of English composition. (Courses in speech are not acceptable as substitutes for English composition.)

Other

It is advantageous to have course credit in mathematics, formal logic, histology, business, social/behavioral sciences (such as psychology), communication skills, computer science, the humanities and applied arts (such as sculpting, drawing, etc.).

Reserved Admission Program

The Reserved Admission Program for the Doctor of Dental Surgery degree at the UMKC School of Dentistry enables highly motivated, ambitious, talented students to pursue their dream of becoming a dentist. Entry into the program is available to students from Missouri and Kansas who are in the early years of their undergraduate education.

This program is composed of three stages with the first two stages requiring formal application and review. The first stage is application and acceptance as a Provisional Reserved Admission Program Student. This step may be accomplished immediately following the completion of a minimum of but not more than four semesters of college credit with a cumulative 3.6 science and math GPA while being continuously enrolled in full-time course loads. In the second stage, provisional reserved admission program students meet additional objective and subjective criteria to move to full acceptance at the end of their undergraduate junior year. Students with full admission into the Reserved Admission Program are assured a seat in the D.D.S. class matriculating in August following the completion of their undergraduate studies, provided they meet the criteria for maintaining their status. The third stage is matriculation at the School of Dentistry.

For more information about this program or to request an application, contact the School of Dentistry's Office of Student Programs. (816) 235-2080 or dds@umkc.edu.

Technical Standards

The dental degree signifies that the holder is a dentist who has received sufficient training in dental education to practice dentistry. It follows that graduates must have acquired and demonstrated the knowledge, skills and abilities to function in a broad variety of clinical situations and to render a wide spectrum of dental care.

While each application is reviewed individually, it is necessary that each candidate be able to observe and perform each task required by the curriculum of the school. Similarly, the school does not consider the waiver of required examinations a reasonable accommodation for individuals with learning disabilities. Learning disabled students, when appropriate, may be granted additional time on required examinations, be examined in separate testing facilities, or accommodated in other reasonable ways, but they will not be exempted from the requirement to take and pass such examinations. (Candidates with disabilities should contact the UMKC Office of Services for Students with Disabilities for information regarding definition and requirements for documentation of learning disabilities.)

Candidates for admission into the D.D.S. program must possess abilities and skills in the following areas to satisfactorily complete the curriculum:

Observation

Candidates must be able to accurately observe laboratory experiments, preclinical demonstrations, clinical laboratory procedures and patient-care activities.

Communication

Candidates must be able to communicate effectively and sensitively with patients and with all members of the health care team.

Motor

Candidates must have physical dexterity to master all aspects of patient care. They must be able to execute motor movements required to arrive at a diagnosis and treatment plan, and to provide patient care, including emergency treatment.

Intellectual-Conceptual, Integrative and Quantitative Abilities

A candidate must have intellectual-conceptual, integrative and quantitative abilities that include measurement, calculation, reasoning, analysis and synthesis. Problem solving, one of the critical skills demanded of dentists, requires all of these intellectual abilities. In addition, the candidate must be able to comprehend three-dimensional relationships and understand the spatial relationship of structures.

Emotional and Behavioral Attributes

In addition to these skills, candidates must possess the high moral and ethical standards demanded of dentists and must possess the capability required for full utilization of intellectual abilities, the exercise of good judgment, the prompt completion of responsibilities attendant to the diagnosis, treatment planning and care of patients, and the development of mature, sensitive and effective professional relationships with patients. Candidates must be able to cope with taxing workloads and to function effectively under stress. A candidate must also be able to adapt to changing environments, to display flexibility and to learn to function in the face of uncertainties in the clinical problems of many patients. In addition, personal qualities such as compassion, integrity, concern for others, interpersonal skills, interest and motivation should be assessed during the admissions and education processes. Technological accommodation can be made for some inadequacies in certain areas, but a candidate must be able to perform in a reasonably independent manner.

Program Requirements

Student Learning Outcomes

The student learning outcomes (competencies) listed below are the minimum levels of performance that are expected of the dentist graduate of UMKC School of Dentistry. Due to special interests, experiences and opportunities many students may exceed these expectations in various areas. However, every dental student must demonstrate competence as described below to graduate.

- Apply the fundamental principles of the biomedical and behavioral sciences as they relate to the promotion and provision of oral health care.
- Apply legal, ethical and regulatory principles to the provision of oral health care, including practice management.
- Apply interpersonal and communication skills to empathetically and effectively care for diverse patient populations and function in the health care environment.
- Apply critical thinking and problem solving skills to provide evidence-based patient-centered care.
- Evaluate various models of oral health management and care delivery.
- Participate in improving the oral health of individuals, families, and groups in the community through oral health promotion, education and interaction with other health professions.
- Manage medical emergencies and complications that may occur during dental treatment.
- Recognize and manage pain and anxiety, trauma, hemorrhage, and infection of the orofacial complex by selection, administration or prescription of pharmacological or non-pharmacologic agents in the treatment of dental patients.
- Demonstrate competence in providing oral health care within the scope of general dentistry for children, adolescents, adults, and special needs patients. This includes:
 - Perform a complete dental examination to arrive at a diagnosis, risk assessment and prognosis of the patient's oral condition/s.
 - Develop, present and implement an integrated treatment plan, including the risks and benefits of various options, to address a patient's oral health needs.
 - Prevent, identify and manage periodontal conditions.
 - Prevent, identify and manage pulpal and periradicular conditions.
 - Identify and manage patients with oral surgical needs.
 - Identify and manage malocclusions (including management of space/s).
 - Manage restorative procedures for single defective teeth, or to restore function in patients with partial or complete edentulism.
 - Treat patients with oral mucosal and osseous disorders and oral manifestations of systemic diseases.
 - Evaluate outcomes of treatment, including recall strategies, and prognosis.
- Demonstrate the ability to self-assess competency and plan for lifelong learning.

Program Requirements

The school offers a four-year, eight-semester, two-summer-term curriculum leading to the doctor of dental surgery (D.D.S.) degree. This curriculum is designed to prepare graduates in dentistry to deliver patient care with a scientific basis and a caring manner. As such, it provides a sound background in the biomedical, behavioral and clinical sciences with an emphasis on comprehensive oral health care. Exposure to clinical dentistry in the first semester of the first year is a hallmark of this curriculum.

The first year of dental school focuses on instruction in the biomedical sciences that provide a foundation for clinical studies. The first-year student also studies introductory courses in oral diagnosis, preventive periodontics and dental restorative techniques in a pre-clinical setting. Early clinical exposure is further emphasized through clinic-based courses in both the first and the second semesters. Acquisition of basic diagnostic skills and background knowledge is a goal of the first year of the curriculum.

Biomedical science courses extend into the second year; however, the major thrust of the second year is devoted to pre-clinical technique coursework of increasing complexity. In the preclinical laboratory courses, students continue learning the fundamental procedures of dentistry: operative dentistry, prosthodontics (fixed and removable), and endodontics. Clinically, students are introduced to the basic essential skills needed in preventive periodontics. Classroom lecture sessions are also conducted in each of these areas of dentistry along with didactic courses in periodontics, oral diagnosis, oral radiology, and oral surgery.

The primary emphasis of the third year of the curriculum is the clinical practice of dentistry. The general clinic is organized into subunits called teams. Each team includes an established set of faculty and staff. Patients are assigned to students for comprehensive care, from diagnosis and treatment planning through procedures necessary for successful case completion. While the emphasis of the third and fourth years of the dental curriculum is gaining clinical experience, students also attend advanced classes in periodontics, prosthodontics, oral surgery, orthodontics, pediatric dentistry, operative dentistry and oral diagnosis/oral medicine.

The fourth year involves extensive clinical practice. There are a few seminar sessions and formal courses (e.g., practice management), but the student's major responsibility is to perfect diagnostic, patient-management and technical-treatment skills and demonstrate competence in all the skills required by the faculty of the School of Dentistry.

An outline of the four-year curriculum by semester is given below.

Code	Title	Credits
Year I		
Fall		
BMS 9300	Human Gross Anatomy I	5
BMS 9308	Histology	2.5

DENT 6306	Transitions: An Introduction to the Profession and Practice of Dentistry	0.5
DENT 6310C	Patient Care I	3
DENT 6313	Applied Biochemistry	4
DENT 6316	Dental Morphology	3
DENT 6319	Ethics and Professionalism	1
DENT 6328	Clinical Decision Making in Dentistry	1
Spring		
BMS 9301	Human Gross Anatomy II	5
DENT 6305	Operative Dentistry I Lecture	1
DENT 6305L	Operative Dentistry I Laboratory	2
DENT 6307	Transitions: Introduction to the Profession & Practice of Dentistry II	0.5
DENT 6314C	Patient Care II	2
DENT 6416	Complete Removable Prosthodontics	1
DENT 6416L	Complete Removable Prosthodontics I Laboratory	2
DENT 6317	Fundamentals of Occlusion and Fixed Prosthodontics	3
DENT 6350	Introduction To The Histopathology Of Oral Tissues	2
LS-PHYS 401	Physiology Lecture	5
Total Credits		43.5

Code	Title	Credits
Year II		
Fall		
DENT 6315C	Patient Care III	3
DENT 6402	Transitions: Introduction to the Profession and Practice of Dentistry III	0.5
DENT 6410	Operative Dentistry II Lecture	1
DENT 6410L	Operative Dentistry II Laboratory	2
DENT 6412	Introduction to Oral Surgery & Pain Management I	1
DENT 6414	Pathology I Lecture	4
DENT 6417	Removable Partial Prosthodontics	1
DENT 6417L	Removable Partial Prosthodontics Laboratory	2
DENT 6422	Fixed Prosthodontics I Lecture	1
DENT 6422L	Fixed Prosthodontics I Laboratory	2
DENT 6426	Oral Radiology Lecture	2
DENT 6435	Endodontics I Lecture	1
DENT 6436	Orthodontics: Growth And Development	1
LS-MCRB 4180	Microbiology	4
Spring		
DENT 6352	Patient Care IV	1
DENT 6403	Transitions: Introduction to the Profession & Practice of Dentistry IV	0.5
DENT 6415	Pathology II	2
DENT 6420	Periodontics I	2
DENT 6423	Fixed Prosthodontics II Lecture	1
DENT 6423L	Fixed Prosthodontics II Laboratory	2
DENT 6424	Dental Management of the Medically Complex Patient	2
DENT 6431	Pediatric Dentistry I Lecture	1
DENT 6439	Medical Emergencies in the Dental Office	1
DENT 6440	Introduction to Oral Surgery & Pain Management II	1
DENT 6442	Endodontics II Lecture	1
DENT 6442L	Endodontics Laboratory	2
DENT 6460C	Review of Pre-Clinical Dentistry	0.5
DENT 6526	Orthodontics I	1
DENT 6526L	Orthodontics I Laboratory	2

DENT 6527	Pharmacology and Therapeutics I	2
DENT 6556	Radiographic Interpretation	1
DENT 6595	Introduction To Implant Dentistry	1
Summer		
DENT 6537	Oral Oncology	0.5
DENT 6566	Bridge Course	2
DENT 6501C	Intro to Comprehensive Patient Care	8
DENT 6558C	Treatment Planning I	1
Total Credits		61

Code	Title	Credits
Year III		
Fall		
DENT 6312	Dental Behavioral Science	1
DENT 6318	Dental Biomaterials	1
DENT 6502	Grand Rounds I	1
DENT 6515	Periodontics II	1
DENT 6518	Transitions: Introduction to the Profession & Practice of Dentistry V	1
DENT 6521	Oral Surgery III	1
DENT 6524	Principles of Oral Medicine and Diagnosis	1
DENT 6538	Orthodontics II	1
DENT 6509C	Comprehensive Patient Care I	8
DENT 6531C	Oral Diagnosis Clinical I	1
DENT 6591C	Professional Development I	1
Spring		
DENT 6411	Operative Dentistry III Lecture	1
DENT 6520	Transitions: Introduction to the Profession & Practice of Dentistry VI	1
DENT 6522	Oral Surgery IV	1
DENT 6534	Advanced Prosthodontics	1
DENT 6559	Diagnosis and Management of Orofacial Pain	1
DENT 6564	Pharmacology and Therapeutics II	2
DENT 6602	Grand Rounds II	1
DENT 6633	Introduction To Dental Public Health	1
DENT 6634		1
DENT 6510C	Comprehensive Patient Care II	4
DENT 6521C	Periodontics Clinical I	1
DENT 6542C	Operative Dentistry Clinical I	1
DENT 6551CR	Oral Surgery Clinical	2
DENT 6592C	Professional Development II	1
DENT 6606C	Pediatric Dentistry Clinical I	1
DENT 6636C	Oral Radiology Clinical	1
Summer		
DENT 6613	Periodontal Treatment Planning	1
DENT 6617	Pediatric Dentistry Seminar	0.5
DENT 6650	Applied Ethics	0.5
DENT 6593C	Professional Development III	1
DENT 6609C	Comprehensive Patient Care III	8
Total Credits		50

Code	Title	Credits
Year IV		
Fall		
DENT 6429		1

DENT 6514	Pathology III Lecture	1
DENT 6603	Grand Rounds III	1
DENT 6614	Dentistry For The Special Patient	2
DENT 6615	Transitions: Introduction to the Profession & Practice of Dentistry VII	1
DENT 6626	Clinical Treatment Planning	1
DENT 6635	Community-Based Dental Education	1
DENT 6607C	Pediatric Dentistry Clinical II	1
DENT 6610C	Comprehensive Patient Care Iv	5
DENT 6691C	Professional Development IV	1
Spring		
DENT 6600	Review Of Clinical Dentistry	1
DENT 6604	Grand Rounds IV	1
DENT 6605	Review Of Clinical Dentistry II	0.5
DENT 6562C	Removable Prosthodontics Clinical II	1
DENT 6601C	Endodontics Clinical	2
DENT 6608C	Pediatric Dentistry Clinical III	1
DENT 6611C	Fixed Prosthodontics Clinical I	1
DENT 6614C	Comprehensive Patient Care V	10
DENT 6621C	Periodontics Clinical II	1
DENT 6625	Oral Surgery Clinical II	1
DENT 6642C	Operative Dentistry Clinical II	1
DENT 6656C	Orthodontic Clinical I	1
DENT 6692C	Professional Development V	1
Total Credits		37.5

Total Credits: 192

Graduation Requirements

1. Satisfactory completion of all program requirements (program competencies and course requirements).
2. A cumulative grade point average of 2.5 or higher for the student's period as a dental student.
3. A passing grade on Part I and Part II of the National Board Dental Examinations.
4. Demonstrate the ability to meet the standards of professional conduct.

Vision, Mission and Goal Statements

Mission Statement

UMKC School of Dentistry serves as a leader in the advancement of oral healthcare through exceptional educational programs, scientific inquiry, patient care and service to society.

Vision Statement

UMKC School of Dentistry will be a model oral healthcare education institution that maintains the highest ethical and scientific standards of care, serving patients and the profession in an evolving healthcare environment.

Goals

The School of Dentistry is a center for dental education, research, service, and clinical care.

The goals of the school are to:

- Enhance the School's culture to advance our mission.
- Evaluate the organizational structure in advancing our mission.
- Maintain and improve the Schools physical infrastructure to advance our mission.
- Provide educational programs that develop competent, compassionate, engaged life-long learners who will become oral health practitioners, researchers and educators.
- Achieve national/international recognition for excellence in oral health research.

- Promote a life-long service commitment to the profession, the community, and society.
- Provide outstanding care to our patients.

Core Values

Excellence

We will achieve excellence by:

- Developing professionals through rigorous academic education and practical training.
- Performing teaching and research that incorporates best-practice techniques, setting goals that are achievable and measurable, as well as by seeking feedback from our students, colleagues and community.
- Adhering to high standards of evidence-based dentistry and clinical judgment through collaboration and leadership.

Compassion

We will practice compassion by:

- Taking a genuine interest in the needs of those we serve in order to help them live healthy and productive lives through the services we deliver.
- Interacting with others as servant leaders.
- Promoting an environment of shared strength through humility and gratitude for our shared talents.

Integrity

We will act with integrity by:

- Demonstrating that ethical behavior is a lifelong habit of honest and sincere action that benefits the profession and society.
- Fulfilling our social contract to perform our work and serve our communities with the veracity and honor that undergird our profession.
- Committing ourselves to the highest moral and ethical standards that will hold us accountable to our own actions and those of our institution, our colleagues, our students, and our community.

Justice

We will act justly by:

- Being sensitive to the complexities inherent in the diversity of our community.
- Striving to allocate the School's limited resources in a manner that best meets the needs of our students, patients, faculty, and staff.
- Doing what is right through our exercise of collegiality, respect, and fairness in all our interactions.

School of Education

About the School of Education (p. 1470)

Undergraduate Programs (p. 1538)

Graduate Programs (p. 1515)

Centers and Projects (p. 1496)

Faculty

Carolyn Barber^{2,3} Contact Information (<https://education.umkc.edu/directory/carolyn-barber/>); associate dean, school of education, and professor of educational psychology; B.A. (Johns Hopkins University); M.A., Ph.D. (University of Maryland-College Park).

Rita Barger^{2,3} Contact Information (<https://education.umkc.edu/directory/rita-barger/>); associate professor of education; B.S., M.A., Ph.D. (University of Missouri-Columbia); M.S. (Drury College).

Clare Bell^{2,3} Contact Information (<https://education.umkc.edu/directory/clare-bell/>); associate professor of education; B.M. (Cleveland Institute of Music); M.A., Ph.D. (The Ohio State University).

LaVerne A. Berkel^{2,3} Contact Information (<https://education.umkc.edu/directory/berkel-laverne/>); associate professor of education; B.S. (Oakwood College); M.A. (New York University), Ph.D. (The Pennsylvania State University).

Chrisanthia Brown^{2,3} Contact Information (<https://education.umkc.edu/directory/brown-chris/>); professor of education; B.S. (University of California at Los Angeles); M.S. (California State University-Long Beach); Ph.D. (University of Missouri-Kansas City).

Eric Camburn^{2,3} Contact Information (<https://education.umkc.edu/directory/camburn-eric/>); Sherman Family Foundation Endowed Chair and professor of education; B.A. (Illinois Benedictine College), M.A. and Ph.D. (University of Chicago)

Loyce Caruthers^{2,3} Contact Information (<https://education.umkc.edu/directory/caruthers-loyce/>); associate professor of education; B.A., M.A., Ed.S., Ph.D. (University of Missouri-Kansas City).

Karin Chang Contact Information (<https://education.umkc.edu/directory/chang-karin/>); associate research professor of education; M.A. (Stanford University); Ph.D. (University of Kansas)

Marvalee Collins¹ (<https://education.umkc.edu/directory/collins-marvalee/>) Contact Information (<https://education.umkc.edu/directory/collins-marvalee/>); assistant teaching professor; M.S.E. (Missouri State University); M.S. (Emporia State University)

Donna M. Davis^{2,3} Contact Information (<https://education.umkc.edu/directory/davis-donna/>); professor of education; B.A. (San Jose State University); M.S., Ph.D. (University of Kansas).

Arthur Gus Jacob¹ Contact Information (<https://education.umkc.edu/directory/jacob-arthur-gus/>); teaching assistant professor of education; B.S., M.S. (Emporia State University); Ed.D. (University of Kansas).

Kimberly Langrehr^{2,3}; Contact Information (<https://education.umkc.edu/directory/langrehr-kimberly/>); associate professor of counseling psychology; B.A., M.S. (University of Wisconsin - Milwaukee); Ph.D. (Loyola University Chicago).

Michelle Maher^{2,3}; Contact Information (<https://education.umkc.edu/directory/maher-michelle/>); professor of higher education administration, B.A. (Iowa State University), M.A. and Ph.D. (George Mason University)

S. Marie McCarther^{2,3} Contact Information (<https://education.umkc.edu/directory/mccarther-s-marie/>); associate professor of education; B.A. (Wilkes University); M.A., Ed.S. (University of Missouri-Kansas City); Ed.D. (University of Cincinnati).

Nancy L. Murdock^{2,3} Contact Information (<https://education.umkc.edu/directory/murdock-nancy/>); professor of education; B.S., M.S., Ph.D. (Virginia Commonwealth University).

Louis Odom^{2,3} Contact Information (<https://education.umkc.edu/directory/odom-louis/>); professor of education, B.S., B.A., M.Ed. (University of Arkansas); Ph.D. (University of Missouri-Columbia).

Joseph Parisi^{2,3} Contact Information (<http://conservatory.umkc.edu/faculty.cfm?r=142D>); professor of music (music education, instrumental music); B.M. (State University College of New York at Potsdam); M.M. (Florida State University); Ph.D. (Florida State University).

Uzziel Pecina² Contact Information (<https://education.umkc.edu/directory/pecina-uzziel/>); teaching assistant professor; B.A., M.S.Ed. (Kansas State University); Ed.D. (University of Missouri-Columbia).

Justin Perry Contact Information (<https://education.umkc.edu/directory/perry-justin/>); dean, school of education, Ewing Marion Kauffman Endowed Chair, and professor of education; B.A. (Tulane University); M.A., Ph.D. (Boston College).

Nora Peterman^{2,3} Contact Information (<https://education.umkc.edu/directory/peterman-nora/>); assistant professor of language and literacy; B.A. (Columbia University, Barnard College); M.S.Ed. (University of Pennsylvania); Ph.D. (University of Pennsylvania).

Tiffani Riggers-Piehl^{2,3} Contact Information (<https://education.umkc.edu/directory/riggers-piehl-tiffani/>); assistant professor of higher education administration, B.S. (Northern Arizona University); M.S.Ed. (Baylor University); M.A. and Ph.D. (University of California-Los Angeles)

Charles R. Robinson^{2,3}; professor of music (music education, choral music); B.M.E. (Florida State University); M.A. (California State University, Long Beach); Ph.D. (Florida State University).

Candace Schlein^{2,3} Contact Information (<https://education.umkc.edu/directory/schlein-candace/>); associate professor of education; B.A., B.Ed. (McGill University); M.Ed., Ph.D. (University of Toronto).

Ekaterina Strelakova-Hughes^{2,3} Contact Information (<https://education.umkc.edu/directory/strelakova-hughes-ekaterina/>); assistant professor of education; M.A. (Volgograd State Pedagogical University); Ph.D. (State University of New York at Buffalo).

Carolyn Thompson Contact Information (<https://education.umkc.edu/directory/thompson-carolyn/>); associate professor of education; B.A. (San Francisco State); M.A. (Mills College); M.A., Ph.D. (University of California-Los Angeles).

Omiunota Ukpokodu^{2,3} Contact Information (<https://education.umkc.edu/directory/ukpokodu-omiunota/>); professor of education; B.S., M.A., M.S., Ph.D. (University of Kansas).

Jennifer Waddell^{2,3} Contact Information (<https://education.umkc.edu/directory/waddell-jennifer/>); Sprint Foundation Endowed Professor and associate professor of education; B.A. (University of Montana); M.A., Ph.D. (University of Missouri-Kansas City).

Laurel Watson^{2,3} Contact Information (<https://education.umkc.edu/directory/watson-laurel/>); associate professor of counseling psychology; B.A. (University of Georgia); M.S., Ph.D. (Georgia State University).

Youfu (Michael) Wei^{2,3} Contact Information (<https://education.umkc.edu/directory/wei-michael/>); associate professor of teaching English to speakers of other languages; B.A. (Yunnan University of the Nationalities in China); M.A. (Naresuan University in Thailand); M.A. and Ph.D. (University of Maryland-College Park).

Professor Emeriti

Susan A. Adler; professor emeritus of education; B.A. (State University of New York-Buffalo); M.A., Ph.D. (University of Wisconsin).

Valerie Blackwell; teaching professor emeritus; B.A., M.A., Ph.D. (University of Missouri-Kansas City).

Bonita Butner; associate professor emeritus of education; B.S. (Central Missouri State University); M.A., Ed.S. (University of Missouri-Kansas City); Ph.D. (University of Missouri-Columbia).

Linda Edwards; dean emeritus, school of education, and professor emeritus of education; B.A. (University of Missouri-Kansas City); M.S. Ed., Ed.D. (University of Kansas).

Cheryl Grossman; associate professor emeritus of education; B.A. (Long Island University); M.A. (New York University); Ph.D. (University of Iowa).

Etta Hollins; professor emeritus of education; B.S. Ed. (Pittsburg State University); M.S. Ed. (University of Washington); Ph.D. (University of Texas-Austin).

Shirley Hill; curators' professor emeritus of education and mathematics; B.A. (University of Missouri-Columbia); M.A. (University of Missouri-Kansas City); Ph.D. (Stanford University).

Ellen Lavelle; associate research professor emeritus of education; B.A., M.S. Ed., Ph.D. (Southern Illinois University-Carbondale).

Robert E. Leibert; professor emeritus of education; B.S. (State University of New York-New Paltz); M.S. (University of Pennsylvania); Ed.D. (Syracuse University).

Daniel Urey Levine; professor emeritus of education; B.A., M.A., Ph.D. (University of Chicago).

Kathryn E. Loncar; associate professor emeritus of education; B.M. Ed. (Saint Mary College); M.A., Ph.D. (University of Missouri-Kansas City).

Frank W. Neff; associate professor emeritus of education; B.A., M.S. (Indiana University); Ed.D. (Columbia University).

Ann Pace; associate professor emeritus of education; B.A., M.S. Ed. (University of Pennsylvania); Ph.D. (University of Delaware).

Robert D. Paul; associate professor emeritus of education; B.S. (South Dakota State University); M. Ed., Ed.D. (University of Florida).

Cynthia Pemberton; professor emeritus of education; B.S. (Missouri State University); M.S. (Kansas State University); Ph.D. (University of Illinois).

Dennis Schemmel; associate professor emeritus of education; B.A. (Loras College); M. Ed. (Marquette University); Ph.D. (Ohio University).

John K. Sherck, Jr.; professor emeritus of education; B.S. (Pennsylvania State University); M.S. (Temple University); Ph.D. (Syracuse University).

Dianne Smith; professor emeritus of education; B.S., M. Ed. (Winthrop College); Ph.D. (Miami University).

William C. Smith; professor emeritus of education; A.B. (St. Benedict's College); M.S. (Kansas State University); Ph.D. (University of Missouri-Kansas City).

George D. Spear; associate professor emeritus of education; B.A. (Baker University); M.A. (University of Missouri-Kansas City); Ph.D. (University of Michigan).

Sue Vartuli; associate professor emeritus of education; B.S. (State University of New York-Oneonta); M.S., Ph.D. (Ohio State University).

Debra Woodard; associate teaching professor emeritus of education; B.A. (Ottawa University); M.S. (Emporia State University).

¹ Members of UMKC Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

Undergraduate

- Bachelor of Arts: Early Childhood Education
- Bachelor of Arts: Elementary Education

- Bachelor of Arts: Middle School Education
- Bachelor of Arts: Secondary Education
- Minor: Exercise Science (p. 1533)

Graduate

- Graduate Certificate: Reading Intervention (p. 1514)
- Master of Arts: Counseling
 - Couples and Family Counseling
 - Mental Health Counseling
 - School Counseling
- Master of Arts: Educational Administration
 - Emphasis Area: School (Grades PK-12) Administration
 - Emphasis Area: Higher Education
- Master of Arts: Curriculum and Instruction
 - Emphasis Area: General
 - Emphasis Area: Early Childhood
 - Emphasis Area: Subject Matter
 - Emphasis Area: Teaching English as a Second Language
- Master of Arts: Language and Literacy
- Master of Arts: Special Education
- Educational Specialist: Educational Administration
- Educational Specialist: Counseling
- Educational Specialist: Curriculum and Instruction
- Educational Specialist: Language and Literacy
- Ed.D.: Educational Administration
 - Emphasis Area: PK-12 Administration
 - Emphasis Area: Higher Education
- Ph.D.: Counseling Psychology
- Interdisciplinary, Ph.D. (p. 1543)

Counseling Psych Counselor Ed Courses

CPCE 230 Effective Interpersonal Communication Credits: 3

Theory, and research on interpersonal relationships; students will learn effective communication skills, including understanding verbal and nonverbal behavior, listening, and empathy.

CPCE 425 Positive Psychology Credits: 3

Introduction to current theory and empirical research in positive psychology. Topics explored include happiness, self-esteem, empathy, friendship, optimism, love, achievement, strengths, mindfulness, spirituality, and hope.

CPCE 5500 Introduction To Professional Counseling Credits: 3

This course introduces students to the professions of counseling and counseling psychology as practiced in a variety of settings. The course provides an overview of basic concepts of mental health, client problems, history of the profession, ethical and professional standards, counseling in a multicultural and pluralistic society, and licensure and credentialing. The course also orients students to the counseling program at UMKC. May be taken prior to admission.

CPCE 5502 Fndtns Of Elementary & Secondary School Counseling & Guidance Credits: 3

The course will present an overview of theory and practice in the field of school counseling and will examine the roles and functions of guidance counselors. For School Counseling Emphasis only.

CPCE 5503 Psychopathology: Diagnoses And Classification Credits: 3

This course is designed to provide students with an opportunity to study psychopathological patterns, mental disorders, and other reactions in client behavior, which are encountered by therapists, counselors, and psychologists in contemporary psychological service systems. The major focus of the course will be on learning current diagnostic criteria and making differential diagnoses. Attention will also be given to the etiology, development, dynamics, and treatment of psychopathology. In addition, the influence of culture on behavior and treatment will be discussed.

Prerequisites: CPCE 5500.

CPCE 5504 School Counseling Programs Credits: 3

This course will provide knowledge and skills in the development and management of school guidance programs, including program planning, implementing and evaluation.

CPCE 5505 Career Development I Credits: 3

Theories of career development and vocational choice and their implications in counseling. Emphasizes knowledge of occupational and career information sources and use of these data by counselors and counseling psychologists. Open to any student who has been admitted to an advanced degree program.

CPCE 5515 Assessment Methods In Professional Counseling Credits: 3

This course provides an understanding of assessment process and assessment techniques. Students will develop skills in selection, administration, and interpretation of representative assessment instruments.

Prerequisites: CPCE 5500.

CPCE 5520 Theories of Counseling Credits: 3

Theoretical positions in counseling; significance of these theories in professional practice. To be taken prior to CPCE 5531.

Co-requisites: CPCE 5500, CPCE 5530.

CPCE 5521 Special Counseling Methods - Substance Abuse Credits: 3

Theories and methods of counseling as applied to clients with substance abuse problems. Includes assessment, treatment strategies, and evaluation. Skills practice in implementing methods.

CPCE 5523 Counseling the Older Adult Credits: 3

This course provides an overview of the basic biological, psychological and social aspects of later life as preparation for counseling the diverse older adult population. Current evidence-based theory related to this specific population is presented along with refinement of interpersonal and counseling skills to support counseling intervention with older adults and their families in the multiple contexts they are served. Best practice examples for meeting the needs and providing mental health services to older adults are reviewed.

CPCE 5527 Theory And Methods Of Sexual Counseling Credits: 3

The focus of this course is on sexual development and the acquisition of therapeutic skills to work with problems relating to human sexual functioning and sexual dysfunctions.

Co-requisites: CPCE 5520.

CPCE 5528 Introduction to Play Therapy Credits: 3

Course covers the philosophy and rationale for using play media in counseling with children and the history of play therapy. The client-centered theoretical approach will be examined with an emphasis on creating and maintaining a relationship with the child that allows for the effective use of play media.

CPCE 5530 Methods Of Counseling Credits: 3

This course is designed to introduce students to the fundamental concepts and methods of counseling. Students will apply ethical and multicultural principles to the helping relationship while learning the basic methods of humanistic, psychodynamic, and cognitive behavioral approaches as they relate to the helping process. A main focus of this course is the acquisition of basic helping skills. Students will also become familiar with counseling outcome research and will increase their level of counselor self-awareness.

Prerequisites: CPCE 5520.

CPCE 5531 Counseling Practicum I Credits: 3

Closely supervised therapeutic counseling with individuals; translation of theory into practice; clinical and professional techniques and issues.

Prerequisites: CPCE 5553.

CPCE 5532 Counseling Practicum II Credits: 3

Supervised therapeutic counseling with individuals and consultation in professional settings.

Prerequisites: CPCE 5531.

CPCE 5533 Couples And Family Therapy Practicum Credits: 3-6

Supervised application of theories and methods of family therapy with individuals, couples and families.

Prerequisites: CPCE 5532 and CPCE 5542.

Co-requisites: CPCE 5541.

CPCE 5534 Practicum For The Assessment Of Children And Adolescents Credits: 3

The practicum for the assessment of children and adolescents covers the facilitation of psychological evaluations for this population and includes maintaining a caseload of assessment evaluations to complete through the CCS Assessment Center. Specialized assessment evaluations and conceptualization issues are covered in the second half of the course, with evaluations for ADHD and other learning disorders emphasized. Special topics will be discussed at the end of the course.

Prerequisites: CPCE 5515.

CPCE 5539 Continuing Counseling Practicum Credits: 1-6

Supervised therapeutic counseling with individuals.

Prerequisites: CPCE 5532.

CPCE 5540 Theories And Methods In Group Counseling Credits: 3

Theories and research in group counseling, including knowledge and skills in establishing and maintaining a counseling group; effective group leadership; therapeutic factors in groups; strategies for group development; and ethical and multicultural considerations in group work. Requires participation in a professional growth group.

Prerequisites: CPCE 5530.

CPCE 5541 Couples And Family Therapy Credits: 3

Introduction to family relationships and the application of life cycle stages to working with couples and families. Focus also includes the study of a range of family configurations and issues with attention to diversity.

CPCE 5542 Theories and Techniques of Family Systems Therapy Credits: 3

A study of major family systems theories and their applied practices in family therapy. Students will develop skills in family assessment techniques and family therapy processes.

Prerequisites: CPCE 5530.

CPCE 5547 Psychology of Stress and Trauma Credits: 3

This course is designed to introduce students to the psychology of stress and trauma. Students will learn about the effects of stress and trauma, as well as counseling interventions that address the effects of stress and trauma. Specifically, students will learn about vicarious trauma, the psychophysiology of stress and trauma, diagnostic and assessment-related issues with stress and trauma, therapeutic approaches to working with trauma survivors, multicultural and social justice considerations, and trauma therapy as applied to specific populations.

Prerequisites: Admission to a degree program in the Counseling and Educational Psychology (CEP) division at UMKC, or if from a program outside of CEP, approval from the course instructor.

CPCE 5550 Organization And Administration Of Counseling Programs Credits: 3

Organization, administration, and planning of counseling programs with emphasis on their practical aspect; counseling practice in schools and agencies; intraprofessional relationships; legal and ethical considerations. Course to be taken near completion of the master's program.

CPCE 5551 Counseling in a Pluralistic Society Credits: 3

Addresses the needs of diverse populations served by counselors and addresses developing intervention methods of working with these populations. Focuses on advocacy and change agent roles of counselors.

Prerequisites: CPCE 5520.

CPCE 5553 Ethics And Professional Issues In Counseling Credits: 3

This course is designed to examine the major ethical and professional issues within the counseling profession. More specific, ethical dilemmas and professional issues relevant to the practice of mental health, marriage and family, school and substance abuse counseling are the major foci of this course. In addition, instruction is designed to enhance student understanding of the ethical standards such that students can effectively apply the critical thinking necessary to practice ethical behavior with clients, professional colleagues, consultees, and the communities in which they work.

CPCE 5575A Internship In Counseling I Credits: 3-16

First semester of a sequence of applied experiences in a planned, supervised program. Seminar accompanies internship experiences. The following areas of specialization are available: a) Marriage and Family, b) Mental Health, c) School, and d) Substance Abuse.

Prerequisites: CPCE 5532 .

CPCE 5575B Internship In Counseling II Credits: 3-16

Second semester of a sequence of applied experiences in a planned, supervised program. Seminar accompanies internship experiences. The following areas of specialization are available: a) Marriage and Family, b) Mental Health, c) School, and d) Substance Abuse.

Prerequisites: Admission to Educational Specialist program in counseling, CPCE 5575A.

CPCE 5575C Internship In Counseling III Credits: 3-16

Third semester of a sequence of applied experiences in a planned, supervised program. Seminar accompanies internship experiences. The following areas of specialization are available: a) Marriage and Family, b) Mental Health, c) School, and d) Substance Abuse.

Prerequisites: Admission to Educational Specialist program in counseling.

CPCE 5589 Special Topics Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed in the semester bulletin.

CPCE 5589CA Special Topics Credits: 1-6**CPCE 5589GC Special Topics Credits: 3****CPCE 5589NP Special Topics Credits: 1-6****CPCE 5589PL Special Topics Credits: 1-6****CPCE 5589SE Special Topics Credits: 1-6**

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed in the semester schedule.

CPCE 5590 Prevention, Consultation, and Program Evaluation in Community Settings Credits: 3

Course provides an overview of mental health consultation and collaboration in community settings. Models and theories of consultation and considerations for ethical practice in diverse settings are reviewed. The course also introduces prevention and program development and evaluation as roles for professional counselors. The course will briefly review the history of prevention, and allow students to develop a prevention program for a population of interest.

Prerequisites: CPCE 5532 or CPCE 5533.

CPCE 5598 Individual Studies Credits: 1-6

Review of the research and trends relative to selected problems.

CPCE 5599 Research And Thesis Credits: 1-9

Research and Thesis

CPCE 5600 Introduction To Counseling Psychology Credit: 1

This course is intended to assist new doctoral students in their orientation to UMKC and to the profession of Counseling Psychology. The course also introduces students to the ethical principles and code of conduct for psychologists.

CPCE 5605 Career Development II Credits: 3

Major theories and research in vocational psychology and career development and implications for the work of the counseling psychologist and counselor.

Prerequisites: CPCE 5505.

CPCE 5609 Assessment II: Intellectual And Cognitive Assessment Credits: 3

This course is designed to provide students with a foundation in the use of intellectual and cognitive assessment instruments in clinical evaluation. The course covers theoretical issues pertinent to intellectual and cognitive assessment as well as basic assessment skills including administration, scoring, interpretation, and communication of results for commonly used measures.

Prerequisites: Admission to the Ph.D Program in Counseling Psychology.

CPCE 5610 Theoretical And Professional Issues In Counseling Psychology Credits: 3

This course is designed to introduce first year doctoral students to the fundamental concepts and methods of psychology conceived as the application of scientific and ethical reasoning to human problems. It will provide an in-depth examination of the American Psychological Association code of ethics and its application to the conduct of psychologists. Critical and analytical thinking will be emphasized in all aspects of the course. The course will cover broad models of clinical and counseling psychology and their historical and scientific foundations, issues in diagnosis, cross-cultural applications and professional problems in light of ethical principles, professional standards, scientific data multi-cultural contexts.

CPCE 5611 Objective Personality Assessment Credits: 3

This course is designed to help students develop knowledge and skills related to the selection, administration, and interpretation of some representative objective personality assessment instruments used in counseling/clinical settings. Students will also learn to integrate data obtained from an assessment battery to write comprehensive psychological reports.

CPCE 5615 Survey Of Research In Counseling Psychology Credits: 3

Survey of significant research in counseling psychology. Critical evaluation of research procedures, instrumentation, and clinical application of results.

Prerequisites: EDUC-R&P 5605 and EDUC-R&P 5608.

CPCE 5620 Advanced Theories And Methods Of Counseling Credits: 3

Personality and learning theories and their implications for professional practice in counseling psychology. Emphasis on critical evaluation of assumptions, methods, comprehensiveness and usefulness of the theories, with reference to related research.

Prerequisites: CPCE 5532.

CPCE 5631 Advanced Counseling Practicum Credits: 3

Advanced supervised therapeutic counseling with individuals and supervised consultation in clinical settings.

Prerequisites: CPCE 5532.

CPCE 5632 Practicum In Group Counseling Credits: 3

Leading groups under supervision. Focus on problems and experiences of counselors and counseling psychologists when leading groups.

Prerequisites: M.A. in Counseling, CPCE 5540.

CPCE 5633 Advanced Couples & Family Practicum Credits: 3

Advanced supervised application of theories and methods of family therapy with individuals, couples and families.

Prerequisites: CPCE 5542.

CPCE 5634 Assessment Practicum Credits: 3

The practicum for assessment of children, adolescents, and adults covers the administration of psychological evaluations and includes maintaining a caseload of assessment evaluations. Specialized assessment evaluations and conceptualization issues as well as special topics are covered, with evaluations for ADHD and learning disorders emphasized.

Prerequisites: CPCE 5611, 5609, 5531, 5532.

CPCE 5639 Continuing Advanced Counseling Practicum Credits: 1-6

Supervised therapeutic counseling with individuals, beyond the advanced level.

Prerequisites: CPCE 5631.

CPCE 5640 Theories And Methods Of Counseling Supervision Credits: 2

This course offers an overview of counseling supervision theories and models, and contemporary research. It also addresses supervision process and tasks, diversity in supervision, and supervisor's ethical and legal responsibilities.

Prerequisites: CPCE 5631.

CPCE 5641 Supervision Practicum Credit: 1

This course is designed to provide students with an opportunity to practice supervision. Students will be assigned 2 to 3 counselors-in-training from a CPCE 5531 and CPCE 5532 practicum class to supervise over the course of a semester. The practicum instructor will provide weekly supervision.

Prerequisites: CPCE 5640.

CPCE 5645 Projective Testing Credits: 3

Course focuses on the diagnostic use of projective assessment techniques, with a special focus on the Rorschach Inkblot Test.

Prerequisites: CPCE 5515, Enrolled in Doctoral Psych. Program, and Measurement of Intelligence or Cognitive Assessment course.

CPCE 5650 Prevention and Consultation in Counseling Psychology Credits: 3

An overview of the psychologist's role in consultation, program development and evaluation in the context of prevention. Students will also apply their knowledge and develop skills in prevention and consultation by developing a prevention program for a real-life setting.

CPCE 5675 Internship In Counseling Psychology Credits: 1-16

Applied experiences in a professional setting under supervision of licensed psychologists.

CPCE 5690 Special Problems Credits: 1-6

Individual studies; thesis exploration; special reading.

CPCE 5699 Research And Dissertation Credits: 1-16

Research and Dissertation.

Education Reading Courses

EDRD 439 Language & Literacy across the Disciplines Credits: 3

Principles and application of disciplinary literacy in the middle and secondary classroom. Class will be primarily composed of discussion and lecture.

As a part of the course, teacher candidates will inquire into and analyze disciplinary practices in 5-12 schools.

Prerequisites: Admission to teacher education program.

EDRD 5439 Language and Literacy Across the Disciplines Credits: 3

Principles and application of disciplinary literacy in the middle and secondary classroom. Class will be primarily composed of discussion and lecture.

As a part of the course, teacher candidates will inquire into and analyze disciplinary practices in 5-12 schools.

Prerequisites: Admission to the school of education.

EDRD 5501 Teaching Of Reading Credits: 3

This graduate language and literacy course explores foundational theories and research that have influenced literacy instruction and assessment in the United States. In particular, this course examines critical sociocultural theories and high leverage literacy practices for diverse learners.

Prerequisites: TCH-ED 415; No pre-requisites for students at the MA or EdSpec level.

EDRD 5502 Early Literacy and Language Development Credits: 3

This graduate language and literacy course emphasizes learning theories related to language acquisition, continuums of emergent literacy development, and corresponding teaching methods for literacy instruction and assessment of diverse learners. This course also prepares teachers and reading professionals to implement continuous professional learning related to language acquisition and emergent literacy with other teaching professionals.

EDRD 5510 Adolescent Practicum in Literacy Assessment and Intervention Credits: 3

This course ensures learners understand the purposes, strengths, and limitations of different literacy assessments in order to assess adolescent students' proficiencies. The course will focus on identifying cognitive, motivational, and sociocultural factors that contribute to literacy success for the adolescent student in order to design and teach literacy intervention lessons with a struggling adolescent reader. As part of the practicum experience, learners are trained on communicating assessment results and implications to a variety of audiences.

EDRD 5511 Advanced Literacy Assessment and Evaluation Credits: 3

This graduate language literacy course engages teachers and literacy specialists in building foundational knowledge, analyzing, and administering intelligence and achievement tests focusing on a range of skills and abilities. The course foregrounds research-based, developmentally-appropriate theoretical frameworks and measures of cognitive functioning and academic achievement, as well as formative and summative literacy assessment practices through a variety of advanced level methods.

EDRD 5515 Seminar In Reading Credits: 3

In this seminar, candidates will be introduced to the discourse of literacy research, understand commonly used practitioner research designs, become critical consumers of literacy research, and expand their knowledge of the extant body of literature on literacy and literacy for diverse learners.

Prerequisites: EDRD 5510.

EDRD 5520 Elementary Practicum in Literacy Assessment and Intervention Credits: 3

This culminating elementary practicum is designed for graduate students in Language Literacy. This course prepares teachers to demonstrate proficiency in meeting the literacy needs of struggling readers and diverse learners in an elementary school setting and engaging in peer coaching and active self-peer analysis in order to improve their own instructional practices. Note: As this is the culminating course in the degree program, students are encouraged to implement learning concepts, practices, and assessments from previous coursework as appropriate during this practicum course.

Prerequisites: EDRD 5502

EDRD 5530 Reading Instruction for K-12 English Language Learners Credits: 3

This course investigates ways to differentiate reading instruction to meet needs of English Language Learners with different levels of language proficiency and at different developmental and academic levels. The course focuses on research findings related to literacy development of diverse learners and ways to strengthen diverse classroom communities. This is an elective course in Language Literacy and does not have prerequisites.

EDRD 5540 African American English in Society and Schools Credits: 3

This course deals with the distinctive varieties of English used by and among African Americans, particularly in big-city settings, and their parallels elsewhere in Africa and the New World, especially in the Caribbean. The subject is approached from four perspectives that will be covered in the course: (1) Present-Day Features of African American Vernacular English (AAVE), its phonology, syntax, lexicon; (2) History and origins of AAVE; (3) Speech Events and Expressive Language Use (SEELU) Structure and function of such expressive African American Speech Events ; (4) Educational Issues connected with the use of AAVE.

Prerequisites: Open to graduate students enrolled in Language and Literacy Program. Open to graduate students enrolled in other programs or undergraduate students with permission of professor.

EDRD 5541 Teaching Reading Improvement: Secondary, College, and Adult Levels Credits: 3

Classroom and laboratory techniques for upper level reading instruction; including study skills; reading speed and flexibility, and vocabulary improvement.

EDRD 5601 Organizing And Guiding The Reading Program Credits: 3

This course examines, analyzes, and develops effective K-12 schoolwide literacy programs that include intervention support systems for responding to the needs of all students in diverse contexts. In addition, the course will focus on program goals, the roles and responsibilities of personnel, materials, fostering collaborative leadership, and creating a school culture that focuses on literacy.

EDRD 5650 Dyslexia and Related Learning Differences Credits: 3

This advanced level graduate language and literacy course analyzes theories of atypical literacy development, with a specific focus on identification and awareness of the ways that language processing affects speech, reading and spelling. Students will explore the coexistence of dyslexia with related learning differences and will plan instructional interventions for students with literacy special needs.

Education Courses

EDUC 149 Economics In The K-8 Classroom Credits: 3

This course is designed to help students develop an understanding of economic concepts and principles and to raise their level of comfort for infusing these concepts throughout the K-8 curriculum. Special attention will be given to both national and state economic standards.

EDUC 160 Career And Life Planning Credits: 3

Skill development in career planning through processes of self-assessment and self-development and analyzing the structure of the world of work and occupational information, values, clarification and decision making, vocational exploration and preparation for employment.

EDUC 180 Introduction To Education Credits: 2

The course will present an overview of education today for those who have a general interest in education or are considering becoming educators. The curriculum provides students with an introduction to current issues in education while incorporating skills needed for academic success. Students will also have the opportunity to gain experience in a K-12 classroom setting (2 credit hours).

EDUC 189 Special Topics Credits: 1-6

An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

EDUC 289 Special Topics Credits: 1-6

An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

EDUC 389 Special Topics Credits: 1-6

An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

EDUC 402R Algebraic Thinking for Teachers Credits: 3

Designed for middle and secondary school mathematics teacher candidates to [re]evaluate conceptions of learning and teaching algebraic concepts across elementary, middle, and high school levels. Course topics include mathematical habits of mind, defining algebra, building number sense to develop algebraic thinking, generalizing functional relationships, and representing mathematical ideas.

EDUC 414 English Language Study In Elementary And Secondary Schools Credits: 3

Designed as a review of traditional as well as descriptive and historical approaches to grammar, usage and syntax - focusing upon teaching strategies for elementary, junior high, middle school, and senior high English/language arts classrooms.

EDUC 428 Cultural Diversity And American Education Credits: 3

An examination of educational needs and strategies in a culturally diverse society based on a study of several major ethnic and nationality groups in America from historical, anthropological and sociological perspectives. This course may be team-taught.

EDUC 434 Classroom Diagnosis And Correction Of Reading Problems Credits: 3

Procedures for the diagnosis and correction of reading problems which are appropriate for classroom teachers.

Prerequisites: TCH-ED 415.

EDUC 440 Literature For Adolescents Credits: 3

Focus upon literature for adolescents and ethnic literature, specifically, and upon the special reading interests of the adolescent in relation to the methods and materials of reading in grades 7-12, generally. Attention to literature selection standards, censorship, individualized instruction, and reader response.

EDUC 489 Special Topics Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in each semester's bulletin.

EDUC 497 Individual Study Credits: 1-6

Guided study of a selected topic in education.

EDUC 5428 Cultural Diversity And American Education Credits: 3

An examination of educational needs and strategies in a culturally diverse society based on a study of several major ethnic and nationality groups in America from historical, anthropological and sociological perspectives. This course may be team-taught.

EDUC 54896CI Special Topics Credits: 1-6

Special Topics

EDUC 5489AR Special Topics Credits: 1-6

Special Topics

EDUC 5489CA Special Topics Credits: 1-3

Special Topics

EDUC 5489LI Special Topics Credits: 1-6

Special Topics

EDUC 5489LM Special Topics Credits: 1-6

Special Topics

EDUC 5489LT Special Topics Credits: 1-6

Special Topics

EDUC 5489MS Special Topics Credits: 1-6

Special Topics

EDUC 5552 Advanced Diagnostic And Treatment Procedures In Reading Credits: 3

Significant aspects of reading disability; diagnostic testing; case report writing; interpretation of test data; implications of test data for recommendations.

Prerequisites: EDRD 5510.

Co-requisites: EDRD 5520.

EDUC 5589AA Special Topics in Education Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC 5589AQ Special Topics In Education Credits: 1-6**EDUC 5589B Special Topics In Education Credits: 1-6****EDUC 5589EP Special Topics In Education Credits: 1-6**

Special Topics In Education

EDUC 5589ES Special Topics in Education Credits: 1-6

EDUC 5589IT Special Topics in Education Credits: 1-6

EDUC 5589LR Special Topics in Education Credits: 1-6

EDUC 5589MS Special Topics in Education Credits: 1-6

EDUC 5589MT Special Topics in Education Credits: 1-6

EDUC 5589Q Special Topics In Education Credits: 1-6

EDUC 5589R Special Topics in Education Credits: 1-6

EDUC 5589RD Special Topics in Education Credits: 1-6

EDUC 5589RH Special Topics In Education Credits: 1-6

EDUC 5589TL Special Topics in Education Credits: 1-6

EDUC 5589WP Special Topics in Education Credits: 1-6

EDUC 5598 Individual Studies Credits: 1-6

Review of the research trends relative to selected problems in education. By prior arrangement with instructor.

EDUC 5598A Individual Studies In Administration Credits: 1-6

EDUC 5598B Individual Studies In Mathematics Credits: 1-6

EDUC 5598C Individual Studies Curriculum Credits: 1-6

EDUC 5598H Individual Studies Higher Education Credits: 1-6

EDUC 5598J Individual Studies Philosophy Of Education Credits: 1-6

EDUC 5598P Individual Studies Educational Psychology Credits: 1-6

EDUC 5598Q Individual Studies Early Childhood Education Credits: 1-6

EDUC 5598R Individual Studies Education Reading Credits: 1-6

EDUC 5598S Individual Studies Research Credits: 1-6

EDUC 5598SA Individual Studies Research Credits: 1-6

EDUC 5598U Individual Studies History Of Education Credits: 1-6

EDUC 5598X Individual Studies Sociological Foundations Credits: 1-6

EDUC 5599 Research And Thesis Credits: 1-9

Research and Thesis.

EDUC 5621 Practicum In Curriculum And Instruction Credits: 3-6

A field experience which provides an opportunity for the application of current research in the area of curriculum and instruction to an educational setting.

EDUC 5640 Apprenticeship And Conference In College Training Credits: 2-5

Apprenticeship experience in preparing, conducting, and evaluating college teaching under the direction of and in conference with supervising professors. Some attention to student personnel and administration in higher education.

EDUC 5690 Special Problems Credits: 1-6

Individual studies; thesis exploration, special reading.

EDUC 5695 Doctoral Dissertation: Reading Education Credits: 1-16

Doctoral Dissertation: Reading Education

EDUC 5696 Dissertation Administration And Community Leadership Credits: 1-16

Dissertation Administration And Community Leadership

EDUC 5697 Dissertation Curriculum And Instruction Credits: 1-16

Dissertation Curriculum And Instruction

EDUC 5698 Dissertation General Education Credits: 1-16

Dissertation General Education

EDUC 5899 Required Graduate Enrollment Credit: 1

Educ-Curriculum Instruction Courses

EDUC-C&I 497 Individual Study Credits: 1-6

Guided study of a selected topic in curriculum and instruction.

EDUC-C&I 5504 Social Studies In the Schools Credits: 3

Trends and curricular developments in social studies. Focus on the development of social studies concepts, the development of critical thinking skills, and analysis of values.

EDUC-C&I 5505 Introduction To Curriculum Theory Credits: 3

An introduction to curriculum theory with the recognition that knowledge, power, ideology and schooling are connected to patterns of complexity and contradictions. Emphasis will be placed on curricula that cultivate theoretical discourses about the quality and purpose of schooling and human life.

EDUC-C&I 5506 Curriculum Design Credits: 3

This course is designed to enhance educators' skills in the areas of curriculum design and interpretation. Students will apply and adapt strategies for curriculum development as well as for interpreting and adapting existing curricula.

EDUC-C&I 5508 Curriculum And Methods For Teaching The Non-Motivated Learner Credits: 3

Analysis of materials relevant to reluctant learners; student-teacher prepared consumable materials; current research; methods for presenting material.

EDUC-C&I 5509 Reducing Risk Factors For Students In Educational & Community Stn Credits: 3

The course offers an overview of current research and of special programs that deal with students who are likely to fail at school or in life. The roles of the larger society in helping create such problems will be considered. There will be an emphasis on early identification of such students and a consideration and evaluation of a number of programs designed to help them. The course will also present descriptions of the roles that educators can implement in programs designed for prevention and intervention.

EDUC-C&I 5510 Differentiating Instruction Through Teaching/Learning Styles Credits: 3

Teaching practices based upon teaching/learning styles are explored and modeled. Through differentiated instruction students learn to use style preferences to meet the needs of learners in a typical classroom including the culturally diverse, at-risk, the remedial, the learning disabled, the gifted, and the special needs students. Differentiation emphasizes learning centers, self-selection, self-pacing, subgrouping, contracting and peer tutoring. (K-12).

EDUC-C&I 5511 Developing Multidisciplinary Problem Solving Skills Credits: 3

Development of heuristic strategies in problem analysis, information processing, modeling and logical thinking. Study of methods and materials for teaching problem solving strategies, with applications from several school curriculum areas and instructional settings. Use of microcomputers to develop skills.

EDUC-C&I 5512 Strategies For Effective Classroom Management Credits: 3

The course presents several current approaches to classroom management and how they might be applied to the classroom. The approaches are evaluated in terms of psychological theory and research. Direct experiences with discipline problems are offered through simulation and role-playing.

EDUC-C&I 5513 Effective Communication In The Classroom Credits: 3

This course will emphasize the relationship between communication and classroom climate, and the influence of communication on motivation and student behavior. Communication with large groups, small groups, and individuals is studied and practiced.

EDUC-C&I 5514 Overview of Culturally Responsive Pedagogy Credits: 3

An introduction to ways of thinking about the relationship among teaching, learning, learner characteristics and experiences, and learning outcomes for traditionally underserved students. Particular attention will be given to a framework for understanding the meaning of culture in framing the curriculum and engaging students in meaningful learning experiences and tasks. A practice-based approach to improving learning for traditionally underserved students will be employed. Each participant will be required to participate in and facilitate discussion, develop a personal inventory, and conduct a historical analysis of her/his school and its relation to the community.

EDUC-C&I 5515 Integrated Arts As A Model For Classroom Instruction Credits: 3

This course provides background on theory, research and practice in arts education. Students will learn to integrate the arts across the curriculum and explore the value of the arts as conveyors of information, powerful tools of communication and bridges to the broader culture. This course will also give the students the opportunity to create, study and experience the arts as a model for classroom instruction.

EDUC-C&I 5516 Understanding the Crisis in Urban Schools Credits: 3

The participants in this course will develop deep knowledge of practices related to long-term and persistent challenges in urban schools. Participants will examine well-documented accounts of conditions and situations within and outside that influence the culture and learning outcomes in high performing and low performing urban schools. These accounts will represent multiple perspectives including those of teachers, administrators, students, parents, and other stakeholders. The insights gained from the documented accounts examined in this course will be used to conceptualize new context- specific approaches and frameworks for improving practices, policies, and learning outcomes in urban schools

EDUC-C&I 5517 Teaching Methods And Practices Credits: 3

This course is designed to present and evaluate basic instructional methods and techniques and to determine the ways in which instruction is affected by the social and cultural context of the school.

EDUC-C&I 5518 Assessment of Diverse Learners, Engagement and Motivation Credits: 3

A framework for assessing diverse learners and implementing culturally responsive pedagogy, leading to increased learner engagement and motivation. An overview of the purposes of assessments, how assessment measures are aligned to the principles of culturally responsive pedagogy, and implications for overall learner academic, personal and social growth. Finally, specific strategies for building engagement and motivation, particularly for learners living in poverty and those from ethnically diverse backgrounds are provided.

EDUC-C&I 5519 Discipline Specific Pedagogy for Diverse Learners Credits: 3

An introduction to the use of research-based, discipline specific pedagogy for traditionally under served students in core subject areas of reading, mathematics, science and social studies. Additionally, participants examine the philosophy and theoretical perspectives that support different pedagogical approaches and the social context for learning in classrooms with diverse students.

EDUC-C&I 5520 English Curriculum In The Middle And High School Credits: 3

Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examination of program objectives, teaching methods, and instructional materials in English.

Prerequisites: valid regular teaching certificate, undergraduate special methods or equivalent, teaching experience.

EDUC-C&I 5522 Language Arts Curriculum In The Elementary And Middle School Credits: 3

Consideration of language concepts as they relate to the teaching of the Language Arts in Grades K through 8. Significant research and its application to current trends in teaching the language arts will be explored.

Prerequisites: an undergraduate course in Language Arts or reading.

EDUC-C&I 5523 Advanced Literature For Children Credits: 3

This course emphasizes the critical analysis and selection of a variety of genres of multicultural children's print, digital, and online literature in order to create "windows and mirrors" (Bishop, 1990) through literature for diverse educational settings. It will emphasize using literature with culturally and linguistically diverse groups of students, explicitly modeling literacy skills and teaching literacy strategies, and exploring prevalent myths and stereotypes in society that are often reflected in children's and young adult literature.

EDUC-C&I 5524 Advanced Methods of Teaching English Language Arts for Grades 5-9 Credits: 3

Students will study research-based, developmentally appropriate pedagogies for teaching English Language Arts in grades 5-9. Course will foreground processes of analytic inquiry and cycles of planning, enacting, interpreting and translating learning experiences to meet the needs of all students. Topics will include methods of teaching reading, literature, writing, language study, speaking/listening, research skills, as well as technology integration.

EDUC-C&I 5525 The Craft of Writing Credits: 3

Students will learn inquiry-based pedagogies for teaching writing in grades 5-9. The course will address the role of the ELA teacher as lead writer in the classroom, and students will develop their own writing process and practice across a range of genres. Students will learn how to create a classroom community of writers through a variety of evidence-based frameworks and practical strategies for effective writing instruction. Topics will address processes of conferencing for instruction, feedback and evaluation supported by current research. Students also will learn effective methods for embedding meaningful stylistic and mechanical instruction to support writer/writing development.

EDUC-C&I 5526 The Craft of Reading Credits: 3

Students will examine inquiry-based pedagogies for teaching reading in grades 5-9. The course will address the role of the ELA teacher as lead reader in the classroom, and students will examine their own reading process and strategies through a variety of interpretive and analytic approaches supported by current research, including reader response and close reading. Topics will address evidence-based frameworks for effective reading instruction, comprehension strategies of diverse readers, and methods of reading assessment, data analysis and reflective practice.

EDUC-C&I 5528 Teaching Nonfiction Texts for Grades 5-9 Credits: 3

Students will gain an understanding of pedagogies for teaching both the craft and criticism of nonfiction texts. Emphasis will be placed upon integration of nonfiction via thematic pairing with existing texts. Topics will include analysis and application of text structures, text features, rhetorical strategies and literary devices, as well as deconstruction and interrogation of state and national standards relating to the teaching of nonfiction texts.

EDUC-C&I 5531 Mathematics Learning Difficulties: Identification and Intervention Credits: 3

Designed for inservice and preservice teachers to explore the interrelation of mathematics concepts and instructional strategies to enhance the mathematical learning of students who underachieve in mathematics and/or struggle with mathematics.

Prerequisites: Any mathematics teaching methods course.

EDUC-C&I 5536 Specialized Secondary School Curriculum Mathematics Credits: 3

Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examinations of program objectives, teaching methods and instructional materials in Mathematics.

Prerequisites: valid regular teaching certificate, undergraduate Special Methods or equivalent, teaching experience.

EDUC-C&I 5539 Mathematics Curriculum Development Credits: 3

Application of principles of curriculum development to the mathematics content and instructions. Development of a rationale for objectives and content selection and for evaluation. Study and evaluation of current programs, trends and experiments.

EDUC-C&I 5540 Evaluation Of Computer Software Credits: 3

The goals of the course are to provide students with a systematic evaluation process which analyzes the hardware resources and application needs of various user groups. This course provides the student with both an academic understanding of evaluation and requirement analysis for educational user groups. The course includes a practicum activity for application projects.

EDUC-C&I 5541 Teaching Mathematics With Computer Credits: 3

The use of a variety of technologies and the appropriate software in teaching secondary mathematics will be investigated and the resulting impact on curriculum will be covered.

Prerequisites: Mathematics teaching certificate or the equivalent of an undergraduate degree in mathematics.

EDUC-C&I 5542 Methods of Teaching English as a Second Language Credits: 3

This course covers the historical and current approaches, methods, and techniques of teaching English to speakers of other languages, from grammar translation to audiolingual and communicative approaches. Additionally, successful classroom practices that address the needs of culturally and linguistically diverse students will be presented.

EDUC-C&I 5543 English Grammar for ESOL Teachers Credits: 3

This course is about teaching English grammar and methods of teaching grammar for graduates, prospective and current teachers of English to speakers of other languages. It includes analysis of the major grammatical structures of American English, discussion of the role of teaching grammar, effective classroom methods and techniques for the English as a second/foreign language classroom.

EDUC-C&I 5544 Theory and Research in Second Language Teaching and Learning Credits: 3

This course covers both second language learning theories and second language research and design. It will also contain a survey of both qualitative and quantitative research literature.

EDUC-C&I 5545 Linguistics for ESOL Teachers Credits: 3

This course is an introduction to linguistic theories focusing on topics that are particularly relevant to ESOL teachers in culturally and linguistically diverse settings. It also covers applying these theories to practice in ESOL classrooms. The contents include basic practical knowledge in phonetics, phonology, morphology, syntax, pragmatics and semantics.

EDUC-C&I 5546 Intercultural communication Credits: 3

This course serves as an introduction to the background of English language learners (ELL) from many countries of the world. It also serves to facilitate ESOL students' success in ELL and mainstream classrooms. The course will introduce culture in general at first and then focus on how to better understand the ELL students' cultures. Class participants will learn to develop lessons that enhance intercultural communication and understanding among all students.

EDUC-C&I 5547 Second Language Acquisition Credits: 3

The course focuses on the foundations of second language learning and teaching. Major theoretical approaches to second language acquisition and second language learning will be discussed. The course is also one of the requirements for an endorsement to teach in English as a second language classroom.

EDUC-C&I 5548 English As A Second Language In Content Areas Credits: 3

Theoretical perspectives of teaching, learning and researching literacy development. The focus of this course will be on content based English as a second language instruction. The course is one of the requirements for an endorsement to teach in an English as a second language classroom.

EDUC-C&I 5549 Practicum In English As A Second Language Credits: 3

A four-week practicum for teachers and researchers in the field of second language learning and teaching. Students will have the opportunity to develop their own teaching plan of action according to the curriculum guidelines of the program in which they participate. Students will develop a portfolio and reflection piece about their own learning in the practicum.

EDUC-C&I 5551 Science Curriculum In The Middle And High School Credits: 3

Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examination of program objectives, teaching methods and instructional materials in Natural Sciences.

Prerequisites: valid regular teaching certificate, undergraduate special methods or equivalent, teaching experience.

EDUC-C&I 5553 Curriculum And Instruction In Science Credits: 3

Advanced study of contemporary programs and practices in science education at all instructional levels. Examination of program objectives and teaching methods and development of instructional materials for classroom use.

Prerequisites: A science teaching methods course and teaching experience.

EDUC-C&I 5554 Assessment In Science Education Credits: 3

Advanced study of science education assessment with option for elementary or secondary emphasis.

EDUC-C&I 5560 Teaching And Learning In The Urban Classroom Credits: 3

Emphasis will be placed on examining cultural beliefs, assumptions, values and their influence on the processes of teaching, perception of the urban learner, understanding the characteristics of the urban learner, and transforming pedagogical practices.

Prerequisites: EDUC-UL 5525 MA Multic Ed Students Only with 15 Prog Credit hours

EDUC-C&I 5561 Teaching Diverse Populations In Today's Classrooms Credits: 3

This course focuses on culturally responsive pedagogies for meeting the academic needs and learning styles of culturally diverse students. Emphasis will be placed on critical investigation of the role of socio-cultural dynamics on learning and teaching, and design of curriculum, materials, and pedagogical and disciplinary practices that affirm student's culture. The ultimate goal of the course is to examine ways in which a culture-based curricular perspective provides powerful scaffolding for enabling and empowering educational experiences for diverse students.

Prerequisites: EDUC-UL 5525, EDUC-UL 5526, EDUC-UL 5527, or EDUC-UL 5528.

EDUC-C&I 5562 Teaching For Equity And Social Justice Credits: 3

This course examines a systems approach to the design, development, assessment, and implementation of school practices that support equity and social justice for all students. It investigates issues of educational inequities and educational empowerment. Practitioners will develop the knowledge, skills and dispositions needed for empowering self and students. Emphasis will be placed on social action learning, empowerment and agency.

Prerequisites: EDUC-UL 5525, EDUC-UL 5526, or EDUC-UL 5528 and EDUC-C&I 5560 or EDUC-C&I 5561 or EDUC-C&I 5562.

EDUC-C&I 5563 Multicultural Perspectives In Education Credits: 3

This course provides an opportunity for students to engage in a critical and in-depth study of multicultural education. Students will examine current theoretical, conceptual, ideological, and political positions that help frame the multicultural education debate. The ultimate goal of the course is to help students develop critical and multiple perspectives about education in a democratic society with the aim of transforming curricular and pedagogical practice.

Prerequisites: EDUC-UL 5525, EDUC-UL 5526, EDUC-UL 5527 or EDUC-UL 5528 and EDUC-C&I 5560 or EDUC-C&I 5561.

EDUC-C&I 5565 Social Studies Curriculum Elementary Education Credits: 3

Trends and new curricular developments in elementary school social studies. Focus on integration of social science concepts, the development of critical thinking skills, and analysis of values.

EDUC-C&I 5566 Social Studies Curriculum In The Middle And High School Credits: 3

Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examinations of program objectives, teaching methods, and instructional materials in Social Studies.

Prerequisites: valid regular teaching certificate, undergraduate special methods or equivalent, teaching experience.

EDUC-C&I 5570 Curriculum And Instruction In Technology Credits: 3

Study of contemporary programs and practices of technology usage in education at all instructional levels. Examination and application of technologically enhanced teaching methods, assessment, and curriculum development for classroom use.

EDUC-C&I 5571 Cognition & Technology Credits: 3

The purpose of this course is to respond to current research in the field of cognition and educational technology and design an evaluative research response to a local technology program. The educators will define the concepts concerning implementation of new technologies into learning environments and the mediational effects on the types and quality of learning that result from that process.

EDUC-C&I 5572 Assessing The Role Of Technology In Education Credits: 3

The purpose of the course is to develop an understanding of changing role of technology in education by reviewing current and historical articles on the topic. This includes a historical analysis of trends and expectations within educational settings and outside educational settings and defining the educator's understandings of the role of technology in educational settings, past, present and future.

EDUC-C&I 5573 Development Learning Tech Progs:Traditional & Non-Trad Settings Credits: 3

The purpose of this course is to develop understandings of currently implemented educational technologies including both software and hardware configurations. The educators will review current use of a variety of current technologies integrated into traditional settings and non-traditional settings and evaluate their effectiveness in developing standards-based learning outcomes and constructivist-based learning outcomes.

EDUC-C&I 5575 Internship - Early Childhood Credits: 3-16

Applied experiences in a planned, supervised curriculum program. Seminar accompanies internship experiences.

EDUC-C&I 5576 Administration Of Early Childhood Programs Credits: 3

This course is designed to examine the administrative functions and decisions involved in effectively directing an Early Childhood Program. Students may plan their own Early Childhood Program incorporating philosophical values and beliefs.

EDUC-C&I 5577 Early Childhood Special Education Methods Credits: 3

EDUC-C&I 5577 provides an overview of the field of early childhood special education, with an emphasis on inclusive education for young children ages birth-third grade. This emphasis includes methods and practices for providing services for young children with special needs and their families and the adaptation of developmentally appropriate curriculum and the classroom environment. Historical, political, and theoretical contexts are provided as framework for the course.

EDUC-C&I 5578 Play In Early Childhood Education Credits: 3

The purpose of this course is to study the various play theories and developmental levels of play. Students plan play activities and participate in Early Childhood programs.

EDUC-C&I 5579 History, Theories, And Issues In Early Childhood Education Credits: 3

This course is designed to explore the historical and theoretical principles in early childhood education. Current issues in the field will be examined and discussed.

EDUC-C&I 5580 Curriculum In Early Childhood Education Credits: 3

The content of this course will include an exploration of appropriate curriculum and instruction of early childhood classrooms. Students will recognize, understand and analyze the differences and similarities between early childhood curriculum and instruction methods and elementary education instruction.

EDUC-C&I 5581 Infant-Toddler Programs: Research Theory And Practice Credits: 3

This course is designed to investigate the research relevant to infant and toddler programs, learn about the appropriate curriculum and teaching methods, and visit infant and toddler programs.

EDUC-C&I 5582 Program Models In Early Childhood Education Credits: 3

This course is designed to explore and analyze program models in early childhood education in terms of their theoretical and/or philosophical bases and their transformation into practice. During this process, students are encouraged to evaluate their own personal views and values concerning teaching/learning issues in early childhood education.

EDUC-C&I 5583 Supervision In Early Childhood Education Credits: 3

The purpose of this course is to study the process of effective supervision of staff in the diverse contexts of early childhood education. This course is designed to prepare students to supervise teachers, staff, paraeducators, or volunteers in early childhood education programs. Students will explore theories of adult development, the supervision process, professional development, and the evaluation process.

EDUC-C&I 5584 Early Childhood Culminating Project Credits: 1-6

This seminar is designed for graduate students to explore current issues and topics pertaining to the field of early childhood education. An in-depth investigation of ways to work with community agencies will be included.

EDUC-C&I 5585 Teaching and Learning with Technology Credits: 3

This is an introductory course that covers the fundamental of standard educational computer applications in addition to providing the basic concepts regarding classroom hardware and software integration. This course familiarizes students with the National Educational Technology Standards For Teachers and Students. Because of the computer's increasing importance in all phases of education, hands-on experiences are required throughout the course.

EDUC-C&I 5586 Multimedia in Education Credits: 3

This course will introduce students to a variety of methods for creating instructional multimedia materials for K-16 classroom use, with a particular emphasis on free and web-based digital editing and conversion programs.

Prerequisites: EDUC-C&I 5585 (or TCH-ED 385).

EDUC-C&I 5587 Facilitating Technology Implementation Credits: 3

This course will prepare students to facilitate the integration of educational technology in PK-12 settings. Skills taught will include planning and implementing educational technology professional development to classroom teachers and integration strategies that increase the potential for meaningful learning.

Prerequisites: EDUC-C&I 5585 (or TCH-ED 385).

EDUC-C&I 5589 Special Topics In Education Credits: 1-6

A course designed to deal with a curriculum topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-C&I 5589AD Special Topics in Education Credits: 1-6

A course designed to deal with a curriculum topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-C&I 5589AM Special Topics In Education Credits: 1-6**EDUC-C&I 5589CD Special Topics In Education Credits: 1-6****EDUC-C&I 5589EG Special Topics In Education Credits: 1-6****EDUC-C&I 5589ES Special Topics Credits: 3****EDUC-C&I 5589GR Special Topics Credits: 3****EDUC-C&I 5589HR Special Topics In Education Credits: 1-6****EDUC-C&I 5589IC Special Topics In Education Credits: 1-6****EDUC-C&I 5589ME Special Topics In Education Credits: 1-6****EDUC-C&I 5589SC Special Methods Science Credits: 5****EDUC-C&I 5589SE Special Methods English Credits: 5****EDUC-C&I 5589SM Special Methods Math Credits: 5****EDUC-C&I 5589SS Special Methods Social Studies Credits: 5****EDUC-C&I 5589TL Special Topics In Education Credits: 1-6**

Special Topics In Education

EDUC-C&I 5589TM Special Topics In Education Credits: 1-6

A course designed to deal with a curriculum topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-C&I 5589UC Sepcial Topics in Education Credits: 1-6

EDUC-C&I 5590 Seminar Credits: 3

Discussion and evaluation of literature in curriculum.

Prerequisites: EDUC-C&I 5505.

EDUC-C&I 5591 Curriculum & Instruction For The 21St Century Credits: 3

A seminar including critical examination of current issues affecting schools such as education for democracy and global interdependence in a diversified society, curriculum and instruction in a technological, post-industrial society; the changing demographics of the U.S. and the implications for curriculum and instruction; and the roles of teachers and administrators in the school of the future. Students will be actively involved in "research-in-action" study of both theory and practice.

EDUC-C&I 5595 Action Research For Practitioners Credits: 3

This course comprises a guided graduate research paper experience. Course participants will work together to plan individual action research studies related to diverse, urban schooling. This course is designed to enable practitioners to engage in systematic inquiry on some aspect of their practice in order to find out more about that practice and eventually improve it. Participants in the course are expected to put their assumptions, ideas and practices to the test by gathering, analyzing and drawing conclusions from evidence. This course is to be taken during the last year of degree study. Course enrollment requires faculty advisor approval and a minimum 3.0 GPA. Participation in this course entails a field placement for research purposes. If a placement in a school is required, students will need to complete a TB test and submit fingerprints for the standard Background Check process by the start of the semester. Any costs associated with these tests are the responsibility of the student. All course participants are further required to obtain a LiveText subscription.

EDUC-C&I 5596 Classroom Assessment Credits: 3

This course is designed to help practitioners develop an understanding of the various roles of classroom assessment, strengthen their own assessment strategies be able to better use data in the development of curriculum that is appropriate for all learners. Students will develop a more clear understanding of the relationship of curriculum, instruction assessment ways in which good assessments can help diverse learners.

EDUC-C&I 5598 Individual Studies Credits: 1-6

Review of the research and trends relative to curriculum in education.

EDUC-C&I 5618 Survey Of Research In Curriculum Credits: 3

Review and analysis of research in curriculum theory and methods.

EDUC-C&I 5619 Systemic Curriculum Evaluation and Review Credits: 3

This course focuses on current practices in systemic curriculum review at the grade, school, district or state level in order to better serve the needs of diverse learners. Emphasis will be placed on the processes of curriculum review, curriculum change, implementation, evaluation of changes, and on-going long-range curriculum planning and review.

EDUC-C&I 5620 Seminars In Theories Related To Curriculum Credits: 3

Study of major historical developments in curriculum and their influence on contemporary models and practices.

Prerequisites: EDUC-C&I 5504 or EDUC-C&I 5505.

EDUC-C&I 5626 Seminar in Multicultural Perspectives In Education Credits: 3

This seminar provides an opportunity for student engagement in critical and in-depth study of multicultural perspectives in education. Students will examine current demographic and achievement realities and the theoretical, conceptual, ideological, and political positions that frame multicultural education. The ultimate goal is to help students develop multicultural competence, critical and multiple perspectives about education for a democratic society, and comprehensive knowledge base, skills, and dispositions for transformative intellectualism and change agency.

Prerequisites: Interdisciplinary Ph.D. Student Status.

EDUC-C&I 5640 Curriculum and Teaching for the College Classroom Credits: 3

This course provides a foundation for preparing for and engaging in instruction at the college level. The emphasis is on curriculum planning, assessment, feedback, classroom interactions, and student motivation across a wide variety of discipline areas. This course may also be counted toward course credit allocation for the Preparing Future Faculty online graduate certificate program.

EDUC-C&I 5641 Apprenticeship and Conference in College Training Credits: 2-6

This course provides a foundation for preparing for and engaging in instruction at the college level. The emphasis is on apprenticeship experience in preparing, conducting, and evaluating college teaching under direction of and in conference with supervising professors.

EDUC-C&I 5690 Special Problems Credits: 1-6

Individual studies: thesis exploration, special reading.

EDUC-C&I 5697 Dissertation Curriculum And Instruction Credits: 1-16

Dissertation Curriculum And Instruction

Educ-Research Psychology Courses

EDUC-R&P 255 Understanding Data Through Sports: Sabermetrics Credits: 3

Non-theoretical approach to data analysis using applications and examples from the world of sports.

EDUC-R&P 5502 Advanced Educational Psychology Credits: 3

Critical examination of the contributions of psychological principles and findings to the field of education.

EDUC-R&P 5505 Statistical Methods I Credits: 3

Non-theoretical approach to statistical procedure, including introduction to simple analysis of variance.

EDUC-R&P 5508 Principles And Methods Of Research Credits: 3

Introduction to the analysis of research literature including types of research, methodology, design and data analysis.

EDUC-R&P 5510 Child Behavior And Development Credits: 3

Growth, maturation, and learning processes in children.

EDUC-R&P 5512 Adolescent Development and the School Credits: 3

An overview of development from preadolescence to adulthood, focusing on major theories and aspects of development, contemporary critical issues of the transitions from childhood to adolescence and into adulthood, and the role of professional educators in facilitating positive development .

EDUC-R&P 5513 Life Span Human Development Credits: 3

This course introduces students to the theories and research of biological, cognitive, social and personality development across the lifespan, within the layers of context of people's lives. Special attention is given to the role in development of social class, gender, ethnicity and culture.

EDUC-R&P 5522 Principles Of Testing Credits: 3

Measurement theory, uses and limitation of assessment procedure.

EDUC-R&P 5555 Statistical Methods II Credits: 3

Non-theoretical approach to statistical procedure, including introduction to factorial ANOVA and multiple regression.

Prerequisites: EDUC-R&P 5505.

EDUC-R&P 5564 Instructional Design Credits: 3

Overview of learning theories and pedagogical models as related to the principles and methods of instructional design. Emphasis on the planning, design, implementation and evaluation of instructional systems including focus on technology integration.

EDUC-R&P 5575 Internship Credits: 3-16

Applied experiences in a planned, supervised program in research or educational psychology.

EDUC-R&P 5589 Special Topics In Education Credits: 1-6

A course designed to deal with a topic in educational research or educational psychology which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-R&P 5589AD Special Topics in Education Credits: 1-6

EDUC-R&P 5589AT Special Topics in Education Credits: 1-6

EDUC-R&P 5589CH Special Topics in Education Credits: 1-6

Special Topics in Education

EDUC-R&P 5589CP Special Topics In Education Credits: 1-6

EDUC-R&P 5589DB Special Topics In Education Credits: 1-6

A course designed to deal with a topic in educational research or educational psychology which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-R&P 5589HL Special Topics in Education Credits: 1-6

EDUC-R&P 5589IS Special Topics in Education Credits: 1-6

EDUC-R&P 5589LP Special Topics in Education Credits: 1-6

EDUC-R&P 5589PE Special Topics In Education Credits: 1-6

EDUC-R&P 5589PR Special Topics In Education Credits: 1-6

EDUC-R&P 5589SC Special Topics in Education Credits: 1-6

EDUC-R&P 5589SE Special Topics In Education Credits: 1-6

EDUC-R&P 5590 Individual Studies Credits: 1-6

Review of the research and trends relative to selected problems in educational research or psychology.

EDUC-R&P 5605 Quantitative Analysis I: Regression And Analysis Of Variance Credits: 3

This graduate level statistics course for students in education and the behavioral sciences provides a strong conceptual understanding of two major statistical procedures within the context of the general linear model: Multiple regression and numerous analysis of variance (ANOVA) models. Students will learn to select appropriate statistical software, and report the results of their analyses in the format of the American Psychological Association.

Prerequisites: EDUC-R&P 5505 and EDUC-R&P 5508.

EDUC-R&P 5606 Quantitative Analysis II : Multivariate Data Analysis Credits: 3

This graduate level statistics course for students in the behavioral sciences and education provides a strong conceptual understanding of advanced topics in regression (interaction effects, logistic regression, path analysis) and various multivariate techniques (MANOVA, canonical correlation, factor analysis). Students will complete a series of data based projects that allow them to demonstrate their skills in analysis, reporting, and interpretation of findings.

Prerequisites: EDUC-R&P 5605 (or PSYCH 5516) and EDUC-R&P 5508.

EDUC-R&P 5608 Introduction To Graduate Research Credits: 3

This course provides an introduction to qualitative and quantitative research methods. It is designed for students beginning their study in a doctoral program.

Prerequisites: EDUC-R&P 5508 and doctoral student status.

EDUC-R&P 5609 Development and Evaluation of Assessment Tools Credits: 3

This survey course examines test theories, construction, and measurement theories. Within the context of a variety of conceptual frameworks and examples, students become knowledgeable about the various purposes, approaches, and computer software tools for measurement.

Prerequisites: EDUC-R&P 5606 or PSYCH 5517.

EDUC-R&P 5611 Structural Equation Modeling Credits: 3

Students will learn core techniques in structural equation modeling, including: path analysis, confirmatory factor analysis, structural regression models; and be introduced to advanced topics such as multi-group SEM and latent growth models. There will be multiple lab sessions using appropriate computer applications.

Prerequisites: EDUC-R&P 5606 (or PSYCH 5517) and EDUC-R&P 5609 (or PSYCH 5538).

EDUC-R&P 5612 Applied Quantitative Research in Education Credits: 3

This class provides an in-depth examination of experimental and non-experimental quantitative research techniques, with a focus on their application in educational research. Students develop a proposal for a quantitative research study, including review of literature, development of research questions and hypotheses; and selection of appropriate research design, data collection techniques, and statistical analyses.

Prerequisites: One semester of statistics at the doctoral level.

EDUC-R&P 5613 Hierarchical Linear Models Credits: 3

Students will be introduced to hierarchical linear modeling techniques. Foundational topics include the rationale for using hierarchical linear models, issues related to assumptions and data screening, and a dissection of the components of a two-level organizational effects hierarchical linear model. Special topics to be discussed include growth modeling, three-level models, dyadic models, and models with categorical outcome variables (i.e., hierarchical generalized linear models). Multiple class sessions will be devoted toward use of software to build and analyze these models.

Prerequisites: EDUC-R&P 5606 and EDUC-R&P 5609.

EDUC-R&P 5615 Qualitative Research Theory & Design Educational Setting. Part 1 Credits: 3

Students will be introduced to qualitative research theory and design.

Prerequisites: EDUC-R&P 5505 and EDUC-R&P 5508.

EDUC-R&P 5616 Qual Data Collection And Analysis In Educational Settings. Part 2 Credits: 3

Students will gain experience in qualitative data collection and analysis.

Prerequisites: EDUC-R&P 5615.

EDUC-R&P 5625 Program Evaluation For Education & Social Credits: 3

Program evaluation is an applied research area that focuses on providing summative and formative data about the progress of an organization or program. This doctoral seminar will focus on learning to identify the goals, objectives and assumptions inherent in a program, and on designing a methodology to assess progress towards the goals. All students will develop a comprehensive evaluation plan for a program of their choice.

Prerequisites: EDUC-R&P 5505, EDUC-R&P 5522, and EDUC-R&P 5508 or EDUC-R&P 5608.

EDUC-R&P 5639 Educational Psychology: Focus on Teaching in Higher Education Credits: 2-3

An introduction to theories and principles from educational psychology as they relate to learning, motivation, assessment, and instruction.

Prerequisites: Doctoral Student Status.

EDUC-R&P 5640 Apprenticeship And Conference In College Training Credits: 1-3

Apprenticeship experience in preparing, conducting, and evaluating college teaching under the direction of and in conference with supervising professors.

Prerequisites: EDUC-R&P 5639.

EDUC-R&P 5690 Special Problems Credits: 1-6

Individual studies; thesis exploration, special reading.

EDUC-R&P 5698 Dissertation In Educational Research & Psychology Credits: 1-16

Dissertation In Educational Research Psychology

Educ-Urban Leadership Courses

EDUC-UL 5501 Foundations Of School Leadership & Organization Credits: 3

Participants will study as cohort team members actively engaged in clinical/practical endeavors in schools, concepts and theories focused: 1) to understand and apply modern leadership and organization development theory in relation to school organizational cultures; 2) to understand both the development of productive school relationships and the theoretical concepts of the legal responsibilities of schools in the society; 3) to develop a plan for principal certification based upon participant needs and experiences; and 4) to build school cultures that are collaborative, participative, reflective, and self renewing.

EDUC-UL 5502 Building Administration And Management Credits: 3

Participants will study and apply theories and concepts as members of a Cohort Team doing clinical work in schools designed to study, learn, and practice the management and administrative responsibilities of building level leaders including principal roles, personnel issues, school business management, community relations, supervision of staff, and to know the legal responsibilities relating to teachers, student and public rights.

Prerequisites: EDUC-UL 5501.

EDUC-UL 5503 Student, Staff And Organization Development Credits: 3

Participants will study as a member of a cohort team doing clinical work in school and developing the ability: 1) to gain knowledge of, and practice in developing "learning organizations"; 2) to assist teachers and other staff members of a school in structuring classrooms around the learning and development of all students; 3) to lead and develop urban schools that are culturally diverse where learner outcomes and performance are not related to race, class, or gender; and 4) to provide leadership related to developing school structures that are outcome oriented.

Prerequisites: EDUC-UL 5501 and EDUC-UL 5502.

EDUC-UL 5504 Elementary School Administration Credits: 3

Contemporary knowledge, understanding, and competencies for elementary administration. Focus on leadership, communication, group processes, organization, fiscal, and political areas. In addition, basic roles and responsibilities of the school principalship are addressed.

EDUC-UL 5505 Middle School Administration Credits: 3

Middle school goals, effective middle school leadership, change models for staff development, relevant curricula, auxiliary and support systems.

EDUC-UL 5506 Secondary School Administration Credits: 3

Organization and objectives of secondary education; curriculum trends; role analysis; principal-staff relations.

Prerequisites: EDUC-UL 5501.

EDUC-UL 5507 Instructional Supervision Credits: 3

Principles of supervision, factors influencing effectiveness of instruction, including the evaluation of teachers.

EDUC-UL 5508 Special Education Administration Credits: 3

Provides special educators, special education and regular education administrators with knowledge and experience in the areas of special education process, policy development, data collection and funding, legal issues and program organization. Special emphasis is given to dealing with common problems which arise in public school special education programs.

EDUC-UL 5510 Planning Educational Facilities Credits: 3

Analysis of educational specifications; cooperative planning processes; analysis of trends in school facilities; financial considerations and construction research. Visitation of selected facilities included.

EDUC-UL 5511 Public School Business Administration Credits: 3

The business related aspects of administering a school district including budgeting and accounting, purchasing, transportation, insurance, and facilities management.

EDUC-UL 5512 School Finance Credits: 3

Sources of revenue for public education; distribution of monies for education; budget construction; accounting procedures; and theories for financing education.

EDUC-UL 5513 School Personnel Administration Credits: 3

Study of processes, policies and theory concerned with the personnel function in educational administration. Emphasizes the importance of human resources in developing effective educational systems.

EDUC-UL 5514 Public Relations In Education Credits: 3

Analysis of various public views on education; mass communications and social change; public relations programs.

EDUC-UL 5515 Governmental And Legal Aspects Of Education Credits: 3

Current and recent legislation affecting education; court cases related to education; emerging patterns of modern juris-prudence; administrators' responsibilities regarding legal decisions.

EDUC-UL 5516 Governmental And Legal Aspects Of Special Education Credits: 3

An examination of current and recent legislation affecting special education; emerging patterns of modern jurisprudence; and special education teacher and administrator legal responsibilities.

EDUC-UL 5518 Leadership for School Improvement Credits: 3

The content of this course has a focus on identifying and using data to make school improvement decisions. Students will be engaged in readings, activities, and reflections that discuss the importance of using data for decision-making at the building and district levels of school leadership.

Prerequisites: Admission into the Educational Administration Program.

EDUC-UL 5520 Data Driven Leadership for Reculturing Schools Credits: 3

The challenges facing urban education are complex and may be understood from a myriad of perspectives including historical and socio-cultural underpinnings, economic and political contexts, and pedagogical/achievement orientations. This course will bring together some of these arguments as they relate to what school leaders can do to promote a community of adult leaders who use data to make decisions for the success of all children. Such a challenge includes working as educational leaders to reculture schools to increase opportunities for all students to learn. For some schools this task involves closing the persistent achievement gap that may exist among groups of students which requires disaggregating data by race, ethnicity, socioeconomic status, gender, and special educational needs.

EDUC-UL 5522 School Organizational Culture As The Context Of Change Credits: 3

This course is designed to enable students to understand that schools as organizations develop cultures and that this culture establishes relationships and conditions in schools for students, teachers, and administrators. Students will develop an understanding of the culture of a school and its influence on efforts to achieve substantive change or reform.

EDUC-UL 5523 Administrative Roles For Instructional Leadership Credits: 3

This course meets a requirement for administrator certification in Missouri and Kansas in the area of school improvement and leadership. The course focuses upon leadership roles necessary for creating a supportive climate for change and for implementing improved instructional programs.

EDUC-UL 5524 Philosophical Inquiry And Education Credits: 3

An examination of issues, problems and controversies discussed in educational and related literature, utilizing criteria and techniques of logical and philosophical analysis. The focus is on the development of critical thinking abilities as applied to theories, positions and arguments in educational and related contexts.

EDUC-UL 5525 Cultural Foundations Of Education Credits: 3

Examines education and schooling as cultural phenomena. This course focuses on an analysis of education and schooling as both cultural transmission and cultural change and the practical implications. Also included is a philosophical/ theoretical examination of varying relationships between dominant and minority cultures.

EDUC-UL 5526 Philosophical Foundations Of Education Credits: 3

Introduction to the study of philosophical problems implicit in educational issues. Focuses on the application of a number of philosophical concepts and skills to a variety of controversies, policies, and theories in education.

EDUC-UL 5527 Historical Foundations Of Education Credits: 3

Study of the development of educational policy, practice, and theory in relation to changes in social institutions and thought. Focuses on the analysis of contemporary educational problems in the light of historical perspectives.

EDUC-UL 5528 Sociological Foundations Of Education Credits: 3

An analysis of issues involving the role of schools in society, the relationship between education and other social institutions, and contemporary social developments which have major implications.

EDUC-UL 5531 Educational Leadership and Human Resources Credits: 3

This course has been designed to develop students' proficiencies in school human resource management and its importance to positive outcomes for student learning. The course focuses on human resource components that are essential to effective schools.

Prerequisites: Admission into the Educational Administration EdD Program.

EDUC-UL 5532 Educational Leadership and Organizational Behavior Credits: 3

This course has been designed to develop the students' proficiencies in school organization and management to provide positive outcomes for student learning. The course focuses upon organizational behavior and development and its components that are essential to effective school.

Prerequisites: Admission into the Educational Administration EdD Program.

EDUC-UL 5534 English Language Learner Program Administration Credits: 3

Provides educators, administrators, and district officials with knowledge, skills, and dispositions necessary to supervise/manage programs and teachers in elementary, middle, or secondary schools that serve students with limited English proficiency. Participants will study and apply theories and practices related to language acquisition cultural pluralism, multicultural education, family and community engagement, acculturation, assessment, and legal rights and responsibilities relating to English language learners and the school.

Prerequisites: Bachelor's degree.

EDUC-UL 5535 Current Topics in Urban School Leadership Credits: 3

Current Topics in Urban School Leadership

EDUC-UL 5550 Organization And Administration Of Higher Education Credits: 3

Organizational patterns; administrative roles and procedures; establishment of policies, institutional development; and public and private financing of higher education.

EDUC-UL 5551 Student Affairs Administration In Higher Education Credits: 3

Study of the objectives, organizational structure, and current issues of student affairs administration as they relate to the academic program, the campus environment, and the needs of students; analysis of the functions of different services.

EDUC-UL 5553 Supervision and Management of People Credits: 3

The purpose of this course is to provide a broad overview of staffing practices in the field of higher education, especially student affairs. The course will assist students to be better professionals, to learn the literature as it relates to supervision, and to begin basic skill development. Other course content includes issues surrounding staff selection, staff orientation. The course is open to any graduate student.

EDUC-UL 5556 The College Student Credits: 3

An examination of today's college students. Review and study of demographics, relationships of students and colleges, nature of student communities, new student populations and the impact of college on students and their educational development.

EDUC-UL 5557 Legal Aspects Of Higher Education Credits: 3

Study of legal issues within higher education. Focus is on state and federal law and regulations as they pertain to issues ranging from academic freedom to governance and administration. Focus on strategies for preventive law is a major component of the course.

EDUC-UL 5558 Advanced Student Development Theory Credits: 3

A focused and in-depth examination of developmental theories related to the college student. This course builds on information presented in EDUC-UL 5556.

Prerequisites: EDUC-UL 5556.

EDUC-UL 5559 Current Issues In Community Colleges Credits: 3

A course responsive to the contemporary issues in community college administration, addressing interesting and important topics that fall outside the scope of other courses in the higher education curriculum. Students will have an overview of the role of community colleges within the larger organization of colleges and universities in the U.S. higher education system.

Prerequisites: Graduate student status.

EDUC-UL 5560 Leadership In Higher Education Credits: 3

Focus on leadership, connections among different approaches to leadership, different forms of power, and different leadership behaviors. A series of opportunities to think systematically about leadership and to increase a student's personal leadership capacities in higher education will be provided.

EDUC-UL 5562 Gender & Leadership In Educ: Implications For Prof. Effectiveness Credits: 3

This course is for women and men who want to understand better the unique challenges and opportunities facing leaders in today's educational organizations. Exploration of connections between gender and leadership is the focus of study. Students will probe linkages between gender and leadership for their own leadership and for organizational policy and practice.

EDUC-UL 5564 History Of Higher Education Credits: 3

Study of the evolution of the constituencies within different types of American higher education institutions. The development of professional, practical, and graduate education will be examined as will 20th century alternatives to the liberal arts colleges and research university models.

EDUC-UL 5566 Racial And Ethnic Diversity, And Cultural Understanding Credits: 3

An exploration of the ideological and historical construction of education for social equality, and subsequent issues of race, ethnicity, and class that influence colleges and universities in the U.S. today.

EDUC-UL 5567 Higher Education Capstone Credits: 3

This course will provide a culminating experience for students in the Higher Education Masters program. All aspects of higher education administration will be examined and synthesized to enhance student ability to understand and operate in a complex setting.

EDUC-UL 5570 Administrative Practicum Higher Education Credits: 3-6

Assigned administrative responsibilities under supervision of practicing higher educational administrator, seminar and written project accompany field experiences.

EDUC-UL 5571 Internship In Higher Education Credits: 3-16

Applied experiences in a planned, supervised program. Seminar accompanies internship experiences.

EDUC-UL 5572 Higher Education Administration: The Profession Credits: 3

A course to introduce the prospective or new student affairs professional to all facets of higher educational administration. The course provides a balance of presentations by student affairs professionals, participation and observation in a variety of higher education offices and individual research projects. It is anticipated that students will visit several institutions of higher education and will participate in a service-learning project.

EDUC-UL 5574 Administrative Practicum Credits: 1-6

Assigned administrative responsibilities under supervision of practicing educational administrators seminar and written project accompany field experiences.

EDUC-UL 5575 Internship In Administration Credits: 1-16

Applied experiences in a planned, supervised educational administration program. Seminar accompanies internship experiences.

EDUC-UL 5589 Special Topics In Educational Leadership Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589AD Special Topics In Educational Leadership Credits: 1-6

EDUC-UL 5589BE Special Topics in Educational Leadership Credits: 1-6
Special Topics in Educational Leadership

EDUC-UL 5589CP Special Topics In Educational Leadership Credits: 1-6

EDUC-UL 5589EA Special Topics In Educational Leadership Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589ED Special Topics In Educational Leadership Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589EL Special Topics In Educational Leadership Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589ET Special Topics In Educational Leadership Credits: 1-6

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589HR Special Topics In Educational Leadership Credits: 1-6

EDUC-UL 5589LR Special Topics In Educational Leadership Credits: 1-6

EDUC-UL 5589OB Special Topics In Educational Leadership Credits: 1-6

EDUC-UL 5589SM Special Topics In Educational Leadership Credits: 1-6

EDUC-UL 5590 Seminar Credits: 3

Discussion and evaluation of literature in Education Administration.

EDUC-UL 5598 Individual Studies Credits: 1-6

Review of the research and trends relative to selected problems in education.

EDUC-UL 5601 Research In Education Administration: Qualitative Theory & Design Credits: 3

First of two courses in advanced qualitative research in higher education and educational administration. Focus is on the theory and design of qualitative work. Students will become familiar with the various ontological, epistemological, and methodological assumptions that guide research in the social sciences and be able to make informed choices about inquiry techniques for dissertation and future research.

EDUC-UL 5602 Seminar In The History Of American Urban Education Credits: 3

A study of the historical development of American urban educational institutions and ideas and of how that development is embedded within the broader context of social, political, and economic change in the United States.

EDUC-UL 5603 Research In Education Administration: Qualitative Data & Analysis Credits: 3

Second of two courses in advanced qualitative research in higher education and educational administration. Focus is on data collection and analysis in qualitative work. Students will become familiar with various data gathering techniques and devices for interpreting qualitative data and drawing meaningful conclusions. This information will guide students in dissertation and future research.

Prerequisites: EDUC-UL 5601.

EDUC-UL 5604 Introduction to Doctoral Study Credits: 3

This course is designed as an introductory course in the doctoral sequence for the EdD in Educational Administration with an emphasis in Higher Education. The course is designed to introduce students to the tasks and processes involved in the completion of the doctoral requirements. It is required for all entering doctoral students.

Prerequisites: Admission to the doctoral program.

EDUC-UL 5616 Analysis Of Educational Theory Formation Credits: 3

Study and application of criteria for evaluating the adequacy of educational theories and evaluating the relevance to theories of research studies.

EDUC-UL 5626 Theory In Educational Administration Credits: 3

Leadership theories and research; bureaucracy and organizational processes; new directions in organizational analysis; sociological and psychological concepts in school administration.

Prerequisites: EDUC-UL 5501.

EDUC-UL 5627 Advanced Educational Supervision Credits: 3

Principles and concepts of educational supervision and implementation.

Prerequisites: EDUC-UL 5507.

EDUC-UL 5628 The Superintendency Credits: 3

Analysis and overview of the nature, functions and activities of the public school superintendency including: historical and philosophical foundations; board-staff and other governing body relationships and functions; professional staff relations and management; public relations and communication; inter-governmental relations and responsibilities, and the functions of planning, direction and supervision of the instructional enterprise.

EDUC-UL 5634 Faculty & Curricular Issues Higher Education Credits: 3

This course will explore different facets of college and university curricula. This course will include varying ways curriculum has been structured and the debates that have surrounded the structure and content. Faculty issues will be explored via the curriculum and will include a focus on workload policies and practices.

Prerequisites: Admission to the doctoral program.

EDUC-UL 5635 Topics In Higher Education Credits: 3

Organization of higher education, public and private financing; accreditation; academic freedom; policy development; community relations; curricular patterns, selected current issues.

Prerequisites: EDUC-UL 5550 (or equivalent).

EDUC-UL 5636 Policy Issues in Higher Education Credits: 3

This course is intended for those whose roles as educational leaders requires them to participate in the analysis and development of policies associated with educational programs and practice. Students will be able to understand the characteristics of a well developed policy agenda, obstacles to policy implementation, and interpretations related to policy implementation. Concurrently, institutional, political, economic, social, and moral consequences of various policies will be explored.

Prerequisites: Admission to the doctoral program.

EDUC-UL 5637 Community College Credits: 3

Investigation of the purposes, programs, and the problems in the American community college movement; analysis of the structure, governance, and financial support of community colleges.

Prerequisites: Doctoral status.

EDUC-UL 5640 Apprenticeship And Conference In College Training Credits: 2-5

Apprenticeship experience in preparing, conducting, and evaluating college teaching under the direction of and in conference with supervising professors. Some attention to student personnel and administration in higher education.

EDUC-UL 5652 Financial Aspects Of Higher Education Credits: 3

This course is designed for graduate students with a basic understanding of the area of Higher Education Administration. The course examines basic concepts and principles of finance in higher education in the United States. Students are expected to: Develop an understanding of 1) the issues and fiscal problems of higher education, 2) the roles and responsibilities of financial officers in higher education, and 3) possible future trends in the financing of higher education.

Prerequisites: Doctoral status.

EDUC-UL 5655 Studies In Philosophy Of Education Credits: 3

Study of special topics in the philosophy of education.

Prerequisites: EDUC-UL 5523, EDUC-UL 5526.

EDUC-UL 5660 Effective Practices II Credits: 3

This course builds on the general understanding of leadership and professional practices developed in Leadership in Education Effective Practices I. The course addresses key leadership challenges and decision making in today's complex work world. The course uses reading on selected issues, case discussions, and role plays to move beyond theory and understanding to application and effectiveness.

EDUC-UL 5665 The Urban University Credits: 3

This course examines the development and unique aspects, characteristics and role of the urban university. In addition to an exploration of the historical relationship between urbanization in American society and university development and evolution, seminars will focus attention on undergraduate and graduate education, faculty development, community relations, and regional and economic development for urban institutions.

Prerequisites: Doctoral status.

EDUC-UL 5685 Problems And Issues In Education & Urban Leadership Credits: 3

This course serves as the capstone class for all doctoral students in education. The course requires analysis of successful dissertations in urban education and prepares students to write their own dissertation relative to urban study and education.

EDUC-UL 5690 Special Problems Credits: 1-6

Individual studies; thesis exploration, special reading.

EDUC-UL 5690A Special Problems Credits: 1-6

Individual studies; thesis exploration, special reading.

EDUC-UL 5696 Dissertation Administration And Community Leadership Credits: 1-16

Culminating written research project for doctoral students in Urban Leadership and Policy Studies.

Physical Education Courses

PHYS-ED 106 Badminton Credit: 1

This course teaches the basic rules, skill techniques, terminology and strategy for badminton.

PHYS-ED 125 Golf Credit: 1

PHYS-ED 157 Weight Training Credit: 1

Weight Training helps students build a solid foundation of current weight training knowledge and practice that can be used throughout their lifetime. Information in the course is consistent with recommendations of the National Strength and Conditioning Association (NSCA) and the American College of Sport Medicine (ACSM). Based on individual goals and assessments, beginning weight training students will create a personal training program and implement a record keeping system to keep track of their progress.

PHYS-ED 158 Advanced Weight Training Credit: 1

This course teaches free weight training exercises that are used within a well-balanced training program, and provides experience needed to design weight training programs.

PHYS-ED 174 Cross Training Credit: 1

This course provides knowledge, skill and opportunity to improve primary sport/activity performance or overall fitness, through designing and participating in a variety of cross training physical activities.

PHYS-ED 175 Personal Fitness Credits: 2

This course is designed to expose students to facts about and experiences in dealing with motor, physical, physiological, psychological and nutritional aspects of the human being. Specific areas of study include hypokinetic disease, physical fitness, nutrition and wellness concepts.

PHYS-ED 175L Lifetime Fitness Lab Credit: 1

This course is designed to provide supervised activity experiences including self assessment and self directed physical exercise programs that are coordinated with the lecture portion of the course.

PHYS-ED 180 Beginning Swimming Credit: 1

This course is designed to equip each student with basic water safety skills and knowledge in order to make them reasonably safe while in, on or about the water.

PHYS-ED 181 Fitness Swimming Credit: 1

This course is designed to challenge and encourage each student to develop an individualized fitness program based on personal goals. Lap swimming as well as water exercise will be incorporated in the class.

PHYS-ED 189 Special Topics: Activity Credit: 1

A course designed to deal with a special activity class which is not available in the regular course offerings. Activity class, instructors and prerequisites to be listed in the semester bulletin.

PHYS-ED 189AY Special Topics:Activity Credit: 1

PHYS-ED 189BE Special Topics: Activity Credit: 1

PHYS-ED 189YO Special Topics: Activity Credit: 1

Special topics in physical education.

PHYS-ED 203 Aquatic Skills And Teaching Techniques Credits: 2

The purpose of this course is to train students to teach water safety and swimming courses through observation, participation and peer teaching.

Prerequisites: Swimmer level skill.

PHYS-ED 206 First Aid And Safety Credit: 1

Methods of administering first aid in case of accident or sudden illness; bandaging; resuscitation; and caring for wounds and injuries. Safety in schools will be stressed. (Elective).

PHYS-ED 207 Outdoor And Leisure Pursuits Credits: 2

Designed to acquaint students with opportunities for leisure and recreational activity in the outdoors. Emphasizes safety measures and planning skills as well as development of particular movement skills and knowledge about associated wildlife.

PHYS-ED 212 Self Defense Credit: 1

Study in the theory of self defense. Content focuses on: technique for eliminating dangers from daily living, methods for recognizing and avoiding dangers, and skills and strategies for employing physical defense when necessary.

PHYS-ED 300 Mechanical Analysis of Human Movement Credits: 3

Study of the kinesiology and biomechanical aspects of human motion with focus on application to sport skill, dance and exercise situations.

Prerequisites: HLSC 120 and HLSC 160 or concurrent enrollment.

PHYS-ED 300L Mechanical Analysis of Human Movement Lab Credit: 1

Lab activities that support the study of kinesiology and biomechanical aspects of human motion with focus on application to sport skill, dance, and exercise situations.

Co-requisites: PHYS-ED 300.

PHYS-ED 312 Physical Education For Elementary Schools Credits: 2

Identifies physical education needs of elementary school child in relation to his/her total development with emphasis on methods and materials.

PHYS-ED 312L Laboratory Experiences in Physical Educ for the Elementary School Credit: 1

This course consists of laboratory teaching experiences, with skill theme combinations of games, gymnastics, dance fitness.

Co-requisites: PHYS-ED 312.

PHYS-ED 323 Nutrition for Fitness and Sport Credits: 3

This course examines the role nutrition, complemented by exercise, may play in the enhancement of fitness and sport performance. Considerable attention will be devoted to the use of nutritional ergogenic aids with reference to athletic performance.

Prerequisites: BIOLOGY 218, BIOLOGY 218L, LS-PHYS 217.

PHYS-ED 350 Physiology of Sport and Exercise Credits: 3

Study of the concepts and principles of exercise physiology with the intent of learning how to apply them to exercise, sport and movement experiences. Includes development of fitness testing skills, program planning and exercise.

Prerequisites: HLSC 120 and HLSC 160 or concurrent enrollment.

PHYS-ED 350L Physiology of Sport and Exercise Lab Credit: 1

Using lab activities, the course uses the concepts and principles of exercise physiology and applies them to exercise, sport, and movement experiences. Includes the development of fitness testing skills, program planning and exercise.

Co-requisites: PHYS-ED 350.

PHYS-ED 361WI Sociology of Sport and Exercise Credits: 3

The critical examination of the function of sport in the American culture, in an interdisciplinary fashion, with a focus on the contemporary scene. The work of the course will include readings on sociological issues of sport and exercise, the writing of mini-research papers, and a long paper with a presentation. Recommended preparation: Introduction course in sociology.

PHYS-ED 370 Psychology of Sport and Exercise Credits: 3

Exploration of psychological constructs related to the competitive sport process and to physical activity.

PHYS-ED 389 Special Topics In Health And Physical Education Credits: 1-3

This course is designed to offer a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

PHYS-ED 391 Fitness Assessment and Exercise Prescription Credits: 3

This course introduces students to health appraisal and fitness assessment of individuals. The course proceeds with prescribing exercise and conditioning programs, to enhance health and develop physical performance.

Prerequisites: PHYS-ED 350.

PHYS-ED 401 Teaching Healthy Behaviors in the Schools Credits: 3

Study of school health and physical activity programs with emphasis on methods and materials for health, safety, and classroom physical activity instruction in grades K-8.

PHYS-ED 401L Health Teaching In The Schools Lab Credit: 1

Students will attain beginning level competence in skills related to teaching health in schools, including planning, preparation and presentation skills. Computer skills will be used to search internet, e-mail, and develop a computer generated presentation.

PHYS-ED 499 Internship Credits: 3-6

Extensive experience in a practical situation under supervision of university faculty and on-site personnel. Breadth and intensity of involvement will depend on student ability. Available only to upper-division majors.

PHYS-ED 5530 Organization And Administration Of Athletics Credits: 3

Organization and management of a program of competitive athletics for schools and colleges.

PHYS-ED 5561 Social-Cultural Aspects of Sport and Physical Activity Credits: 3

The social significance of sport in modern societies. Research on the social structure, social relations and social problems of sport from several subcultural perspectives will be reviewed.

PHYS-ED 5570 Sport Psychology Credits: 3

Analysis of research and theory focused on the psychological aspects associated with participation in sport and physical activity.

Prerequisites: PHYS-ED 370.

Educ-Teacher Education Courses

TCH-ED 130 Number Systems and Related Topics Credits: 3

This course is designed for elementary perservice teachers to meet certification requirements for a course in number theory. The course provides a constructive development of the real number system, introduces concepts from elementary number theory and applies this knowledge of quantitative systems to solve various types of problems. Recommended preparation: High School Algebra and Geometry.

TCH-ED 140 Geometry for Elementary Teachers Credits: 3

This course is designed for elementary preservice teachers to meet certification requirements for a course in geometry. It provides a constructive development of axiomatic geometry and introduces concepts from transformation geometry. Elements of spatial sense and measurement are included and an emphasis is placed on applying this knowledge to solve various types of problems. Recommended preparation: High School Algebra and Geometry.

TCH-ED 150 Foundations of Urban Education Credits: 3

This course is designed to introduce students to the social and philosophical issues in urban education and will include an emphasis on culture, race, class, and ethnicity as they relate to schooling in urban America.

TCH-ED 151 Introduction to Urban Education Field Experience Credits: 2

Introduction to Urban Education Field Experience. The field experience is intended to give students an opportunity to see the application of learning theory in authentic classroom situations. Students are encouraged to become involved in the learning of the classroom and provide a helping hand to the teacher.

TCH-ED 152 Urban Education Seminar 1: Social Justice Credits: 2

Introductory seminar to the field of urban education. This seminar aligns with the other fall semester experiences and allows students an opportunity to dialogue about the possible application of their experience work as it applies to teaching in an urban school. Students will be introduced to current topics in education and society; identify, develop and enhance study strategies; observe, listen and think critically, sharpen writing skills; and work effectively in groups.

TCH-ED 153 Math Methods for Urban Education teachers: Number Systems Credits: 2

Designed for elementary school teacher. A constructive development of the real number system beginning with the system of whole number, concepts for the elementary number theory; applications of quantitative systems to problems in discrete mathematics.

TCH-ED 160 Introduction to Teaching Credits: 3

Introduction to the historical, social and philosophical dimensions of teaching. Prospective teacher candidates gain greater insight into the commitment, purpose, and responsibility associated with professional teaching practice. Particular focus is place on productive teaching practices and the habits of mind of expert teachers.

TCH-ED 201 Children's Literature Credits: 3

This course emphasizes the critical analysis and selection of a variety of genres of multicultural children's literature in order to create "windows and mirrors" (Bishop, 1990) through literature for diverse educational settings. It will emphasize the skills and dispositions needed to share literature with culturally and linguistically diverse groups of children and explore prevalent myths and stereotypes in society that are often reflected in children's and young adult literature.

TCH-ED 202 Literature for Adolescents Credits: 3

Focus upon literature for adolescents and ethnic literature, specifically, and upon the special reading interests of the adolescent in relation to the methods and materials of reading in grades 6-12, generally. Attention to literature selection standards, censorship, individualized instruction, and literary theory.

TCH-ED 203 Health, Safety, and Nutrition in Early Childhood Education Credits: 3

This course is an introduction to wellness in Early Childhood Education grounded in cultural funds of knowledge and community histories of learners and their families. Students examine and act upon systemic inequities related to health, safety, and nutrition; investigate scheduling, procedural, and policy elements related to health, safety, and physical activity/rest; design space elements that nurture physical development, social interactions, and emotional well-being; and create learning experiences that promote health and physical development.

TCH-ED 251 Child and Adolescent Development for Urban Educators Credits: 3

This course is designed to provide students with the information they will use as educators to design developmentally appropriate practices for the children they will work with in the classroom setting, thus discussions about how the information is translated into the classroom will be applied.

TCH-ED 252 Field Exp: Child/Adolescent Development Credit: 1

This field experience is designed in conjunction with TCH-ED 251 to provide students with real-world interactions to study the development of children from birth to adolescence. Field experience settings have been arranged to provide students with an opportunity to observe and interact with children as they study the four stages of development.

TCH-ED 253 Urban Education Seminar II: Social Justice Credit: 1

This seminar aligns with the other semester experiences and allows students an opportunity to dialogue about the possible application of their experience work as it applies to teaching in an urban school. Students will be introduced to current topics in urban education and society; identify, develop and enhance study strategies; observe, listen and think critically, sharpen writing skills; and work effectively in groups as they explore social justice and the relationship between society and schools.

TCH-ED 254 Math Methods for Urban Teachers: Geometry Credits: 2

Designed for elementary school teachers. A constructive development of geometry and concepts from elementary teacher education; applications will be made to connect with elementary curriculum.

TCH-ED 255 Intergrated Music and Visual Arts Credits: 3

Basic principles of creativity and their application in the multicultural teaching of art, creative dance and musical and rhythmic interpretation will be explored. An emphasis is placed on interrelationship of these disciplines and their integration into the curriculum. Special emphasis will be placed on helping students to develop a wider and more respectful understanding of our nation's cultural diversity as reflected in all art forms. Students will be exposed to the literature, poetry, theater, visual art and music contributed by African-Americans, Hispanic Americans and Native Americans among other.

TCH-ED 256 Field Experience: Music and Visual Arts Credit: 1

The field experience is intended to give students an opportunity to see the application of learning theory and integration of the arts in authentic classroom situations.

TCH-ED 258 Math Methods for Urban Teachers: Probability and Statistics Credits: 2

Designed for Elementary and Middle School Teachers. This course is designed to provide undergraduate students in elementary and middle school mathematics with the foundational knowledge of the teaching of probability and statistics and how to use the elements of statistics to interpret and solve problems in elementary and middle school classrooms.

TCH-ED 259 Introduction to Urban Teaching Credits: 3

This course is designed to introduce students to the sociopolitical context of urban education, schooling, teaching and learning. It will provide an overview of education in a multicultural democracy, mostly African Americans, Latino Americans, and other racial/ ethnic groups and immigrants. Specifically, it will introduce students to the notion of teaching for social justice, the social justice teacher and social empowerment. Opportunities will be provided for students to review research, debunk stereotypes, negative views, and to recognize urban learners as capable, motivated, and resilient. The ultimate goal of this course is to facilitate experiences that will enable students to develop the knowledge, skills and dispositions needed for learning in urban schools.

TCH-ED 265 Field Experience: Urban Teaching Credit: 1

As a co-requisite to Introduction to Urban Teaching, students will spend 60 hours in urban schools working with diverse student populations, specifically; students will work with African Americans, Latino Americans, and English Language Learners grades K-8. Reflection and discussion of clinical experiences will occur during the urban education seminar and Introduction to urban education classes. Students will keep a reflective journal of their experiences working with diverse learners.

TCH-ED 266 Urban Education IV: Classroom Management Credit: 1

This course will present the foundations for developing expertise in classroom management. Theory and activities will introduce students to strategies and procedures to manage student's behavior as well as keep them on task throughout the school day. The intent of this course is to provide the prospective teacher with the skills and the expertise necessary to manage the classroom behavior of students effectively while creating a caring and supportive atmosphere.

TCH-ED 300 Summer Community Experience Credits: 3

This course provides an in-depth examination into both the evolution of ghetto communities and dynamics of community building in inner cities, with special emphasis on Kansas City, Missouri. In addition, theories of educational psychology as well as child and adolescent behavior will be infused to assist participants in developing age appropriate mentoring/teaching strategies and activities.

TCH-ED 310 Classroom Climate and Organization Credits: 3

This course is focused on understanding classroom practices that support student cognitive and social development, that supports learning for students from diverse cultural and experiential backgrounds; and developing a well-organized, attractive and functional physical space for learning.

TCH-ED 311 Curriculum and Learning Theory Credits: 4

Focus on classroom organization, building relationships with students, and applying theoretical knowledge of child development to the analysis of contexts impacting students' educational experiences. Classroom processes and teacher interactions that undergird effective instruction and proactive classroom management.

TCH-ED 312 Legal and Ethical Aspects of Teaching Credits: 3

This course provides an introduction to landmark court cases, federal and state laws, and regulations that frame students' and teachers' rights and responsibilities and that provide guidance for ethical professional practices.

TCH-ED 314 Cultural Diversity and Teaching English Language Learners Credits: 3

Foundational knowledge on teaching diverse populations and practical instructional approaches for meeting the needs of linguistically and culturally diverse learners. Emphasis on studying and applying instructional strategies that are appropriate for addressing the unique needs of children whose primary language may not be English.

TCH-ED 315 Assessment and Data Literacy Credits: 3

Data collection and assessment strategies—including formative, summative, formal, and informal—to be used in developing student learning profiles, planning learning experiences, and monitoring student progress toward academic goals. Topics include the impact of assessment on equitable education for diverse learners, critical observation and questioning, basic qualitative and quantitative data analysis, working with data teams, collaboration/communication with families and other educational stakeholders, setting and monitoring learning goals, and the ethics of data collection and sharing.

TCH-ED 316 Reading and Language Arts I Credits: 4

This course emphasizes learning theories and methods for teaching and assessing literacy. It will primarily focus on the components of a culturally responsive literacy curriculum for elementary students in diverse, urban contexts. This course is field-based and there will be multiple opportunities for observing, teaching, and assessing elementary school children.

Co-requisites: TCH-ED 397.

TCH-ED 317 Reading and Language Arts II Credits: 4

This course emphasizes methods for elementary literacy instruction and assessment. The course will primarily focus on the components of a culturally responsive writing curriculum for elementary students in diverse, urban contexts. This course includes a supervised field experience where teacher candidates implement literacy assessment and instruction with students.

Prerequisites: TCH-ED 316.

TCH-ED 318 Literacy Assessment and Instruction Credits: 3

Focus on using formal and informal assessments to design appropriate literacy instruction for diverse learners in urban elementary classrooms.

TCH-ED 330 Analyzing Learning Environments in Urban Contexts Credits: 3

This course serves as the major vehicle for articulating a programmatic construction of classroom management as establishing productive learning environments, facilitating social interaction, and planning relevant and engaging learning experiences based upon deep knowledge of individual students' contexts and cultures.

Co-requisites: TCH-ED 422.

TCH-ED 333 Learning Environments: Birth to Grade 3 Credits: 3

Course provides an analysis of learning environments (community, school, and classroom) as socio-emotional and physical spaces that nurture learning and development of early childhood learners in urban settings. Teacher candidates use the analysis to frame the design of learning environments as context and content of meaning making.

TCH-ED 350 Multi-Media Production For The Classroom Credit: 1

An introductory course in the media production techniques involving knowledge and practical use of computers, scanners, digital video, digital audio and graphics to create professional multimedia for use in the classroom. The class is designed for prospective and current classroom teachers.

TCH-ED 351 Literature for a Lifetime Credits: 6

This course will provide students with an encompassing survey of fiction and non-fiction literature appropriate for all age ranges from the young child to adult. Lectures and discussions will focus on the value of literature as a tool for thinking, as a way of illuminating modern life, as a means of understanding history and human behavior, and as a source of aesthetic pleasure and lifelong enjoyment. Students will learn how to select and critique both the media used in illustrated books and the literacy techniques and forms of the many genres of literature. In this course special emphasis will be placed on literature that reflects life in many cultures and periods of history, in particular from those racial and ethnic sources that make modern America such a pluralistic and diverse society. There will also be an emphasis on the universal themes that run through literature of the societies.

TCH-ED 365 Seminar in Teacher Identity, Power and Privilege Credit: 1

Focus on developing teacher candidates' knowledge of themselves and their roles in facilitating learning for diverse student populations. Acquaints pre-service teachers with three areas of multicultural education: knowing one's self, knowing diverse student populations, and knowing effective practices which will accelerate the learning of the diverse student populations.

TCH-ED 366 Field Experience: Literacy Credit: 1

Students will spend 100 hours working in an urban school classroom. Students will have the opportunity to apply learning and lessons designed in the semester's pedagogical courses, particularly Integrated Instruction: Language Arts and Social Studies. Students will work with their seminar leader, having the opportunity to be observed and conference about their teaching.

TCH-ED 385 Teaching and Learning with Technology Credits: 3

This course addresses the fundamentals of using technology in education and planning instruction to engage PK-12 students in problem solving and critical thinking using technology. Topics within the course are informed by International Society for Technology in Education Standards (ISTE), InTASC Model Core Teaching Standards and Learning Progressions for Teachers 1.0, Missouri Teacher Standards and Quality Indicators, and Missouri Learning Standards.

TCH-ED 396 English Language Study for Middle and High School Teachers Credits: 3

Explores the fundamentals of teaching English language and grammar study, emphasizing patterns in the English language including sounds, words, sentences, meaning, and discourse as they are manifested in daily lives. Educationally relevant topics, such as applications of sociolinguistics to the teaching of English language and literature, varieties of grammar, and linguistic descriptions of styles and registers are an integral part of the course.

TCH-ED 397 Practicum I - Elementary Credit: 1

The overarching goal for this introductory field experience is to help teacher candidates shift their perspectives from that of a student to that of a classroom teacher. Emphasis is on observing the relationship among students' experiences within and outside of school, and planning specific learning experiences for academic and social growth and development. Additionally, teacher candidates attend to the individual student's responses to learning experiences, as well as the social dynamic among students as they work together in a classroom.

TCH-ED 398 Practicum II – Elementary Credit: 1

This field experience is part of Block 2—the second field experience within a four-block sequence. The overarching goal is for teacher candidates to observe the implementation of the school curriculum in specific disciplines. Topics include the structure of the discipline, interrelatedness among basic concepts, discipline specific practices, and the design of instruction to facilitate deep learning.

Prerequisites: TCH-ED 397.

TCH-ED 399 Continuous Enrollment Credit: 1

A practicum experience for students delaying student teaching for one semester.

TCH-ED 400 Child Development Credits: 3

Intellectual and social development from birth through adolescence and their implications for the educative process.

TCH-ED 402 Integrated Arts Credits: 3

Basic principles of creativity and their application in the multicultural teaching of art, creative dramatics, creative movement and musical rhythmic interpretation will be explored. An emphasis will be placed on the interrelationship of these disciplines and integration into the curriculum.

TCH-ED 403 Educational Psychology Credits: 3

This course will provide an introductory examination of psychological research and theory which have implications for, and applications to learning and instruction in interactive social contexts, such as classrooms.

TCH-ED 404 Education of the Exceptional Child and Youth Credits: 3

Students will be introduced to identification and educational intervention strategies for educating exceptional children and adolescents in inclusive classroom situations. This course requires a 10-hour field experience.

TCH-ED 405 Practicum I Credit: 1

Taken in conjunction with elementary and middle school methods courses. Students are expected to spend 60 hours at classroom sites throughout the semester.

TCH-ED 406 Practicum II: Elementary Credit: 1

Taken in conjunction with elementary courses. Students are expected to spend 60 hours at classroom sites during the semester.

TCH-ED 407 Practicum III - Elementary Credit: 1

Taken in conjunction with the elementary courses. Students are expected to spend 60 hours at classroom sites during the semester.

TCH-ED 408WI Advanced Foundations Credits: 3

The course will concentrate on the development of a philosophical, historical and social model to assist in understanding the complexities, strengths and problems of present day education.

TCH-ED 409 Curriculum and Assessment Credits: 3

Curriculum and Assessment is the first of a three-part course sequence designed to assist the preservice teacher in acquiring the knowledge and skills to become an effective practitioner in a world of constant change. The preservice teacher in turn will become a professional educator and facilitator of learning by developing an understanding of the varied roles and relationships that are an integral part of the teaching/learning process. This course focuses on the meaning of curriculum, the role of standards in curriculum design and implementation, the role of assessment is used to effectively enhance instruction and student learning.

TCH-ED 410 Teacher in the Classroom Credits: 2

This is the second of a three-part sequence designed to assist the preservice teacher in acquiring the knowledge and skills to become an effective practitioner in a world of constant change. The preservice teacher in turn will become a professional educator and facilitator of learning by developing an understanding of the varied roles and relationships that are an integral part of the teaching/learning process. It is designed to assist preservice teachers in not only make the transformation from to student to professional educator, but also in developing the knowledge, management, and reflective skills to implement a well-planned and effective curriculum that meets the needs, interests challenges and lives of students who live in and will function in an increasingly culturally diverse, democratic society in an interdependent world.

TCH-ED 412 Language Arts in the Elementary and Middle School Credits: 3

Provides instruction in planning, implementing and assessing language arts activities. Critical analysis in classroom settings is emphasized. Other issues discussed include: literature-based instruction, multicultural perspectives, special needs students and professional behaviors.

TCH-ED 413 Mathematics in the Elementary School I Credits: 3

Mathematics-specific pedagogy. Methods, techniques, tools and materials for the effective teaching of mathematics. Focuses on the principles, methods, and materials of elementary school mathematics instruction and state curriculum in the context of diverse student backgrounds.

TCH-ED 414 General Methods Elementary and Middle - 3 Credits: 2

To summarize and synthesize the pre-service educational experience. To become knowledgeable about the realities of a school life in a "real" classroom.

TCH-ED 415 Reading 1: Intro to Literacy and Reading Instruction Credits: 4

This course introduces concepts about literacy processes; i.e., social, cultural, cognitive and linguistic foundations of reading and writing processes. The major focus of the course is on learning components of a comprehensive reading curriculum, and a range of instructional approaches and methods appropriate for learners at different stages of literacy development.

TCH-ED 416 Reading II: Assessing and Teaching Diverse Learners Credits: 4

This course focuses on understanding the major components of reading processes (phonemic awareness, word identification and phonics, vocabulary and background knowledge, fluency, comprehension strategies, and motivation) and how they are integrated in fluent reading for individual students at different stages of literacy development. The major project for the course involves assessing and teaching an individual student of the course of the semester. Teacher candidates should also assess and teach small groups of readers.

Prerequisites: TCH-ED 415, admission into teacher education program.

TCH-ED 417 Science Methods in the Elementary School Credits: 3

Prepares teacher candidates in teaching methods focused on ways of involving elementary-aged children (grades 1-6) in science activities and experiences designed to promote curiosity, inquiry-based investigation, and application of scientific concepts as they explore the world.

TCH-ED 418 Social Studies in the Elementary School Credits: 3

The social studies methods course is designed to provide the prospective teacher with the theory, content, powerful teaching practices, and understanding of the role of social studies in a global and multicultural society. The prospective teacher will acquire the knowledge, skills and dispositions needed to design and enact a transformative social studies curriculum that prepares the young to develop civic competence.

TCH-ED 419 Student Teaching in Elementary School Credits: 3-12

Culminating field experience in an elementary school (grades 1-6). Elementary program student teachers engage in an all-day, full semester placement in an elementary classroom. Elementary majors must enroll in 9 credit hours. Hours for other programs using this field experience vary. Teacher candidates should seek advisor approval.

TCH-ED 420 Adolescent Development Credits: 3

Various aspects of physiological, emotional, cognitive, social and moral development in the transition from childhood to adolescence will be considered. Attention is focused on a conception of adolescence that is grounded on current research and theory.

TCH-ED 422 Practicum I - Middle and High School Credit: 1

The overarching goal for this introductory field experience is to help teacher candidates shift their perspectives from that of a student to that of a classroom teacher. Emphasis is on observing the relationship among students' experiences within and outside of school, and planning specific learning experiences for academic and social growth and development. Additionally, teacher candidates attend to the individual student's responses to learning experiences, as well as the social dynamic among students as they work together in a classroom.

Prerequisites: Admission to the Teacher Education Professional Program.

TCH-ED 423 Practicum II - Middle and High School Credit: 1

This field experience is part of Block 2—the second field experience within a four-block sequence. The overarching goal is for teacher candidates to observe the implementation of the school curriculum in specific disciplines. Topics include the structure of the discipline, interrelatedness among basic concepts, discipline specific practices, and the design of instruction to facilitate deep learning.

Prerequisites: TCH-ED 422.

TCH-ED 424 Practicum III - Middle and High School Credit: 1

This field experience is part of Block 3—the third field experience within a four-block sequence. The overarching goal for this field experience is for teacher candidates to apply conceptual and theoretical knowledge to practice in identifying appropriate instructional strategies, planning instruction, and assessing learning. The emphasis is on understanding the relationships among instructional practices, learner characteristics, and learning outcomes.

Prerequisites: TCH-ED 423.

TCH-ED 425 General Methods - Secondary 2 Credits: 2

The intent of this course is to prepare pre-service teachers to be effective managers of instruction who are skillful in interpersonal communication. Course activities include opportunities for applying techniques based upon a variety of management/discipline models. Field experiences permit on-site observation of various management styles.

TCH-ED 427 Reading in the Secondary School Credits: 3

An examination of the reading process and study of methods and materials used by the secondary school classroom teacher in assessing student reading ability, determining the readability of content area materials and teaching students of all reading levels how to comprehend their textbooks and other printed instructional materials in various content area subjects.

TCH-ED 429 Mathematics in the Elementary School II Credits: 3

Mathematics-specific pedagogy. Methods, techniques, tools and materials for the effective teaching of mathematics. Focuses on the principles, methods, and materials of elementary school mathematics instruction and state curriculum in the context of diverse student backgrounds.

Prerequisites: TCH-ED 413.

Co-requisites: TCH-ED 479.

TCH-ED 430 Gateway to Teaching Credits: 3

This course is designed to introduce pre-service teachers to the education profession and to the teacher education program at UMKC. Through lecture discussion and field experiences the students will examine the social, political, cultural and professional aspects of teaching in 21st century America. In addition, the students will be given an overview of the teacher preparation program and the requirements and expectations for completing the program and qualifying for a certificate to teach in the state of Missouri.

Prerequisites: Admission into the Teacher Education program.

TCH-ED 431 Summer Community Experience Credits: 3

This field-based course provides an in-depth examination into both the evolution of urban communities and dynamics of community building in inner cities, with special emphasis on Kansas City, Missouri. In addition, theories of educational psychology as well as child and adolescent behavior will be infused to assist participants in developing age appropriate mentoring/teaching strategies and activities. Students in the course are engaged with the community through field trips, simulations, course events, and community service.

TCH-ED 432 Special Methods of Teaching English in Middle and High Schools Credits: 3

This course stresses the skills, knowledge, and dispositions pertinent to teaching English Language Arts in middle schools and high schools.

TCH-ED 433 Special Methods of Teaching Mathematics in Middle and High Schools Credits: 3

This course stresses the skills, knowledge, and dispositions pertinent to teaching mathematics in middle schools and high schools.

TCH-ED 434 Seminar in Social Science Curriculum Credits: 3

This seminar course is designed to strengthen teacher candidates' content knowledge for designing and enacting transformative social science curriculum and pedagogy. Students will actively examine key content, concepts, themes, issues, multiple perspectives, and enduring questions embedded in the social science disciplines such as history, geography, economics, anthropology, sociology, political science and psychology and cultural and social contexts to enhance their knowledge, skills, and confidence for designing and enacting a transformative social science curriculum for diverse middle and high school students' development of civic competence.

TCH-ED 435 Special Methods of Teaching Science in Middle and High Schools Credits: 3

Provides an opportunity for future science teachers to refine their skills as science educators and at the same time to reflect upon the ways and whys of teaching science.

TCH-ED 436 Special Methods of Teaching Social Science in Middle and High Schools Credits: 3

This course will assist teacher candidates in developing the knowledge, skills, and dispositions needed to design and enact powerful transformative social studies curricular experiences, to foster middle and secondary school students' abilities to make informed, reasoned decisions and actions for the public good. Students will be introduced to powerful teaching practices, issues, and resources in secondary school social science.

TCH-ED 437 Student Teaching in High School Credits: 3-9

Culminating experience in a secondary school (grades 9-12).

TCH-ED 438 Culturally Responsive Strategies for Teaching Diverse Learners Credits: 3

This course is designed to move students from cultural awareness to the application of culturally responsive practice. Specifically, this course will heighten students' understanding of cultural characteristics and their relationships to teaching and learning. Students will learn culturally responsive strategies and their enactment in instruction for diverse learners.

TCH-ED 440 Introduction To Early Childhood Education Credits: 3

This course is an introduction to the historical, theoretical, ethical, and pedagogical underpinnings of the early childhood education profession. Teacher candidates explore play, inquiry-based learning, documentation, and the role of family and community within diverse curriculum approaches to early childhood education.

TCH-ED 441 Language Development Credits: 3

An introduction to what language is, how first and second languages are acquired, and how to support language development in early childhood classrooms in collaboration with families and communities. Teacher candidates construct knowledge through university classroom experiences, observations of focal children in urban educational settings, and family interviews.

TCH-ED 442 Assessment, Screening, and Data-Informed Early Childhood Teaching Credits: 3

This course provides analysis of assessment methods, application of authentic assessment throughout the teaching cycle and investigation of data-based decision-making through focused inquiry and application in the practicum setting.

TCH-ED 443 Mathematics in Early Childhood II Credits: 3

Approaches to assessing and developing mathematical competencies in young children, birth through Grade 3. Emphasis is placed upon mathematics as a sense-making tool through which actions such as observation, classification, ordering, pattern seeking, and testing of ideas drive experiences and problem solving in the child's immediate environment.

Prerequisites: TCH-ED 444.

TCH-ED 444 Mathematics in Early Childhood I Credits: 3

Approaches to developing mathematical competencies in young children, through Grade 3. Emphasis is placed upon mathematics as a sense-making tool through which actions such as observation, classification, ordering, pattern seeking, and testing of ideas drive experiences and problem solving in the child's immediate environment. A variety of materials and tools are studied in terms of the ways they help children explore, develop and test ideas, construct meaning, and communicate ideas.

TCH-ED 445 Science In Early Childhood Credits: 3

This course provides an exploration of the major concepts and culturally responsive teaching strategies in early childhood science (birth –Grade 3). Teacher candidates analyze inquiry processes and tools in science to develop integrated learning experiences that ensure mastery of content and promote curiosity, creativity, inquiry, and self-awareness as learners explore their world.

TCH-ED 446 Early Childhood Creative Activities Credits: 3

Analysis of symbolic representations, creativity, and imagination as a foundation for learning and development of diverse learners in urban early childhood settings. Hands on exploration of creative materials and activities from different representational systems to shape planning of learning experiences and environments that enhance learning and promote children's creative abilities development.

TCH-ED 447 Social Studies in Early Childhood Credits: 3

This course provides an exploration of the major concepts and teaching strategies in early childhood social studies (birth-Grade 3). Teacher candidates analyze the processes and tools of scientific inquiry related to social studies to design integrated learning experiences that incorporate authentic local and global issues relevant to the learners.

TCH-ED 450 Integrating The Curriculum In Early Childhood Education Credits: 3-4

A culminating curriculum course for early childhood students. The overall goal is to help students become more aware, skilled and informed about developmentally and educationally appropriate practice and curriculum for children during early childhood. Its focus is on constructing an integrated curriculum. A field-based experience is included.

TCH-ED 451 Child Guidance in Early Childhood Classrooms Credits: 3

This course provides an analysis of theory and research on child guidance to frame teacher candidates' development of guidance procedures that meet ethical guidelines and foster a classroom environment conducive to optimal learning and development of early childhood learners.

TCH-ED 452 Family and Program Relationships in Early Childhood Education Credits: 3

This course provides an analysis of purposes and procedures of family, school and community partnerships that frame teacher candidates' collaborations, consultation, and teaching of early childhood learners in urban settings.

TCH-ED 453 Learning from Parents Credits: 2

Designed to provide students with direct interactions with parents whose children are participating in early childhood programs, birth to age 8. Emphasis is placed upon students' understanding of, and sensitivity to, parents' perspectives regarding the care and education of their young children and recognition of parents as significant informants about their children.

Co-requisites: TCH-ED 452.

TCH-ED 454 Human Relations In The Early Childhood Classroom Credits: 3

Students will analyze the connections between an effective helping relationship and effective teaching in the early childhood classroom. Effective interpersonal communication skills will be identified and practiced. The development of self-concept will be discussed.

TCH-ED 455 Student Teaching In Preschool Credits: 6-10

Observation and student teaching under supervision in a preschool setting.

TCH-ED 456 Student Teaching in Early Childhood Credits: 9

Culminating field experience in Early Childhood. Student teachers engage in an all day, full-semester placement in a K-3 early childhood setting.

Co-requisites: TCH-ED 486.

TCH-ED 457 Infant and Toddler Care and Education Credits: 3

This course provides an investigation into infant/toddler care and education theories and practices. Teacher candidates explore relevant curriculum and teaching methods, visit infant and toddler programs, analyze state regulations and national standards for quality care, and evaluate early learning environments.

TCH-ED 458 Practicum For Learning About Infants And Toddlers Credit: 1

The purpose of this course is to learn about child care and education practices in various centers. We will discuss how practices are influenced or constrained by human biology and developmental stages, as they are by ecological and environment pressures such as mothers' work roles. The central themes of the course can be summarized by the phrases purposeful care practices and the optimal practices for infants and toddlers.

TCH-ED 459 Early Childhood Program Management Credits: 3

This course provides an exploration of the program manager's role as a leader who establishes school culture, implements and maintains policies and procedures, and partners with families and communities to facilitate high performing urban early childhood learning environments. Teacher candidates analyze licensing and accreditation regulations that contribute to health, safety and nutrition of learners; interview administrator and community members; and observe at an urban early childhood program.

TCH-ED 460 Middle School Curriculum Credits: 2

This course offers the pre-service teachers an overview of middle school goals, basic principles, and organizations. The course explores interdisciplinary teaming, flexible scheduling, exploratory and advisory programs, and other aspects of the organization within the context of middle school goals and practices.

TCH-ED 461 Student Teaching In Middle School Credits: 6-9

Culminating field experience in a middle school setting. Student teachers engage in an all-day, full semester placement in a middle school classroom. Middle School Education majors must enroll in 9 credit hours. Hours for other programs using this field experience vary. Teacher candidates should seek advisor approval.

Prerequisites: TCH-ED 424.

TCH-ED 462 Middle School Philosophy and Organization Credits: 3

This course offers teacher candidates an overview of middle school goals, basic principles, and organizations. Topics include interdisciplinary teaming, flexible scheduling, exploratory and advisory programs, and other aspects of the organization within the context of middle school goals and practices.

TCH-ED 463 Literacy Intervention across the Disciplines Credits: 3

Examination of research, policy, and effective practice of literacy intervention in middle and secondary disciplinary classrooms (i.e. English/language arts, mathematics, science, social studies). Topics will include recognition of reading and writing difficulties, response-to-intervention (RTI), scaffolding instruction for grade level reading comprehension, metacognition, and culturally responsive literacy instruction.

TCH-ED 464 Math Methods for Urban Teachers Credits: 3

Mathematics-specific pedagogy for urban teachers. Methods, techniques, tools and materials for the effective teaching of mathematics. Emphasis on problem solving and reasoning skills in applying mathematics and on teaching in the context of diverse student backgrounds. Portions of this course will occur in urban school classrooms. Students will apply learning to urban classrooms.

Prerequisites: Admission into the Institute for Urban Education.

TCH-ED 465 Urban Education VI: Teaching Diverse Students Credit: 1

This interactive course will investigate and examine the principles of teaching diverse students and factors influencing effectiveness of instruction, including empowering African American males, teaching students from diverse populations and working with students with special needs. Some of the class sessions will be taught electronically and work will be submitted electronically.

Prerequisites: Admission into the Institute of Urban Education.

TCH-ED 466 Field Experience: Diverse Learners Credit: 1

Students will spend a minimum of 90 hours in an urban school classroom. Students will have the opportunity to apply learning and lessons designed in the semester's pedagogical courses, particularly Best Practices for Teaching Math, Science, and strategies for working with diverse learners. Students will work with their seminar leader, having the opportunity to be observed and conference about their teaching.

Prerequisites: Admission into the Institute for Urban Education.

Co-requisites: TCH-ED 465.

TCH-ED 470 Philosophy and History of Science and Technology Credits: 3

This course uses an historical survey to introduce the main philosophical interpretations of the nature and structure of both science and technology. Core concepts such as prediction, explanation, progress, truth, and utility will be examined in light of various philosophical perspectives. Following this, case study methodology will be used to examine interactions among science, technology, and society. Although the major focus will be upon modern Western culture, some attention will be paid to earlier and non-Western cultures. Case studies to be examined include: Perception and Estimation, nuclear power and pesticides; the impact of high technology upon medicine; and the estimated cost/benefit of computer-mediated communications, for example, the Internet.

TCH-ED 475 Working with Families and Communities Credits: 3

This course provides an in-depth examination of research and theory relative to children, family and community which have implications for and application to learning and instruction. Emphasis will be placed on the exploration and critical examination of and insights into the significance of school-family relationships and their relevance to teaching and learning.

TCH-ED 478 Seminar - Elementary Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

TCH-ED 479 Practicum III – Elementary Credit: 1

This field experience is part of Block 3—the third field experience within a four-block sequence. The overarching goal for this field experience is for teacher candidates to apply conceptual and theoretical knowledge to practice in identifying appropriate instructional strategies, planning instruction, and assessing learning. The emphasis is on understanding the relationship among instructional practices, learner characteristics, and learning outcomes.

Prerequisites: TCH-ED 398.

TCH-ED 480 Practicum I Early Childhood Credit: 1

The overarching goal for this introductory field experience is to help teacher candidates shift their perspectives from that of a student to that of a classroom teacher. Emphasis is on observing the relationship among students' experiences within and outside of school, and planning specific learning experiences for academic and social growth and development. Additionally, teacher candidates attend to the individual student's responses to learning experiences, as well as the social dynamic among students as they work together in a classroom.

TCH-ED 481 Practicum II Early Childhood Credit: 1

This field experience is part of Block 2—the second field experience within a four-block sequence. The overarching goal is for teacher candidates to observe the implementation of the school curriculum in specific disciplines. Topics include the structure of the discipline, interrelatedness among basic concepts, discipline specific practices, and the design of instruction to facilitate deep learning.

TCH-ED 482 Seminar in Teaching and Evaluating Writing Credits: 3

This course is designed to provide future teachers with a framework for success in the teaching of writing within the English Language Arts curriculum. The goal is to help students turn sound theory provided by the National Writing Project, the National Council of Teachers of English, and other experts in the field of rhetoric and composition into effective practice in the classroom.

TCH-ED 483 Early Childhood Literacy I Credits: 4

This course emphasizes learning theories and methods for early literacy instruction and assessment. It will primarily focus on the components of a culturally responsive literacy curriculum for early childhood students in diverse, urban preprimary and kindergarten contexts. This course includes a field experience with multiple opportunities for observing, teaching, and assessing the literacy development of young children throughout the teaching cycle including engagement with their families and communities.

TCH-ED 484 Early Childhood Literacy II Credits: 4

This course emphasizes learning theories and methods for early literacy instruction and assessment. The course will primarily focus on the components of a culturally responsive curriculum for early childhood students in diverse, urban kindergarten through 3rd grade contexts. This course includes a supervised field experience with multiple opportunities for observing, teaching, and assessing the literacy development of young children throughout the teaching cycle including engaging with their families and communities.

TCH-ED 485 Language Arts in the Early Childhood Classroom Credits: 3

This course provides instruction in planning, implementing, and assessing early childhood (birth through third-grade) language arts activities. Critical analysis in classroom settings is emphasized. Other issues discussed include: literature-based instruction, multicultural perspectives, special needs students and professional behaviors.

TCH-ED 486 Seminar - Early Childhood Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

Co-requisites: TCH-ED 456.

TCH-ED 487 Practicum III - Early Childhood Credit: 1

This field experience is part of Block 3, the third field experience within a four-block sequence. The overarching goal for this field experience is for teacher candidates to apply conceptual and theoretical knowledge to practice in identifying appropriate instructional strategies, planning instruction, and assessing learning. The emphasis is on understanding the relationships among instructional practices, learner characteristics, and learning outcomes.

TCH-ED 491 Seminar - Art Education Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

TCH-ED 492 Integrated Instruction: Language Arts and Social Studies Credits: 6

This course will focus on teaching Language Arts and Social Studies in the Urban Elementary School. Methods, techniques, tools and materials for the effective teaching will be observed and practiced. Students will work closely with in-service teachers and their university instructor. There will be emphasis on balanced literacy, readers' and writers' workshops, literacy development, assessment techniques and the integration of social studies and language arts. Curriculum mapping and unit planning will be introduced and practiced in this course. This course will focus on school and classroom organization and management, detailed lesson planning, use of instructional materials and media in the teaching of language arts and social studies.

Prerequisites: Admission into the Institute of Urban Education.

TCH-ED 493 Seminar - Mathematics Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

Co-Requisites: TCH-ED 437 or TCH-ED 461.

TCH-ED 494 Seminar - English/Language Arts Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

Co-requisites: TCH-ED 437 or TCH-ED 461.

TCH-ED 495 Seminar - Science Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

Co-requisites: TCH-ED 437 or TCH-ED 461.

TCH-ED 496 Seminar - Social Science Credits: 3

Supports the culminating student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Student teachers will work cooperatively with school personnel, the larger professional community, and families to meet students' needs.

Co-requisites: TCH-ED 437 or TCH-ED 461.

TCH-ED 497 Teaching Internship Credits: 3-8

Teacher candidates will work 3 to 5 days at the school site in which the candidate will complete the year-long teaching internship.

Prerequisites: TCH-ED 398.

TCH-ED 498 Urban Education Seminar VII Credit: 1

This seminar meets weekly for 2 hours and is led by a clinical professor who serves as a mentor for the students throughout their program. Students will work closely with mentor teachers in the application and integration of social justice and the elementary school curriculum. A critical analysis of current practices, teaching methods, materials and how social justice manifests in curriculum and instruction. Emphasis is on understanding cultural diversity and cultural influences on learning. Concepts of a classroom community, parental relations and democratic classroom processes will be addressed. Students will have opportunities to apply their learning to urban classrooms.

Prerequisites: Admission into the Institute for Urban Education.

TCH-ED 499 Capstone Credits: 2

This seminar is designed to complement the student teaching experience through the discussion and analysis of school-based issues. It is intended to help further develop a reflective, critical and analytical approach to pedagogical decision making through supportive collaboration.

TCH-ED 5312 Legal and Ethical Aspects of Teaching Credits: 3

This course provides an introduction to landmark court cases, federal and state laws, and regulations that frame students' and teachers' rights and responsibilities and that provide guidance for ethical professional practices.

TCH-ED 5314 Cultural Diversity and Teaching English Language Learners Credits: 3

Foundational knowledge on teaching diverse populations and practical instructional approaches for meeting the needs of linguistically and culturally diverse learners. Emphasis on studying and applying instructional strategies that are appropriate for addressing the unique needs of children whose primary language may not be English.

TCH-ED 5315 Assessment and Data Literacy Credits: 3

Data collection and assessment strategies—including formative, summative, formal, and informal—to be used in developing student learning profiles, planning learning experiences, and monitoring student progress toward academic goals. Topics include the impact of assessment on equitable education for diverse learners, critical observation and questioning, basic qualitative and quantitative data analysis, working with data teams, collaboration/communication with families and other educational stakeholders, setting and monitoring learning goals, and the ethics of data collection and sharing.

TCH-ED 5385 Teaching and Learning with Technology Credits: 3

This course addresses the fundamentals of using technology in education and planning instruction to engage PK-12 students in problem solving and critical thinking using technology. Topics within the course are informed by International Society for Technology in Education Standards (ISTE), InTASC Model Core Teaching Standards and Learning Progressions for Teachers 1.0, Missouri Teacher Standards and Quality Indicators, and Missouri Learning Standards.

TCH-ED 5396 English Language Study for Middle and High School Teachers Credits: 3

Explores the fundamentals of teaching English language and grammar study, emphasizing patterns in the English language including sounds, words, sentences, meaning, and discourse as they are manifested in daily lives. Educationally relevant topics, such as applications of sociolinguistics to the teaching of English language and literature, varieties of grammar, and linguistic descriptions of styles and registers are an integral part of the course.

TCH-ED 5404 Education of the Exceptional Child and Youth Credits: 3

Students will be introduced to identification and educational intervention strategies for educating exceptional children and adolescents in inclusive classroom situations. This course requires a 10-hour field experience.

TCH-ED 5412 Language Arts in the Elementary and Middle School Credits: 3

Provides instruction in planning, implementing and assessing language arts activities. Critical analysis in classroom settings is emphasized. Other issues discussed include: literature-based instruction, multicultural perspectives, special needs students and professional behaviors.

TCH-ED 5413 Mathematics in the Elementary School I Credits: 3

Mathematics-specific pedagogy. Methods, techniques, tools and materials for the effective teaching of mathematics. Focus on the principles, methods, and materials of elementary school mathematics instruction and state curriculum in the context of diverse student backgrounds.

TCH-ED 5417 Science Methods In The Elementary School Credits: 3

The course prepares pre-service teachers to teach science from a constructivist, inquiry-oriented perspective.

TCH-ED 5418 Social Studies Methods in the Elementary and Middle Schools Credits: 3

A critical analysis of current practices, teaching methods, materials and the relationship of the social sciences to social studies. Emphasis is on understanding cultural diversity and cultural influences on learning. The planning, implementation and evaluation of an interdisciplinary social studies unit of instruction, focusing on competencies and skills needed for the 21st Century.

TCH-ED 5419 Student Teaching in Elementary School Credits: 3-12

Observation and student teaching under supervision in an elementary school. Elementary majors must enroll in 12.0 credit hours. Music education majors enroll in 3.0 or 7.0 hours; art education and foreign language education majors enroll in 7.0 hours.

TCH-ED 5422 Practicum I - Middle and High School Credit: 1

The purpose of this field experience is to apply theoretical and practical knowledge gained in concurrent courses.

Co-requisites: TCH-ED 312; TCH-ED 430; TCH-ED 420.

TCH-ED 5423 Practicum II - Middle and High School Credit: 1

The purpose of this field experience is to apply theoretical and practical knowledge gained in concurrent courses.

Prerequisites: TCH-ED 422.

Co-requisites: TCH-ED 385, TCH-ED 314.

TCH-ED 5424 Practicum III - Middle and High School Credit: 1

The purpose of this field experience is to apply theoretical and practical knowledge gained in concurrent courses.

Co-requisites: TCH-ED 315, TCH-ED 463, TCH-ED 438, Content specific methods courses.

TCH-ED 5427 Reading in the Secondary School Credits: 3

An examination of the reading process and study of methods and materials used by the secondary school classroom teacher in assessing student reading ability, determining the readability of content area materials and teaching students of all reading levels how to comprehend their textbooks and other printed instructional materials in various content area subjects.

TCH-ED 5430 Analyzing Learning Environments in Urban Contexts Credits: 3

This course serves as the major vehicle for articulating a programmatic construction of classroom management as establishing productive learning environments, facilitating social interaction, and planning relevant and engaging learning experiences based upon deep knowledge of individual students' contexts and cultures.

TCH-ED 5431 Summer Community Experience Credits: 3

This field-based course provides an in-depth examination into both the evolution of urban communities and dynamics of community building in inner cities, with special emphasis on Kansas City, Missouri. In addition, theories of educational psychology as well as child and adolescent behavior will be infused to assist participants in developing age appropriate mentoring/teaching strategies and activities. Students in the course are engaged with the community through field trips, simulations, course events, and community service.

Prerequisites: Admission into Elementary Education program or Institute for Urban Education.

TCH-ED 5432 Special Methods of Teaching English in Middle and High Schools Credits: 3

This course stresses the skills, knowledge, and dispositions pertinent to teaching English Language Arts in middle schools and high schools.

TCH-ED 5433 Special Methods of Teaching Mathematics in Middle and High Schools Credits: 3

This course stresses the skills, knowledge, and dispositions pertinent to teaching mathematics in middle schools and high schools.

Co-requisites: TCH-ED 315, TCH-ED 463, TCH-ED 438.

TCH-ED 5434 Seminar in Social Science Curriculum Credits: 3

This seminar course is designed to strengthen teacher candidates' content knowledge for designing and enacting transformative social science curriculum and pedagogy. Students will actively examine key content, concepts, themes, issues, multiple perspectives, and enduring questions embedded in the social science disciplines such as history, geography, economics, anthropology, sociology, political science and psychology and cultural and social contexts to enhance their knowledge, skills, and confidence for designing and enacting a transformative social science curriculum for diverse middle and high school students' development of civic competence.

TCH-ED 5435 Special Methods of Teaching Science in Middle and High Schools Credits: 3

Provides an opportunity for future science teachers to refine their skills as science educators and at the same time to reflect upon the ways and whys of teaching science.

TCH-ED 5436 Special Methods of Teaching Social Science in Middle and High Schools Credits: 3

This course will assist teacher candidates in developing the knowledge, skills, and dispositions needed to design and enact powerful transformative social studies curricular experiences, to foster middle and secondary school students' abilities to make informed, reasoned decisions and actions for the public good. Students will be introduced to powerful teaching practices, issues, and resources in secondary school social science.

TCH-ED 5437 Student Teaching in Secondary School Credits: 3-9

Culminating experience in a secondary school (grades 9-12). Enrollment hours vary for teacher candidates in Music, Art, and Foreign Languages.

Secondary majors in English, Mathematics, Science, and Social Science enroll for 9 semester credit hours.

Prerequisites: TCH-ED 5424.

Co-Requisite: Seminar.

TCH-ED 5438 Culturally Responsive Strategies for Teaching Diverse Learners Credits: 3

This course is designed to move students from cultural awareness to the application of culturally responsive practice. Specifically, this course will heighten students' understanding of cultural characteristics and their relationships to teaching and learning. Students will learn culturally responsive strategies and their enactment in instruction for diverse learners.

TCH-ED 5440 Introduction To Early Childhood Education Credits: 3

Introduction to the field of early childhood care and education, birth to age 8. Designed to familiarize future practitioners with the unique characteristics of early childhood education and its practice.

TCH-ED 5441 Literacy Development I Credits: 3

An introduction to how language is acquired and how to facilitate oral language expression in early childhood classrooms.

TCH-ED 5442 Observation, Assessment & Screening in Early Childhood Classrooms Credits: 3

This course is designed to identify developmentally appropriate ways to measure and evaluate child growth and development.

TCH-ED 5444 Mathematics In Early Childhood and Elementary Schools Credits: 3

The course prepares teachers who can create a learning environment in which mathematical concepts are drawn from and modeled within the child's active investigation of his or her own surroundings and views of the world. The emphasis is upon mathematics as a sense-making tool through which observation, action, classification, ordering, seeking patterns and common features, and testing of ideas come together to organize experiences and solve problems in the immediate environment. Stress is placed on methods and materials to make mathematics learning active and hands-on. A variety of materials, physical models, and tools are studied in terms of the way they can be used to help children explore, develop and test ideas, construct meaning, and communicate ideas.

TCH-ED 5445 Science In Early Childhood and Elementary Schools Credits: 3

Focus on ways of involving young children in science activities and experiences designed to promote curiosity, investigation and self-awareness as they explore their world.

TCH-ED 5447 Social Studies In Early Childhood and Elementary Schools Credits: 3

This course is designed to help students understand basic social studies concepts and pedagogy for young learners.

TCH-ED 5448 Literacy Development II Credits: 3

This course is designed to introduce the student to the different theories on literacy development. Students will examine different approaches but focus on a developmental perspective to literacy development.

TCH-ED 5449 Literacy Development III Credits: 3

This course is designed to help students identify effective and developmentally appropriate practices, strategies and experiences that foster literacy development.

TCH-ED 5450 Integrating The Curriculum In Early Childhood Education Credits: 3-4

A culminating curriculum course for early childhood students. The overall goal is to help students become more aware, skilled and informed about developmentally and educationally appropriate practice and curriculum for children during early childhood. Its focus is on constructing an integrated curriculum. A field-based experience is included.

TCH-ED 5451 Child Guidance Within The Classroom Credits: 3

Designed to help students examine and evaluate guidance techniques and teaching strategies used in classrooms for young children. Preventive measures in classroom management will be stressed.

Co-requisites: TCH-ED 481.

TCH-ED 5452 Family and Program Relationships in Early Childhood Education Credits: 4

Provides insight into the challenge of parenting, knowledge about the development and implementation of parent education and support programs, and the significance of school-family relationships. In addition, this course seeks to facilitate students' understanding of and sensitivity to parents' perspectives regarding the care and education of their young children.

Co-requisites: TCH-ED 453.

TCH-ED 5453 Learning From Parents Credits: 2

Designed to provide students with direct interactions with parents whose children are participating in early childhood programs, birth to age 8. Emphasis is placed upon students' understanding of, and sensitivity to, parents' perspectives regarding the care and education of their young children and recognition of parents as significant informants about their children.

Co-requisites: TCH-ED 452.

TCH-ED 5454 Human Relations In The Early Childhood Classroom Credits: 3

Students will analyze the connections between an effective helping relationship and effective teaching in the early childhood classroom. Effective interpersonal communication skills will be identified and practiced. The development of self-concept will be discussed.

TCH-ED 5455 Student Teaching In Preschool Credits: 6-10

Observation and student teaching under supervision in a preschool setting.

TCH-ED 5456 Student Teaching In Elementary, K Through 3 Credits: 6-12

Observation and student teaching under supervision in an elementary school, grades K through 3.

TCH-ED 5457 Infant And Toddler Care And Education Credits: 3

In this course, students will investigate infant and toddler care and education theories and practices. Students will learn about appropriate curriculum and teaching methods, visit infant and toddler programs, learn about state regulations and national standards for quality, and complete an environment rating scale.

TCH-ED 5458 Practicum For Learning About Infants And Toddlers Credit: 1

The purpose of this course is to learn about child care and education practices in various centers. We will discuss how practices are influenced or constrained by human biology and developmental stages, as they are by ecological and environment pressures such as mothers' work roles. The central themes of the course can be summarized by the phrases purposeful care practices and the optimal practices for infants and toddlers.

TCH-ED 5459 Early Childhood Program Management and Advocacy Credits: 2

Students will begin to explore basic early childhood program components. Different types of advocacy will be presented, discussed, and implemented.

Prerequisites: TCH-ED 440.

TCH-ED 5460 Middle School Curriculum Credits: 2

This course offers the pre-service teachers an overview of middle school goals, basic principles, and organizations. The course explores interdisciplinary teaming, flexible scheduling, exploratory and advisory programs, and other aspects of the organization within the context of middle school goals and practices.

TCH-ED 5461 Student Teaching In Middle School Credits: 6-9

Culminating field experience in a middle school setting. Student teachers engage in an all-day, full semester placement in a middle school classroom. Middle School Education (English, Mathematics, Science, Social Science) majors must enroll in 9 credit hours. Hours for other programs using this field experience vary. Teacher candidates should seek advisor approval.

Prerequisites: TCH-ED 5424.

Co-Requisite: Seminar.

TCH-ED 5462 Middle School Philosophy and Organization Credits: 3

This course offers teacher candidates an overview of middle school goals, basic principles, and organizations. Topics include interdisciplinary teaming, flexible scheduling, exploratory and advisory programs, and other aspects of the organization within the context of middle school goals and practices.

TCH-ED 5463 Literacy Intervention across the Disciplines Credits: 3

Examination of research, policy, and effective practice of literacy intervention in middle and secondary disciplinary classrooms (i.e. English/language arts, mathematics, science, and social studies). Topics will include recognition of reading and writing difficulties, response-to-intervention (RTI), scaffolding instruction for grade level reading comprehension, metacognition, and culturally responsive literacy instruction.

TCH-ED 5464 Math Methods for Urban Teachers Credits: 3

Mathematics-specific pedagogy for urban teachers. Methods, techniques, tools and materials for the effective teaching of mathematics. Emphasis on problem solving and reasoning skills in applying mathematics and on teaching in the context of diverse student backgrounds. Portions of this course will occur in urban school classrooms. Students will apply learning to urban classrooms.

TCH-ED 5465 Urban Education VI: Teaching Diverse Students Credit: 1

This interactive course will investigate and examine the principles of teaching diverse students and factors influencing effectiveness of instruction, including empowering African American males, teaching students from diverse populations and working with students with special needs. Some of the class sessions will be taught electronically and work will be submitted electronically.

Prerequisites: Admission into the Institute of Urban Education.

TCH-ED 5466 Field Experience: Diverse Learners Credit: 1

Students will spend a minimum of 90 hours in an urban school classroom. Students will have the opportunity to apply learning and lessons designed in the semester's pedagogical courses, particularly Best Practices for Teaching Math, Science, and strategies for working with diverse learners. Students will work with their seminar leader, having the opportunity to be observed and conference about their teaching.

Prerequisites: Admission into the Institute for Urban Education.

Co-requisites: TCH-ED 465.

TCH-ED 5470 Philosophy and History of Science and Technology Credits: 3

This course uses an historical survey to introduce the main philosophical interpretations of the nature and structure of both science and technology. Core concepts such as prediction, explanation, progress, truth, and utility will be examined in light of various philosophical perspectives. Following this, case study methodology will be used to examine interactions among science, technology, and society. Although the major focus will be upon modern Western culture, some attention will be paid to earlier and non-Western cultures. Case studies to be examined include: Perception and Estimation, nuclear power and pesticides; the impact of high technology upon medicine; and the estimated cost/benefit of computer-mediated communications, for example, the Internet.

TCH-ED 5475 Working with Families and Communities Credits: 3

This course provides an in-depth examination of research and theory relative to children, family, and community which have implications for and application to learning and instruction. Emphasis will be placed on the exploration and critical examination of and insights into the challenge or parenting, knowledge about the development and support programs, and the significance of school-family relationships. In addition, this course seeks to facilitate students' understanding of and sensitivity to families' perspectives regarding the care and education of their children and adolescents. The course is for students in the elementary education program and Institute for Urban Education.

Prerequisites: Admission into Teacher Education or IUE.

TCH-ED 5480 Practicum I Early Childhood Credit: 1

Early Childhood students will participate in observation, assessment, and screening activities as they explore the complex nature of primary school settings. Students will be expected to spend 60 hours at classroom sites during the semester.

Co-requisites: TCH-ED 442.

TCH-ED 5481 Practicum II Early Childhood Credit: 1

Early Childhood students will participate in classroom management and guidance practices as they explore the complex nature of pre-kindergarten settings. Students will be expected to spend 60 hours at classroom sites during the semester.

Prerequisites: TCH-ED 480, admission into teacher education program.

Co-requisites: TCH-ED 451.

TCH-ED 5482 Seminar in Teaching and Evaluating Writing Credits: 3

This course is designed to provide future teachers with a framework for success in the teaching of writing within the English Language Arts curriculum. The goal is to help students turn sound theory provided by the National Writing Project, the National Council of Teachers of English, and other experts in the field of rhetoric and composition into effective practice in the classroom.

TCH-ED 5483 Early Childhood Reading I: Introduction to Literacy and Reading Education Credits: 4

This course introduces concepts about literacy processes: i.e., social, cultural, cognitive and linguistic foundations of reading and writing processes. The major focus of the course is on learning components of comprehensive reading curriculum and a range of instructional approaches and methods appropriate for early childhood learners at different stages of literacy development.

TCH-ED 5484 Early Childhood Reading II: Assessing and Teaching Diverse Learners Credits: 4

This course introduces focuses on understanding the major components of reading processes (Phonemic awareness, word identification and phonics, vocabulary and background knowledge, fluency, comprehension strategies, and motivation) and how they are integrated in fluent reading for individual students at different stages of literacy development. The major projects for the course involves assessing and teaching an individual student over the course of the semester. Teacher candidates should also assess and teach in small groups of readers.

Prerequisites: Admission into the teacher education program.

TCH-ED 5485 Language Arts in the Early Childhood Classroom Credits: 3

This course provides instruction in planning, implementing, and assessing early childhood (birth through third-grade) language arts activities. Critical analysis in classroom settings is emphasized. Other issues discussed include: literature-based instruction, multicultural perspectives, special needs students and professional behaviors.

TCH-ED 5492 Language Arts Capstone Credits: 2

Designed for students in their last professional semester of the TE program, and are in a full-time student teaching placement. The course will serve as a culminating experience of the major concepts from the previous three semesters. Topics covered include school law, classroom management, working with special needs students, building critical thinking activities into the curriculum, planning and implementing authentic assessments, and examining the obligations, challenges, and realities of the teaching profession.

Prerequisites: TCH-ED 432.

Co-requisites: student teaching.

TCH-ED 5493 Seminar - Mathematics Credits: 3

Supports the culminating mathematics student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessments for individual learners. Peer and mentor collaboration in the analytical process are fundamental to the course objectives.

Prerequisites: TCH-ED 5433.

Co-requisites: Student Teaching.

TCH-ED 5494 Seminar - English/Language Arts Credits: 3

Designed for students in their last professional semester of the TE program, and are in a full-time student teaching placement. The course will serve as a culminating experience of the major concepts from the previous three semesters. Topics covered include: school law, classroom management, working with special needs students, building critical thinking activities into the curriculum, planning and implementing authentic assessments, and examining the obligations, challenges, and realities of the teaching profession. Supports the culminating English/Language Arts student teaching experiences, and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Peer and mentor collaboration in the analytical process are fundamental to the course objectives.

Prerequisites: TCH-ED 5432.

Co-requisites: Student teaching.

TCH-ED 5495 Seminar - Science Credits: 3

Supports the culminating Science Education student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of teaching strategies they apply in their student teaching experiences, their effectiveness in facilitating learning in classrooms, and adaption of lessons and assessment for individual learners. Peer and mentor collaboration in the analytical process are fundamental to the course objectives.

Prerequisites: TCH-ED 5435.

Co-requisites: Student teaching.

TCH-ED 5496 Seminar — Social Science Credits: 3

Supports the culminating Social Science Education student teaching experience and the submission of a final professional teaching portfolio. Student teachers analyze the effectiveness of the teaching strategies they are applying in their student teaching experiences, for their effectiveness in facilitating learning in classrooms, and adapt lessons and assessment for individual learners. Peer and mentor collaboration in the analytical process are fundamental to the course objectives.

Prerequisites: TCH-ED 5436.

Co-requisites: Student Teaching.

TCH-ED 5497 Teaching Internship Credits: 3-8

Teacher candidates will work 3 to 5 days at the school site in which the candidate will complete the year-long teaching internship.

Prerequisites: TCH-ED 398.

TCH-ED 5498 Urban Education Seminar VII Credit: 1

This seminar meets weekly for 2 hours and is led by a clinical professor who serves as a mentor for the students throughout their program. Students will work closely with mentor teachers in the application and integration of social justice and the elementary school curriculum. A critical analysis of current practices, teaching methods, materials and how social justice manifests in curriculum and instruction. Emphasis is on understanding cultural diversity and cultural influences on learning. Concepts of a classroom community, parental relations and democratic classroom processes will be addressed. Students will have opportunities to apply their learning to urban classrooms.

Prerequisites: Admission into the Institute for Urban Education.

TCH-ED 5499 Capstone Credits: 2

This seminar is designed to complement the student teaching experience through the discussion and analysis of school-based issues. It is intended to help further develop a reflective, critical and analytical approach to pedagogical decision making through supportive collaboration.

About the School of Education

Education Building (<http://www.umkc.edu/virtualtour/education-building.asp>), Room 347

615 E. 52nd Street

(816) 235-2260 Dean's Office

(816) 235-2234 Student Services

Fax: (816) 235-5270

education@umkc.edu

<http://education.umkc.edu/>

Mailing Address

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 School of Education
 5100 Rockhill Road
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Justin Perry

Associate Dean:

Carolyn Barber

Director of Student Services:

Brad Martens

Division of Counseling and Educational Psychology Chair:

Chris Brown

Division of Teacher Education and Curriculum Studies co-Chairs:

Rita Barger

Jennifer Waddell

Division of Educational Leadership, Policy and Foundations Chair:

Michelle Maher

Divisions in the School of Education

Division of Counseling and Educational Psychology

Chair: Dr. Chris Brown

Division of Teacher Education and Curriculum Studies (p. 1500)

co-Chair: Dr. Rita Barger

co-Chair: Dr. Jennifer Waddell

Division of Educational Leadership, Policy and Foundations (p. 1498)

Chair: Dr. Michelle Maher

History and Mission

History

The School of Education, organized officially as a separate academic division in 1954, was the result of the University of Kansas City's involvement in professional education since 1940. At that early date the University was offering an M.A. in education, heavily liberal-arts laden, with most classes conducted in the summer and evenings. An undergraduate major in elementary education was established in 1952, and the first University of Kansas City doctoral program, the Ph.D. in education, was inaugurated with the organizing of the school in 1954. Since 1954, the school has grown to include three disciplinary divisions with more than 20 programs, offering bachelor of arts, master of arts, graduate certificates, educational specialist, doctor of philosophy, doctor of education and interdisciplinary degree programs. Several degree and certification programs are offered in cooperation with the School of Biological and Chemical Sciences, the UMKC Conservatory, and the College of Arts and Sciences.

Mission & Values

The mission of the School of Education is to recruit, prepare, and support outstanding teachers, mental health professionals, and educational leaders who will create lifelong opportunities for the diverse communities they serve through excellence in teaching, research, and practice. This mission is centered on six key values which embody the knowledge, skills and dispositions expected of our candidates across the School of Education. The goals defined by individual programs are more specific subsets of these broader values:

1. Academic excellence
2. Strategic innovation
3. Inquiry leading to reflective decision-making and problem-solving
4. Skilled and knowledgeable professionals working collaboratively
5. Democracy, diversity, and social justice
6. Creating caring and safe environments

Vision

To be a leading urban-serving School of Education, committed to social justice and transformation in the Kansas City metropolitan area, the region, and beyond.

Accreditation

The initial teacher preparation programs in the School of Education are nationally accredited at the bachelor's and master's levels by the Council for the Accreditation of Educator Preparation (2018-2025).

The School of Education is a member of the American Association of Colleges of Teacher Education.

The Ph.D. program in Counseling Psychology has been continuously accredited by the Commission on Accreditation of the American Psychological Association since 1985.

The Master's program in Counseling is accredited by the Master's in Psychology and Counseling Accreditation Council (2014-2024).

Programs for the preparation of teachers and other school personnel are approved by the Missouri Department of Elementary and Secondary Education.

Admission to the Teacher Education Program

Students new to UMKC should send transcripts and applications for admission to:

UMKC Office of Admissions
5100 Rockhill Road
Kansas City, MO 64110-2499

Initial admission at the freshman or sophomore level will be as a pre-professional major to the School of Education in accordance with regular UMKC admissions standards. For students interested in music education, admission will be to the Conservatory.

Due to program accreditation requirements all students (both first-year college and transfer) will need to submit ACT or SAT scores to UMKC for review.

Current UMKC students or transfer students seeking entry into professional teacher preparation programs should apply for admission to Teacher Education when they anticipate completion of the majority of their pre-professional coursework. The major map for each degree option details the appropriate sequence of pre-professional courses and optimal application term: <http://umkc.edu/majormaps> (<http://umkc.edu/majormaps/>).

Students must have a current cumulative GPA of at least a 2.75 to be eligible to submit an application for admission into the Professional Education Program of their choice. Cumulative GPA includes all UMKC and/or University of Missouri-system coursework for native students and all transfer coursework for transfer students. Professional Teacher Education cohorts are admitted each fall term. More information may be found at <https://education.umkc.edu/student-services/teacher-candidates/>.

Full Admission into the Profession-level Teacher Education Program requires:

- Completion of Pre-professional requirements (prerequisites and subject/content area coursework) with a GPA of 3.0 or higher in content courses, 3.0 or higher in all TCH-ED courses and 3.0 or higher overall (cumulative).
- Passing scores on the Missouri General Education Assessment (MoGEA) OR composite score of 20 or higher on the ACT.
- Passing scores on the Missouri Content Assessment (MoCA) for all K-12, Middle School and Secondary Education students.
 - Note – K-12 Foreign Language Applicants are waived from the MoCA as an admission requirement, but will be required to take the MoCA after gaining admission to the Professional-level Teacher Education Program. See the relevant major map for guidance on when to complete the MoCA.
- Completion of all General Education classes.
- FBI background check clearance.
- Interview with faculty.
- Middle School and Secondary Education students must be fully admitted to the professional program by fall 2020 in order to complete the Bachelor of Arts program at the School of Education.

Liability Insurance

The School of Education requires all students to have current professional liability insurance during all field experiences and student teaching. Students must provide verification of current professional liability insurance to the Educational Field Experiences office. Students can obtain this insurance by becoming a "student member" of educational organizations (e.g., MSTA or NEA), both of which provide this insurance, or they may purchase coverage through an independent insurance agent.

Master of Arts in Teaching (MAT)

Students who have earned a baccalaureate degree in another field and wish to become certified teachers while earning a master's degree should apply to the School of Graduate Studies for the Master of Arts in Teaching (MAT). Academic work completed prior to admission will be reviewed on a course-by-course basis to determine applicability to teacher certification requirements. More information on the MAT and prerequisites can be found at <https://education.umkc.edu/academics/masters-program/ma-in-teaching/>.

Advising and Student Services

The School of Education Student Services Office mission is to facilitate student success by providing quality services and support in the spirit of building a community of learners. The office is a resource for all School of Education students, providing program information as well as referrals to other campus resources and services. Primary responsibilities are to provide quality advising for undergraduates and to coordinate the processing of certification. The staff also assists with recruitment events, contact with prospective students, freshmen and transfer orientation, admissions to teacher education, School of Education scholarship materials, commencement and other student-centered activities.

Academic advisors are available to meet with undergraduate education majors and those seeking teacher certification. Academic advisors can be reached by contacting Student Services in person in the School of Education Learning Commons, room 129, by phone at (816) 235-2234 or by e-mail at education@umkc.edu.

Graduate students are encouraged to contact their department within the first semester to connect with their faculty advisor.

Bachelor of Arts: Early Childhood Education

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- 1. Understand how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.
- 2. Understand of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.
- 3. Work with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
- 4. Understand the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.
- 5. Understand how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
- 6. Understand and use multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

- 7. Plan instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.
- 8. Understand and use a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.
- 9. Engage in ongoing professional learning and use evidence to continually evaluate their practice, particularly the effects of their choices and actions on others (learners, families, other professionals, and the community), and adapt practice to meet the needs of each learner.
- 10. Seek appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

The student learning outcomes for the BA in Early Childhood Education program listed above reflect the Interstate Teacher Assessment and Support Consortium (InTASC) standards that are required as the basis for teacher preparation programs by the Council for the Accreditation of Educator Preparation (CAEP).

Program Requirements

Teacher Education Admission Requirements (p. 1472)

Completion of this program leads to a Bachelor of Arts degree in the School of Education. Contingent upon satisfactory completion of all degree coursework, key assessments, and state testing requirements, teacher candidates may be eligible for certification upon recommendation of the Teacher Education faculty.

A 3.00 cumulative GPA, 3.00 content area GPA and 3.00 professional education GPA is required at completion of the program. Grades of C (2.00) or better are required in all content area and education classes. Prospective students and teacher candidates should meet each semester with an academic advisor to determine specific course requirements.

The School of Education requires all teacher candidates to have current professional liability insurance during all field experiences and student teaching. Verification of current professional liability insurance must be provided to the School of Education Student Services office. Insurance can be obtained through "student membership" in an educational organization (e.g., MSTA or NEA) that provides such insurance or purchased coverage through an independent insurance agent.

Candidates admitted to the Professional Teacher Education Program must uphold all academic and social regulations and policies established by the School of Education. **Candidates are subject to any Missouri legislative action or State Board of Education policy that may become effective during the lifetime of this catalog.** The responsibility of the School of Education is to recommend qualified candidates for licensure to the state and to ensure our candidates meet or exceed these requirements. While the degree programs outlined in the catalog are aligned with state requirements, certification is dependent on both the degree requirements and successful completion of all state assessments required by the Missouri State Department of Elementary and Secondary Education. Additionally, candidates must successfully complete program Key Assessments each semester to continue in the program.

NOTE: During the student teaching semester, teacher candidates follow the school district's calendar, not the UMKC academic/semester calendar. Teacher candidates begin student teaching according to the school district's calendar and not the first day of the UMKC academic/semester calendar.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3

Critical Thinking in Natural & Physical Sciences (GECRT-SC)	3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)	3
Culture & Diversity Course (GECDV)	3
Civic & Urban Engagement Course (GECUE)	3
Total Credits	30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Pre-Professional Requirements

Code	Title	Credits
Coursework Required before Admission to the Teacher Education Professional Program		
TCH-ED 130	Number Systems and Related Topics	3
TCH-ED 160	Introduction to Teaching	3
TCH-ED 201	Children's Literature	3
TCH-ED 203	Health, Safety, and Nutrition in Early Childhood Education	3
TCH-ED 400	Child Development	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 440	Introduction To Early Childhood Education	3
TCH-ED 441	Language Development	3
Total Credits		27

Code	Title	Credits
Coursework Required for the Teacher Education Professional Program		
Block 1		
TCH-ED 333	Learning Environments: Birth to Grade 3	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 451	Child Guidance in Early Childhood Classrooms	3
TCH-ED 457	Infant and Toddler Care and Education	3
TCH-ED 459	Early Childhood Program Management	3
TCH-ED 480	Practicum I Early Childhood	1
Block 2		

TCH-ED 444	Mathematics in Early Childhood I	3
TCH-ED 445	Science In Early Childhood	3
TCH-ED 446	Early Childhood Creative Activities	3
TCH-ED 447	Social Studies in Early Childhood	3
TCH-ED 481	Practicum II Early Childhood	1
TCH-ED 483	Early Childhood Literacy I	4
Block 3		
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 442	Assessment, Screening, and Data-Informed Early Childhood Teaching	3
TCH-ED 443	Mathematics in Early Childhood II	3
TCH-ED 452	Family and Program Relationships in Early Childhood Education	3
TCH-ED 484	Early Childhood Literacy II	4
TCH-ED 487	Practicum III - Early Childhood	1
Block 4		
TCH-ED 456	Student Teaching in Early Childhood	9
TCH-ED 486	Seminar - Early Childhood	3
Total Credits		62

Minimum GPA: 3.0

Total Credit Hours: 122

Graduation Requirements Early Childhood Education

- Completion of Teacher Education Key Assessments. In order to be recommended for certification, graduates must pass all Teacher Education Key Assessments.
- Completion of all coursework listed above
- Successful completion of all Missouri state certification requirements/exams
- Exit Survey completed

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
TCH-ED 160 ^{CC}		3 TCH-ED 130	3
ENGLISH 110		3 TCH-ED 203	3
GEFSE 101		3 COMM-ST 110, 140, or 277	3
GECRT-SS 101		3 GECRT-AH 101	3
MATH 116 or STAT 115		3 HISTORY 101, 102, or POL-SCI 210	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
TCH-ED 201		3 TCH-ED 400	3
TCH-ED 440 ^{CC}		3 TCH-ED 403	3
ENGLISH 225		3 TCH-ED 404	3
GECRT-SC 101		3 TCH-ED 441	3
GECDV 201		3 GECUE 201	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
TCH-ED 333		3 TCH-ED 444	3
TCH-ED 451		3 TCH-ED 445	3
TCH-ED 457		3 TCH-ED 447	3
TCH-ED 459		3 TCH-ED 483	4
TCH-ED 385		3 TCH-ED 446	3
TCH-ED 480		1 TCH-ED 481	1
		16	17

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
TCH-ED 438		3 TCH-ED 486	3
TCH-ED 442		3 TCH-ED 456	9
TCH-ED 443		3	
TCH-ED 452		3	
TCH-ED 484		4	
TCH-ED 487		1	
		17	12

Total Credits: 122

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)

- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs.

Advising Contact Information

School of Education Student Services

129 Education Building

816-235-2761

education@umkc.edu

<http://education.umkc.edu>

Bachelor of Arts: Elementary Education

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

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Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

1. Understand how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.
2. Understand individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.
3. Work with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
4. Understand the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.
5. Understand how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
6. Understand and use multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.
7. Plan instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.
8. Understand and use a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

- 9. Engage in ongoing professional learning and use evidence to continually evaluate their practice, particularly the effects of their choices and actions on others (learners, families, other professionals, and the community), and adapt practice to meet the needs of each learner.
- 10. Seek appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

The School of Education subscribes to the Missouri Standards for the Preparation of Educators (MoSPE) which can be found on the website of the Missouri Department of Elementary and Secondary Education - dese.mo.gov (<http://dese.mo.gov/>). The student learning outcomes for the BA in Elementary Education program listed above reflect the Interstate Teacher Assessment and Support Consortium (InTASC) standards that are required as the basis for teacher preparation programs by the Council for the Accreditation of Educator Preparation (CAEP).

Program Requirements

Teacher Education Admission Requirements (p. 1472)

Completion of this program leads to a Bachelor of Arts degree in the School of Education. Contingent upon satisfactory completion of all degree coursework, key assessments, and state testing requirements, teacher candidates may be eligible for certification upon recommendation of the Teacher Education faculty.

A 3.00 cumulative GPA, 3.00 content area GPA and 3.00 professional education GPA is required at completion of the program. Grades of C (2.00) or better are required in all content area and education classes. Prospective students and teacher candidates should meet each semester with an academic advisor to determine specific course requirements.

The School of Education requires all teacher candidates to have current professional liability insurance during all field experiences and student teaching. Verification of current professional liability insurance must be provided to the School of Education Student Services office. Insurance can be obtained through “student membership” in an educational organization (e.g., MSTA or NEA) that provides such insurance or purchased coverage through an independent insurance agent.

Candidates admitted to the Professional Teacher Education Program must uphold all academic and social regulations and policies established by the School of Education. **Candidates are subject to any Missouri legislative action or State Board of Education policy that may become effective during the lifetime of this catalog.** The responsibility of the School of Education is to recommend qualified candidates for licensure to the state and to ensure our candidates meet or exceed these requirements. While the degree programs outlined in the catalog are aligned with state requirements, certification is dependent on both the degree requirements and successful completion of all state assessments required by the Missouri State Department of Elementary and Secondary Education. Additionally, candidates must successfully complete program Key Assessments each semester to continue in the program.

NOTE: During the student teaching semester, teacher candidates follow the school district’s calendar, not the UMKC academic/semester calendar. Teacher candidates begin student teaching according to the school district’s calendar and not the first day of the UMKC academic/semester calendar.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (choose one of the following):		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus (5 credit hours)	
Any 200-level MATH or STAT course		
ACT Math Subscore of 28 or higher; or SAT Math Subscore of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3

Civic & Urban Engagement Course (GECUE)	3
Total Credits	30

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Pre-Professional Requirements

Code	Title	Credits
Coursework Required before Beginning the Teacher Education Professional Program		
CONSVTY 285	Elementary Music Methods	3
PHYS-ED 401	Teaching Healthy Behaviors in the Schools	3
TCH-ED 130	Number Systems and Related Topics	3
TCH-ED 140	Geometry for Elementary Teachers	3
TCH-ED 160	Introduction to Teaching	3
TCH-ED 201	Children's Literature	3
TCH-ED 400	Child Development	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
Total Credits		27

Code	Title	Credits
Coursework Required for the Teacher Education Professional Program		
Block 1		
TCH-ED 310	Classroom Climate and Organization	3
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 316	Reading and Language Arts I	4
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 397	Practicum I - Elementary	1
Block 2		
TCH-ED 317	Reading and Language Arts II	4
TCH-ED 398	Practicum II – Elementary	1
TCH-ED 402	Integrated Arts	3

TCH-ED 413	Mathematics in the Elementary School I	3
TCH-ED 417	Science Methods in the Elementary School	3
TCH-ED 418	Social Studies in the Elementary School	3
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 429	Mathematics in the Elementary School II	3
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 475	Working with Families and Communities	3
TCH-ED 479	Practicum III – Elementary	1
Block 4		
TCH-ED 419	Student Teaching in Elementary School	9-10
TCH-ED 478	Seminar - Elementary	3
Total Credits		59-60

Minimum GPA: 3.0

Total Credit Hours: 120

Graduation Requirements Elementary Education

- Completion of at least 120 credit hours including all course work listed (although program may require more than 120 credits)
- Successful completion of all Missouri state certification requirements/exams
- Completion of Teacher Education Key Assessments. In order to be recommended for certification, graduates must pass all Teacher Education Key Assessments.
- Exit survey

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
TCH-ED 160 ^{CC}		3 TCH-ED 140	3
TCH-ED 130		3 HISTORY 101, 102, or POL-SCI 210	3
ENGLISH 110		3 COMM-ST 110, 140, or 277	3
GEFSE 101		3 GECRT-SC 101	3
GECRT-SS 101		3 GECRT-AH 101	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
TCH-ED 201		3 TCH-ED 400	3
PHYS-ED 401		3 TCH-ED 403	3
ENGLISH 225		3 TCH-ED 404	3
MATH 116 or STAT 115		3 CONSVTY 285	3
GECDV 201		3 GECUE 201	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
TCH-ED 310		3 TCH-ED 317	4
TCH-ED 312		3 TCH-ED 402	3
TCH-ED 314		3 TCH-ED 413	3
TCH-ED 316		4 TCH-ED 417	3
TCH-ED 385		3 TCH-ED 418	3
TCH-ED 397		1 TCH-ED 398	1
		17	17

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
TCH-ED 315		3 TCH-ED 478	3
TCH-ED 429		3 TCH-ED 419	10
TCH-ED 438		3	
TCH-ED 475		3	
TCH-ED 479		1	
		13	13

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs.

Advising Contact Information

School of Education Student Services

129 Education Building

816-235-2761

education@umkc.edu

<http://education.umkc.edu>

Bachelor of Arts: Middle School Education

Students interested in completing this program at UMKC must be admitted to the Teacher Education Professional Program no later than Fall 2020 and must complete the program by May 2022.

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- 1. Understand how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.
- 2. Understand individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.
- 3. Work with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
- 4. Understand the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.
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- 6. Understand and use multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.
- 7. Plan instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.
- 8. Understand and use a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.
- 9. Engage in ongoing professional learning and use evidence to continually evaluate their practice, particularly the effects of their choices and actions on others (learners, families, other professionals, and the community), and adapt practice to meet the needs of each learner.

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Completion of this program leads to a Bachelor of Arts degree in the School of Education. Contingent upon satisfactory completion of all degree coursework, key assessments, and state testing requirements, teacher candidates may be eligible for certification upon recommendation of the Teacher Education faculty.

A 3.00 cumulative GPA, 3.00 content area GPA and 3.00 professional education GPA is required at completion of the program. Grades of C (2.00) or better are required in all content area and education classes. Prospective students and teacher candidates should meet each semester with an academic advisor to determine specific course requirements.

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NOTE: During the student teaching semester, teacher candidates follow the school district’s calendar, not the UMKC academic/semester calendar. Teacher candidates begin student teaching according to the school district’s calendar and not the first day of the UMKC academic/semester calendar.

Language Arts Emphasis Area

Code	Title	Credits
Teacher Education Professional Requirements		
Block 1		
TCH-ED 202	Literature for Adolescents	3
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School	1
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 396	English Language Study for Middle and High School Teachers	3
TCH-ED 423	Practicum II - Middle and High School	1
TCH-ED 462	Middle School Philosophy and Organization	3
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 424	Practicum III - Middle and High School	1
TCH-ED 432	Special Methods of Teaching English in Middle and High Schools	3
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 482	Seminar in Teaching and Evaluating Writing	3
Block 4		
TCH-ED 461	Student Teaching In Middle School	9

TCH-ED 463	Literacy Intervention across the Disciplines	3
TCH-ED 494	Seminar - English/Language Arts	3
Total Credits		63

Code	Title	Credits
General Electives		6

Minimum GPA: 3.0

Total Credits: 120

Mathematics Emphasis Area

Code	Title	Credits
Teacher Education Professional Requirements		
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School	1
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 423	Practicum II - Middle and High School	1
TCH-ED 462	Middle School Philosophy and Organization	3
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 413	Mathematics in the Elementary School I	3
TCH-ED 424	Practicum III - Middle and High School	1
TCH-ED 429	Mathematics in the Elementary School II	3
TCH-ED 433	Special Methods of Teaching Mathematics in Middle and High Schools	3
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
Block 4		
TCH-ED 461	Student Teaching In Middle School	9
TCH-ED 463	Literacy Intervention across the Disciplines	3
TCH-ED 493	Seminar - Mathematics	3
Total Credits		60

Code	Title	Credits
General Electives		9

Minimum GPA: 3.0

Total Credits: 120

Science Emphasis Area

Code	Title	Credits
Teacher Education Professional Requirements		
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3

TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School	1
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 417	Science Methods in the Elementary School	3
TCH-ED 423	Practicum II - Middle and High School	1
TCH-ED 462	Middle School Philosophy and Organization	3
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 424	Practicum III - Middle and High School	1
TCH-ED 435	Special Methods of Teaching Science in Middle and High Schools	3
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 470	Philosophy and History of Science and Technology	3
Block 4		
TCH-ED 461	Student Teaching In Middle School	9
TCH-ED 463	Literacy Intervention across the Disciplines	3
TCH-ED 495	Seminar - Science	3
Total Credits		60

Code	Title	Credits
General Electives		10

Minimum GPA: 3.0

Total Credits: 120

Social Science

Code	Title	Credits
Teacher Education Professional Requirements		
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School	1
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 418	Social Studies in the Elementary School	3
TCH-ED 423	Practicum II - Middle and High School	1
TCH-ED 462	Middle School Philosophy and Organization	3
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 424	Practicum III - Middle and High School	1
TCH-ED 434	Seminar in Social Science Curriculum	3
TCH-ED 436	Special Methods of Teaching Social Science in Middle and High Schools	3
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3

Block 4		
TCH-ED 461	Student Teaching In Middle School	9
TCH-ED 463	Literacy Intervention across the Disciplines	3
TCH-ED 496	Seminar - Social Science	3
Total Credits		60

Code	Title	Credits
General Electives		12

Minimum GPA: 3.0

Total Credits: 120

Graduation Requirement for Middle School Education

- Completion of at least 120 credit hours including all course work listed (although actual program may require more than 120 credits)
- Successful completion of all Missouri state certification requirements/exams

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

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Bachelor of Arts: Secondary Education

Students interested in completing this program at UMKC must be admitted to the Teacher Education Professional Program no later than Fall 2020 and must complete the program by May 2022.

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

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Student Learning Outcomes

Students graduating from this program will:

- 1. Understand how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.
- 2. Understand individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.
- 3. Work with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
- 4. Understand the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.
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- 7. Plan instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.
- 8. Understand and use a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.
- 9. Engage in ongoing professional learning and use evidence to continually evaluate their practice, particularly the effects of their choices and actions on others (learners, families, other professionals, and the community), and adapt practice to meet the needs of each learner.
- 10. Seek appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

The School of Education subscribes to the Missouri Standards for the Preparation of Educators (MoSPE) and the Missouri Teacher Standards which can be found on the website of the Missouri Department of Elementary and Secondary Education - dese.mo.gov (<http://dese.mo.gov/>).

Program Requirements

Teacher Education Admission Requirements (p. 1472)

The Bachelor of Arts in Secondary Education includes professional coursework in teacher education as well as coursework in a selected content area corresponding to the desired teacher certification.

- Art (K-12)
- English
- Foreign Languages
 - Foreign Language-French
 - Foreign Language-German
 - Foreign Language-Spanish
- Mathematics
- Sciences
 - Biology; Unified Science-Biology
 - Chemistry; Unified Science-Chemistry
 - Earth Science; Unified Science-Earth Science
 - Physics; Unified Science-Physics
- Social Science

Note: Music Education majors should check degree requirements with the Conservatory.

Typically, between 30 and 50 hours of content area coursework is required to attain the subject major/certification. Students must consult with an advisor to determine specific requirements. Students who already have a bachelor's degree may be required to complete content area requirements that were not part of their prior degree program in addition to the professional education requirements.

Completion of this program leads to a Bachelor of Arts degree in the School of Education. Contingent upon satisfactory completion of all degree coursework, key assessments, and state testing requirements, teacher candidates may be eligible for certification upon recommendation of the Teacher Education faculty.

A 3.00 cumulative GPA, 3.00 content area GPA and 3.00 professional education GPA is required at completion of the program. Grades of C (2.00) or better are required in all content area and education classes. Prospective students and teacher candidates should meet each semester with an academic advisor to determine specific course requirements.

The School of Education requires all teacher candidates to have current professional liability insurance during all field experiences and student teaching. Verification of current professional liability insurance must be provided to the School of Education Student Services office. Insurance can be obtained through "student membership" in an educational organization (e.g., MSTA or NEA) that provides such insurance or purchased coverage through an independent insurance agent.

Candidates admitted to the Professional Teacher Education Program must uphold all academic and social regulations and policies established by the School of Education. **Candidates are subject to any Missouri legislative action or State Board of Education policy that may become effective during the lifetime of this catalog.** The responsibility of the School of Education is to recommend qualified candidates for licensure to the state and to ensure our candidates meet or exceed these requirements. While the degree programs outlined in the catalog are aligned with state requirements, certification is dependent on both the degree requirements and successful completion of all state assessments required by the Missouri State Department of Elementary and Secondary Education. Additionally, candidates must successfully complete program Key Assessments each semester to continue in the program.

NOTE: During the student teaching semester, teacher candidates follow the school district's calendar, not the UMKC academic/semester calendar. Teacher candidates begin student teaching according to the school district's calendar and not the first day of the UMKC academic/semester calendar.

Art Emphasis Area

Teacher Education Professional Coursework

Code	Title	Credits
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School	1
or TCH-ED 397	Practicum I - Elementary	
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 423	Practicum II - Middle and High School	1
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 402	Integrated Arts	3
TCH-ED 424	Practicum III - Middle and High School	1
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 463	Literacy Intervention across the Disciplines	3
Block 4		
TCH-ED 437 & TCH-ED 419	Student Teaching in High School and Student Teaching in Elementary School	9
TCH-ED 491	Seminar - Art Education	3
Total Credits		51

Minimum GPA: 3.0

Total Credits: 129

English Emphasis Area

Teacher Education Professional Coursework

Code	Title	Credits
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School	1
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 202	Literature for Adolescents	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 396	English Language Study for Middle and High School Teachers	3
TCH-ED 423	Practicum II - Middle and High School	1
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 424	Practicum III - Middle and High School	1
TCH-ED 432	Special Methods of Teaching English in Middle and High Schools	3
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 463	Literacy Intervention across the Disciplines	3
TCH-ED 482	Seminar in Teaching and Evaluating Writing	3
Block 4		
TCH-ED 437	Student Teaching in High School	9
TCH-ED 494	Seminar - English/Language Arts	3
Total Credits		60

Code	Title	Credits
General Electives		3

Minimum GPA: 3.0

Total Credit Hours: 120

Foreign Languages-French Emphasis Area

Teacher Education Professional Coursework

Code	Title	Credits
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School ¹	1
or TCH-ED 397	Practicum I - Elementary	
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 423	Practicum II - Middle and High School ¹	1

or TCH-ED 398	Practicum II – Elementary	
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 424	Practicum III - Middle and High School ¹	1
or TCH-ED 497	Teaching Internship	
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 463	Literacy Intervention across the Disciplines	3
FRN-LNG 494	Methods of Teaching Foreign Languages	3
Block 4		
TCH-ED 437	Student Teaching in High School	9
or TCH-ED 419	Student Teaching in Elementary School	
FRN-LNG 459	Foreign Languages Teacher Education Seminar	3
Total Credits		51

¹ K-12 students must complete at least one Middle & High School practicum for certification.

Code	Title	Credits
General Electives		3

Minimum GPA: 3.0

Total Credit Hours: 120

Foreign Languages-German Emphasis Area

Teacher Education Professional Coursework

Code	Title	Credits
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School ¹	1
or TCH-ED 397	Practicum I - Elementary	
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 423	Practicum II - Middle and High School ¹	1
or TCH-ED 398	Practicum II – Elementary	
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 424	Practicum III - Middle and High School ¹	1
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 463	Literacy Intervention across the Disciplines	3
FRN-LNG 494	Methods of Teaching Foreign Languages	3
Block 4		
TCH-ED 437	Student Teaching in High School	9
or TCH-ED 419	Student Teaching in Elementary School	
FRN-LNG 459	Foreign Languages Teacher Education Seminar	3
Total Credits		51

¹ K-12 students must complete at least one Middle & High School practicum for certification.

Code	Title	Credits
General Electives		3
Minimum GPA: 3.0		
Total Credit Hours: 120		

Foreign Languages-Spanish Emphasis Area

Teacher Education Professional Coursework

Code	Title	Credits
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School ¹	1
or TCH-ED 397	Practicum I - Elementary	
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 423	Practicum II - Middle and High School ¹	1
or TCH-ED 398	Practicum II – Elementary	
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 424	Practicum III - Middle and High School ¹	1
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 463	Literacy Intervention across the Disciplines	3
FRN-LNG 494	Methods of Teaching Foreign Languages	3
Block 4		
TCH-ED 437	Student Teaching in High School	9
or TCH-ED 419	Student Teaching in Elementary School	
FRN-LNG 459	Foreign Languages Teacher Education Seminar	3
Total Credits		51

¹ K-12 students must complete at least one Middle & High School practicum for certification.

Code	Title	Credits
General Electives		3
Minimum GPA: 3.0		
Total Hours: 120		

Mathematics Emphasis Area

Teacher Education Professional Coursework

Code	Title	Credits
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3

TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School ¹	1
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 423	Practicum II - Middle and High School ¹	1
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 424	Practicum III - Middle and High School ¹	1
TCH-ED 433	Special Methods of Teaching Mathematics in Middle and High Schools	3
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 463	Literacy Intervention across the Disciplines	3
Block 4		
TCH-ED 437	Student Teaching in High School	9
TCH-ED 493	Seminar - Mathematics	3
Total Credits		51

Minimum GPA: 3.0

Total Credit Hours: 125

Biology Emphasis Area

Teacher Education Professional Coursework

Code	Title	Credits
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School ¹	1
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 423	Practicum II - Middle and High School ¹	1
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 424	Practicum III - Middle and High School ¹	1
TCH-ED 435	Special Methods of Teaching Science in Middle and High Schools	3
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 463	Literacy Intervention across the Disciplines	3
TCH-ED 470	Philosophy and History of Science and Technology	3
Block 4		
TCH-ED 437	Student Teaching in High School	9
TCH-ED 495	Seminar - Science	3
Total Credits		54

Minimum GPA: 3.0**Total Credit Hours: 126**

Chemistry Emphasis Area

Teacher Education Professional Coursework

Code	Title	Credits
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School ¹	1
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 423	Practicum II - Middle and High School ¹	1
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 424	Practicum III - Middle and High School ¹	1
TCH-ED 435	Special Methods of Teaching Science in Middle and High Schools	3
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 463	Literacy Intervention across the Disciplines	3
TCH-ED 470	Philosophy and History of Science and Technology	3
Block 4		
TCH-ED 437	Student Teaching in High School	9
TCH-ED 495	Seminar - Science	3
Total Credits		54

Minimum GPA: 3.0**Total Credit Hours: 121**

Earth Science Emphasis Area

Teacher Education Professional Coursework

Code	Title	Credits
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School ¹	1
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 423	Practicum II - Middle and High School ¹	1
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 424	Practicum III - Middle and High School ¹	1

TCH-ED 435	Special Methods of Teaching Science in Middle and High Schools	3
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 463	Literacy Intervention across the Disciplines	3
TCH-ED 470	Philosophy and History of Science and Technology	3
Block 4		
TCH-ED 437	Student Teaching in High School	9
TCH-ED 495	Seminar - Science	3
Total Credits		54

Code	Title	Credits
General Electives		7

Minimum GPA: 3.0**Total Credit Hours: 120**

Physics Emphasis Area

Teacher Education Professional Coursework

Code	Title	Credits
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School ¹	1
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 423	Practicum II - Middle and High School ¹	1
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 424	Practicum III - Middle and High School ¹	1
TCH-ED 435	Special Methods of Teaching Science in Middle and High Schools	3
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 463	Literacy Intervention across the Disciplines	3
TCH-ED 470	Philosophy and History of Science and Technology	3
Block 4		
TCH-ED 437	Student Teaching in High School	9
TCH-ED 495	Seminar - Science	3
Total Credits		54

Minimum GPA: 3.0**Total Credit Hours: 130**

Social Science Emphasis Area

Teacher Education Professional Coursework Common to All Secondary Education Certification Areas

Code	Title	Credits
Block 1		
TCH-ED 312	Legal and Ethical Aspects of Teaching	3
TCH-ED 330	Analyzing Learning Environments in Urban Contexts	3

TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 422	Practicum I - Middle and High School ¹	1
Block 2		
EDRD 439	Language & Literacy across the Disciplines	3
TCH-ED 314	Cultural Diversity and Teaching English Language Learners	3
TCH-ED 385	Teaching and Learning with Technology	3
TCH-ED 423	Practicum II - Middle and High School ¹	1
Block 3		
TCH-ED 315	Assessment and Data Literacy	3
TCH-ED 424	Practicum III - Middle and High School ¹	1
TCH-ED 435	Special Methods of Teaching Science in Middle and High Schools	3
TCH-ED 436	Special Methods of Teaching Social Science in Middle and High Schools	3
TCH-ED 438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 463	Literacy Intervention across the Disciplines	3
Block 4		
TCH-ED 437	Student Teaching in High School	9
TCH-ED 496	Seminar - Social Science	3
Total Credits		54

Code	Title	Credits
General Electives		6

Minimum GPA: 3.0

Total Credit Hours: 120

Graduation Requirements for Secondary Education

- **Completion of at least 120 semester credit hours including all course work listed (Individual certification programs may require more than 120 semester credit hours.)**
- **Successful completion of all Missouri state certification requirements/exams**

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Centers and Projects

Berkley Child and Family Development Center

The Berkley Child and Family Development Center provides quality care and education for young children and serves as a research training site for UMKC students. The center is administered through the School of Education and is part of the academic unit. It is accredited through the National

Association for the Education of Young Children and licensed by the state of Missouri. Enrollment is open to the University population and the community for children ages 3 months to 6 years old. The center is accessible to children with special needs. To inquire about enrollment or a tour of the facility call (816) 235-2600.

Community Counseling and Assessment Services (CCAS)

UMKC Community Counseling and Assessment Services (CCAS) is committed to providing a variety of affordable counseling and assessment services to the Greater Kansas City Community. Staff are comprised of graduate student counselors and assessment specialists who are supervised by faculty members licensed as professional counselors or psychologists. Our counselors combine education, research, and a sincere passion for their work to help clients meet their goals and potential. CCAS's service fees are determined using a sliding scale fee structure based on income and the number of dependents. For information or appointments call (816) 235-2725 or email umkccasservices@umkc.edu

Kansas City Regional Professional Development Center (KCRPDC)

The Kansas City Regional Professional Development Center (KCPDC) is one of nine regional professional development centers in Missouri, partially funded by the Department of Elementary and Secondary Education and serving schools, districts and educators in the Kansas City region. The mission of the KCPDC is to build the capacity of educators to maximize student performance through high quality professional development. Programs sponsored by the KCRPDC include, but are not limited to:

- **Migrant Education and English Language Learning (MELL).** The Missouri Migrant Education and English Language Learning program (MELL) is designed to use existing resources to better serve all English Language Learning (ELL) and migrant students in the state of Missouri. The MELL program works to prevent duplicate services and allows most funds to swiftly reach any and all Missouri school districts with children of need.
- **Missouri School-Wide Positive Behavior Support.** Missouri School-wide Positive Behavior Support is a partnership among the Missouri Department of Elementary and Secondary Education (DESE), The University of Missouri-Columbia (MU) Center for School-wide Positive Behavior Support and the Office of Special Education Programs (OSEP) Center on Positive Behavioral Interventions and Supports, University of Oregon and Connecticut. The program facilitates teachers and administrators in implementing a behavior culture and climate to increase learning.
- **Special Education Consultants.** The KCRPDC provides technical assistance and instructional support to special education teachers and administrators. Services include supporting effective practices, compliance, post-secondary transition planning, and MAP-A.
- **Professional Learning Communities.** The Missouri Professional Learning Communities Project (PLC) evolved from the Missouri Accelerated Schools Project which had served as a school reform initiative for many years. PLC consultants work with building leadership teams during a multi-year process to implement school-wide reform.
- **Curriculum, Instructional and Assessment Support.** Consultants at the KCPDC are available to assist teachers and administrators in reviewing, designing and implementing effective curriculum, instructional strategies and assessments.

Urban Education Research Center

The Urban Education Research Center (UERC) is the research arm of the University of Missouri-Kansas City School of Education. Its mission is to create reliable, usable knowledge about education in urban areas with the goal of promoting excellent schooling and improving the lives, opportunities, and communities of urban residents in the Greater Kansas City community and the nation. The center accomplishes this mission through collaborative, data rich approaches including technical assistance and consultation, and rigorous research using a range of methodological tools. The UERC works collaboratively within the School of Education, across the university, and in conjunction with local partners and communities. Collaborators and partners include education leaders, educators, researchers, community leaders, advocacy groups, and service organizations throughout the Kansas City metropolitan area.

Counseling and Counseling Psychology - Graduate Programs

Ph.D.: Counseling Psychology (p. 1534)

Educational Specialist: Counseling (p. 1504)

Master of Arts: Counseling (p. 1519)

Curricula Objectives

The UMKC School of Education has been committed to professional education in the Kansas City metropolitan area for 60 years. Throughout the School's history, faculty have an established record of involvement in educational reform - exemplified through innovative teaching methods, action-based research, and community-focused programs preparing teachers, educational leaders, and mental health professionals for the challenges in urban communities today and for the future.

The primary objectives of the School of Education, which stem from our conceptual framework, mission, and values, are:

- To provide sound theoretical foundations and practical skills at the undergraduate and graduate levels required for competent performance by teachers, administrators and special-services personnel in schools, colleges and universities in a culturally pluralistic society.
- To provide graduate education and research skills which are supportive of and lead to advanced levels of scholarly achievement.
- To provide a diversity of specialized education and training programs for persons engaged in educational roles in non-school settings such as governmental agencies, social service agencies, mental and physical health care institutions, business and industrial organizations and private practice.
- To provide leadership, consultation and other support services for quality improvement in planning and conducting educational programs in schools, higher education institutions, and community agencies and organizations.
- To provide professional development opportunities for educators at all levels through specially designed programs in research, continuing education instruction, in-service programs and workshops.
- To impact the student learning in classrooms and communities throughout Missouri and the Kansas City metropolitan region in positive and meaningful ways.
- To make original contributions to the broad field of professional education through basic and applied research by both faculty and students with specific emphasis on issues of urban education.

Teacher Education and Curriculum Studies - Graduate Programs

Educational Specialist: Curriculum and Instruction (p. 1507)

Educational Specialist: Language and Literacy (p. 1510)

Master of Arts: Curriculum and Instruction (p. 1522)

Master of Arts: Language and Literacy (p. 1530)

Master of Arts: Special Education (p. 1532)

Master of Arts: Teaching (MAT) (p. 1517)

Graduate Certificate in Reading Intervention (p. 1514)

Division of Counseling and Counseling Psychology

Chair:

Chris Brown, Ph.D.

(816) 235-2492

Areas of Study and Degrees

- Minor in Exercise Science (p. 1533)
- M.A. Counseling; Emphasis Areas: School Counseling, Mental Health Counseling, and Couples and Family Counseling (p. 1519)
- Ed.S. Counseling; Emphasis Areas: School Counseling, General Mental Health (p. 1504)
- Ph.D. Counseling Psychology (p. 1534)

Faculty Scholastic Activity and Research Interests

The faculty in Counseling and Educational Psychology embodies a diverse gathering of expertise and interest. Faculty members conduct research in a wide variety of counseling and education-related areas, direct grant programs, and counsel clients in therapy. Individual and cultural diversity is paramount to the division, and faculty members attend to diversity issues in both coursework and research. Faculty members are invested in advising students in research, evaluation and counseling endeavors in order to help them achieve their educational goals.

Division of Educational Leadership, Policy and Foundations

Chair:

Michelle Maher, Ph.D.

(816) 235-2325

Areas of Study and Degrees

- M.A. Educational Administration; Emphasis Areas: PK-12 Administration (Building-Level), Higher Education Administration (p. 1525)
- Ed.S. Educational Administration; Emphasis Areas: PK-12 Administration (Building-Level) (p. 1508)
- Ed.D. Educational Administration; Emphasis Areas: PK-12 Administration; Higher Education Administration (p. 1501)
- Ph.D. Interdisciplinary (Educational Leadership, Policy and Foundations with other disciplines) (See School of Graduate Studies)

Student Academic Assessment Policy

The Council for the Accreditation of Educator Preparation (CAEP), and other accrediting bodies governing the work of the School of Education and its programs, have standards which require that candidates demonstrate the knowledge, skills and professional dispositions necessary for educators and educational leaders. The academic assessment of a student in the School of Education is a significant event for both the student and the faculty. It represents an evaluation by the faculty of student competency in academic skills and/or in other critical areas of professional conduct.

At any point during the student's matriculation through the program, the faculty retains the right to review any student behavior that may affect the welfare of the student or others. Such a review may result in the student being encouraged to receive additional support and assistance or possibly not being permitted to continue in the program. The following are offered as examples of behaviors that are the basis for evaluation of student progress:

1. Failure to maintain academic standards (e.g., 3.0 GPA).
2. Academic dishonesty (e.g., cheating, plagiarism).
3. Unethical or unprofessional behavior which could include but is not limited to, dishonesty; lack of collegiality, cooperation, or responsibility; inability to handle stress; abrasiveness; lack of timeliness; to name a few.
4. Behaviors that obstruct the leadership process and/or threaten the welfare of the student or others (e.g., verbal abuse, physical abuse, active substance abuse).
5. Failure to comply with established University or Program timetables, requirements, and policies (e.g., failure to meet time limits for completion of degree program).
6. Violation of federal, state, or local laws on UMKC premises or at UMKC sponsored or supervised activities.
7. Consideration may be given to other circumstances as they arise.

Procedures for Student Evaluation

To protect student interests as well as the rights of faculty to uphold the academic and professional standards of the academic program, the following steps may be taken as part of the academic review process.

1. If a concern about student behavior develops within the context of a course or at a field experience, the course instructor and/or field supervisor documents concerns and notifies the student's faculty advisor. The instructor meets with the student (and the faculty advisor if needed) to outline deficiencies and establish a remedial course of action (if appropriate). Chronological time frames may be established to evaluate performance. Others (i.e., program faculty or professionals and agents outside the university) who have university-related concerns about a student outside of the context of a course may communicate their concerns directly to the appropriate division chair or the Dean's Office. (Such discussions are governed by the Family Educational Rights and Privacy Act.)
2. If the instructor(s) has made a reasonable determination with adequate documentation that a pattern of severe problems exists, he or she warrants additional action beyond that already taken. Then the instructor will communicate the concerns, actions taken and their outcomes to the faculty advisor and Division Chair and request a hearing panel be assembled to review the student's status.
3. The student will be informed in writing by the Division Chair of the concerns and a hearing will be set by the Dean's Office with the program faculty (at least three faculty, in addition to the faculty member filing the complaint, must be present) and the student. An Associate Dean will present the scenario(s) and the student will have a right to respond to the allegations. The hearing panel may ask questions of both parties. The student may bring another person of support to the hearing but this individual may not speak on behalf of the student. The student will receive copies of all written documentation related to the allegations in advance of the hearing. This hearing will determine the student's status in the program.
4. The program faculty will notify the student in writing of the outcome of the hearing and make a recommendation to the Dean.
5. The student has a right to appeal the decision of the program faculty and must notify the Dean in writing within ten business days of the faculty decision. Another hearing will take place between the student and the Dean or his/her designee. The Dean/designee and program faculty may recommend to the Dean of the School of Graduate Studies that the student be reclassified or declared ineligible for further study. The Dean of the School of Graduate Studies reviews the recommendation and conveys a decision to the respective faculty group, student, and Academic Unit Dean.
6. Students who have been declared ineligible due to unsatisfactory progress or performance may appeal such decisions to the Provost, as Chief Academic Officer of the University. This appeal must be made in writing within 14 consecutive days after receipt of the registrar's notification to the student of the decision. The Dean of the School of Graduate Studies will review the full record of the case and the appeal document.
7. The decision of the Provost, as the Chancellor's designated representative in such cases, is final and will be communicated in writing to:
 - a. The student
 - b. The graduate faculty review group(s)
 - c. The academic dean
 - d. The registrar

Faculty Scholastic Activity and Research Interests

Faculty in Educational Leadership, Policy and Foundations have a wide variety of experiences and interests. Faculty members engage in research and consult on education-related issues in both public and higher education. The faculty are committed to multiculturalism and the importance of diversity in education settings. They advise students in research and administrative endeavors, and help them achieve their professional career goals.

Division of Teacher Education and Curriculum Studies

Co-Chairs:

Rita Barger, Ph.D.

Jennifer Waddell, Ph.D.

(816) 235-2245

Areas of Study and Degrees

- B.A. Early Childhood Education (p. 1473)
- B.A. Elementary Education (p. 1478)
- B.A. Middle School Education (p. 1483) (English, Mathematics, Science, Social Science)
- B.A. Secondary Education; (p. 1487) Certification areas: Art, English, Foreign Language (French, German, Spanish), Mathematics, Sciences (Biology, Chemistry, Earth Science, Physics) and Social Science

Undergraduate students may also elect to pursue a dual degree between Education and Arts and Sciences. Secondary education majors may earn a B.A. or B.S. degree in a major in the College of Arts and Sciences. Elementary and Early Childhood Education majors may earn a bachelor of liberal arts degree in the College of Arts and Sciences. Contact the advising office of the College of Arts and Sciences for more details.

- M.A. Curriculum and Instruction; Emphasis Areas: Early Childhood, General, Subject Matter Specialty and Teaching English as a Second Language (p. 1522)
- M.A. Language and Literacy (p. 1530)
- M.A. Special Education (Mild/Moderate Cross-Categorical Disabilities) (p. 1532)
- Ed.S. Curriculum and Instruction (p. 1507)
- Ed.S. Language and Literacy (p. 1510)
- Ph.D. Interdisciplinary (Curriculum and Instruction and other disciplines) (p. 1568)

Student Academic Assessment Policy

The Council for the Accreditation of Educator Preparation (CAEP), and other accreditation bodies governing the work of the School of Education and its programs, have standards which require that candidates demonstrate the knowledge, skills and professional dispositions necessary for educators and educational leaders. Assessments of knowledge, skills and professional dispositions occur regularly throughout programs.

At any point during the student's matriculation through the program, the faculty retains the right to review any student behavior that may negatively affect the welfare of others, particularly K-12 students who are served by teacher education. Such a review may result in the student being encouraged to receive additional support and assistance or in not being permitted to continue in the program. The following are offered as examples of such behaviors:

1. Failure to maintain academic standards (e.g., 3.0 GPA).
2. Academic dishonesty (e.g., cheating, plagiarism).
3. Unethical or unprofessional behavior which could include but is not limited to, dishonesty; lack of collegiality, cooperation, or responsibility; inability to handle stress; abrasiveness; or lack of timeliness.
4. Behaviors that obstruct the leadership process and/or threaten the welfare of the student or others (e.g., verbal abuse, physical abuse, active substance abuse).
5. Failure to comply with established University or Program timetables, requirements, and policies (e.g., failure to meet time limits for completion of degree program).
6. Violation of federal, state, or local laws on UMKC premises or at UMKC sponsored or supervised activities.
7. Consideration may be given to other circumstances as they arise.

Procedures for Student Evaluation

To protect student interests as well as the rights of faculty to uphold the academic and professional standards of the academic program, the following steps may be taken as part of the academic review process.

1. If a concern about student behavior develops within the context of a course or at a field experience, the course instructor and/or field supervisor documents concerns and notifies the student's faculty advisor. The instructor meets with the student (and the faculty advisor if needed) to outline deficiencies and establish a remedial course of action (if appropriate). Chronological time frames may be established to evaluate performance. Others (i.e., program faculty or professionals and agents outside the university) who have university-related concerns about a student outside of the context of a course may communicate their concerns directly to the appropriate division chair or the Dean's Office. (Such discussions are governed by the Family Educational Rights and Privacy Act.)
2. If the instructor(s) has made a reasonable determination with adequate documentation that a pattern of severe problems exists, he or she recommends additional action be taken. Then the instructor will communicate the concerns, actions taken and their outcomes to the faculty advisor and Division Chair and request a hearing panel be assembled to review the student's status.
3. The student will be informed in writing by the Division Chair of the concerns and a hearing will be set by the Dean's Office with the program faculty (at least three faculty, in addition to the faculty member filing the complaint, must be present) and the student. An Associate Dean will present the scenario(s) and the student will have a right to respond to the allegations. The hearing panel may ask questions of both parties. The student may bring another person of support to the hearing but this individual may not speak on behalf of the student. The student will receive copies of all written documentation related to the allegations in advance of the hearing. This hearing will determine the student's status in the program.
4. The program faculty will notify the student in writing of the outcome of the hearing and make a recommendation to the Dean.
5. The student has a right to appeal the decision of the program faculty and must notify the Dean in writing within ten business days of the faculty decision. Another hearing will take place between the student and the Dean or his/her designee. The Dean/designee and program faculty may recommend to the Dean of the School of Graduate Studies that the student be reclassified or declared ineligible for further study. The Dean of the School of Graduate Studies reviews the recommendation and conveys a decision to the respective faculty group, student, and Academic Unit Dean.
6. Students who have been declared ineligible due to unsatisfactory progress or performance may appeal such decisions to the Provost, as Chief Academic Officer of the University. This appeal must be made in writing within 14 consecutive days after receipt of the registrar's notification to the student of the decision. The Dean of the School of Graduate Studies will review the full record of the case and the appeal document.
7. The decision of the Provost, as the Chancellor's designated representative in such cases, is final and will be communicated in writing to:
 - a. The student
 - b. The graduate faculty review group(s)
 - c. The academic dean
 - d. The registrar

Faculty Scholastic Activity and Research Interests

Faculty in the Division of Teacher Education and Curriculum Studies have a wide variety of experiences and interests. Several faculty members conduct research on achievement and pedagogy for at-risk students, direct grant programs and work intensely and collaboratively in school settings. Faculty emphasize the importance of technology in the classroom and incorporate this content into their work. They are active in national and regional professional associations, in which many hold offices. Faculty in Teacher Education and Curriculum Studies strive to facilitate high levels of professional development and leadership skills and help their students achieve their educational goals.

Ed.D. - Educational Administration

Doctor of Education: Focus in PK-12 Administration

The Doctorate of Education Degree (Ed.D.) in Educational Administration has been designed to meet the needs of aspiring administrators in urban and metropolitan school districts and colleges/universities. There are two focus areas within the Ed.D. program: PK-12 school administration and higher education administration.

Coordinators:

Loyce Caruthers, (816) 235-1044, caruthersl@umkc.edu (PK-12)

Michelle Maher, (816) 235-2325, mahermi@umkc.edu (Higher Education)

Student Learning Outcomes

Upon completion of the PK-12 Education Administration Program, the student will:

- Apply knowledge, skills, and dispositions related to human resources and organizational development, communication with media, and critical skills for professional success as indicated by the comprehensive exam in the area of 21st Century School Principal and the personal profile of educational leadership.
- Demonstrate the ability to facilitate and engage in activities that use best practices and sound educational research to improve instructional programs with self-reflection on research and investigation of the opportunity gap.
- Employ program evaluation theory, concepts, and standards within school and community settings by developing and implementing a program evaluation project.
- Deconstruct educational theory formation and its relationship to curriculum and instruction.

- Integrate theory and research related to human resources, organizational, and educational leadership in school practices as indicated by the comprehensive exam in the areas of 21st Century Principal and Instructional Leader.
- Demonstrate knowledge of qualitative and/or quantitative methods to develop an applied research proposal that addresses problems or dilemmas within a district or school.
- Design and successfully defend the final applied dissertation for selected research inquiry in a public arena as indicated by scores on the Final Dissertation Report submitted by the student's dissertation committee.
- Demonstrate knowledge, dispositions, and skills that relate to issues of social justice, fairness, and respect for others as indicated by the comprehensive exam in the areas of Democratic Education and 21st Century School Principal, Investigation of the Achievement Gap, and Personal Leadership Profile.

The Doctorate of Education in PK-12 Educational Administration program is designed to expand the content competencies and applied leadership skills of candidates in educational leadership careers in elementary, middle, and secondary school settings, as well as in central office administration. Curriculum focuses on current and future educational challenges to enhance the knowledge and skill development of public school leaders in their positions, incorporating strategic planning, collaborative problem solving, interpersonal and inter-group functioning, technological proficiency, and effective communication.

Criteria for Admission to PK-12 Focus

1. Completed UMKC application.
2. Official transcripts from each college attended.
3. Master's degree or Educational Specialist degree or equivalent from an accredited institution with G.P.A. of at least 3.65 in Education Administration. (Master's in other fields may be provisionally accepted.)
4. Graduate Record Examination within the last five years: verbal, quantitative, and analytical writing.
5. Four professional or academic letters of reference.
6. An autobiographical statement (500 words or less) that includes your professional goals and how the doctoral degree will help you in achieving these goals, and a description of some of your leadership accomplishments.
7. A writing sample, which gives evidence of your writing ability. The sample may be a previous course paper, a chapter from thesis, a published article, etc. Sent copies of documents will not be returned.
8. Successful completion of three hours or equivalent of EDUC-R&P 5505 -**and**- three hours or equivalent of EDUC-R&P 5508 with a grade of B or higher.

Curriculum

The Doctorate of Education program consists of 33 hours of inter-disciplinary course work and a 9 hour Applied Research Dissertation Project. The Doctoral Applied Research Study will include the identification of a study to be conducted that is grounded in educational policy in the public arena. A theoretical construct for the study will be developed including a research design, a review of the literature, and a presentation of the findings of the study in a public setting as well as to the doctoral committee. It is expected that students will complete this program during a four year period of time.

Professional Standards for Educational Leaders

Standard 1. Mission, Vision, and Core Values

Effective educational leaders develop, advocate, and enact a shared mission, vision, and core values of high-quality education and academic success and well-being of *each* student.

Standard 2. Ethics and Professional Norms

Effective educational leaders act ethically and according to professional norms to promote *each* student's academic success and well being.

Standard 3. Equity and Cultural Responsiveness

Effective educational leaders strive for equity of educational opportunity and culturally responsive practices to promote *each* student's academic success and well-being.

Standard 4. Curriculum, Instruction, and Assessment

Effective educational leaders develop and support intellectually rigorous and coherent systems of curriculum, instruction, and assessment to promote *each* student's academic success and well-being.

Standard 5. Community of Care and Support for Students

Effective educational leaders cultivate an inclusive, caring, and supportive school community that promotes the academic success and well being of *each* student.

Standard 6. Professional Capacity of School Personnel

Effective educational leaders develop the professional capacity and practice of school personnel to promote *each* student's academic success and well-being.

Standard 7. Professional Community for Teachers and Staff

Effective educational leaders foster a professional community of teachers and other professional staff to promote *each* student's academic success and well-being.

Standard 8. Meaningful Engagement of Families and Community

Effective educational leaders engage families and the community in meaningful, reciprocal, and mutually beneficial ways to promote *each* student's academic success and well-being.

Standard 9. Operations and Management

Effective educational leaders manage school operations and resources to promote *each* student's academic success and well-being.

Doctor of Education: Focus in Higher Education Administration

The Doctorate of Education Degree (Ed.D.) in Educational Administration has been designed to meet the needs of aspiring administrators in urban and metropolitan school districts and colleges/universities. There are two focus areas within the Ed.D. program: PK-12 school administration and higher education administration.

Coordinators:

Loyce Caruthers Contact Information (<http://education.umkc.edu/our-school/people/educational-leadership-policy-foundations-directory/lcaruthers/>), (816) 235-1044, caruthersl@umkc.edu (**PK-12**)

Michelle Maher Contact Information (<http://education.umkc.edu/our-school/people/educational-leadership-policy-foundations-directory/mahermi/>) (816) 235-2325, mahermi@umkc.edu (**Higher Education**)

Student Learning Outcomes for Higher Education Administration

Upon completion of the Higher Education Administration program, the student will:

- Have a thorough grounding of higher education/student affairs as a field of study
- Understand organizational, management, leadership and supervision theories and issues
- Understand developmental theories as they relate to college students
- Understand professional requirements and ethics of the field
- Develop self-awareness
- Develop multicultural competencies
- Improve communication skill
- Develop skills to use technology to enhance the educational experience
- Develop the ability to analyze and interpret current research in the field
- Increase skills to apply research
- Improve ability to integrate and synthesize information

The doctoral program with a focus in Higher Education Administration is designed to prepare administrative leaders for positions in community colleges and four-year colleges and universities. The program may also be appropriate for individuals working in government agencies and business and industry. Therefore, students may come to the program from a variety of fields, backgrounds, and types of higher education institutions.

Criteria for Admission to Higher Education Focus

Admission to the Higher Education doctoral program is a separate procedure from admission to the Graduate School and is based on successful acceptance into the University of Missouri-Kansas City graduate School and the Higher Education program. This requires submission of the following:

1. Completed UMKC application.
2. Official transcripts from each college attended.
3. Graduate Record Exam: quantitative, verbal and writing portion

4. A letter of intent including a statement of the reason for pursuing a doctoral degree in Higher Education and a brief discussion about the match between the applicant's needs and the program offering.
5. A vita or resume providing a summary of leadership activities, work experiences, and scholarly activity.
6. Three letters of recommendation (on forms provided in application packet) are required. One letter may be from a personal reference; two letters must be professional references.
7. An interview will be scheduled with at least two faculty members as the final step in the admission process. Interview topics will be wide-ranging, including personal goals and objectives, current issues in education, and successful college experiences. The interview is designed to acquire information concerning the applicant's oral skills and critical thinking skills. The applicant will also have the opportunity to garner additional information about the program.

Curriculum

The program consists of 90 semester hours beyond the baccalaureate degree inclusive of the dissertation. The Ed.D. is an applied degree designed for the advanced student who wishes to achieve a superior level of competency in his/her professional field with emphasis on practice and leadership in an urban setting. The degree requires students to demonstrate proficiency in independent research in higher education and make original contributions to the body of knowledge related to higher education. The program is structured on a cohort model with admission every three years. Admitted students must agree to take courses as prescribed in order to complete all courses in a three year timeframe.

Educational Leadership, Policy and Foundations - Graduate Programs

Ed.D.: Educational Administration (p. 1501)

Educational Specialist: Educational Administration (p. 1508)

Master of Arts: Educational Administration (p. 1525)

Educational Specialist: Counseling

Mission Statement

The mission of the Counseling programs at UMKC's School of Education is to prepare students to meet the varied psychological, social, and educational needs of individuals, couples and families in diverse urban communities. With an emphasis on social justice, the programs are based on national and state standards for excellence in counselor education training and the overarching goal of the programs is to develop competent counseling professionals who are eligible for certification as professional school counselors and to be licensed as professional counselors.

Overview of the Ed.S. in Counseling

The Educational Specialist degree in Counseling is a post-masters program designed for experienced counselors who desire to add another area to their professional expertise. The program is designed with flexibility to support the preparation of licensed professional counselors and certified school counselors. Emphasis areas include Mental Health Counseling and School Counseling.

All students pursuing the Educational Specialist degree in Counseling complete a minimum of 26 hours of required coursework (because of certification and licensure requirements, students may be required to complete additional courses). In addition to the core courses, students will complete 12 or more hours depending on the chosen emphasis area and certification and/or licensure requirements. The curriculum is individually designed with an adviser so each candidate meets his/her specific needs and professional objectives. Those electing the School Counseling emphasis will, upon successful completion of the coursework and passing of the state exams for counseling, become eligible for school counselor certification in Missouri. The Mental Health Counseling emphasis area is designed for students who wish to work in a variety of settings other than the public schools. Those earning degrees in counseling become employed in community colleges, four-year colleges, specialized areas in large universities (e.g., career planning and placement, drug and alcohol counseling), the court system and community-based mental health services.

Requirements for Admission

1. Hold a master's degree in counseling from an accredited institution.
2. A grade of "B" or better is required for courses in theories and methods of counseling.
3. A grade of "pass" or "credit" is required for counseling practicum courses.
4. Overall master's in counseling degree GPA of at least 3.25 on a 4.0 scale.

Admission Procedures

Applications are accepted and reviewed on an ongoing basis. Applicants are encouraged to apply early to allow for processing and review time, which could take up to 8 weeks. Application materials must be submitted to two separate offices on campus.

Send the following materials to the Mailing Address below:

1. UMKC Application for Admission.
2. Application Fee : \$35 (domestic online) or \$50 (international) non-refundable application fee.

3. Official transcripts from all post-secondary institutions.
4. Official GRE scores.

NOTE: The GRE requirement can be waived if the applicant is a graduate of master degree program equivalent to UMKC Master's degree in Counseling and Guidance (at least 48 credit hrs) with a graduate GPA of 3.5. If you do not have an official report of your performance on the GRE, you can make arrangements to take the test at the Counseling, Health, and Testing Center, 4825 Troost Ave (816) 235-1635, or at almost any university counseling center.

Mailing Address

University of Missouri-Kansas City
UMKC Admissions
120 Administrative Center
5100 Rockhill Road
Kansas City, MO 64110-2499

Send the following materials to the address below:

1. Cover sheet for the Education Specialist Degree in Counseling Program (included in the program application packet).
2. Three applicant evaluation forms (included in the program application packet) with attached letters of recommendation.
 - Raters should address your suitability for professional studies in counseling.
 - Raters should have knowledge of your interpersonal and intellectual functioning and skills in research, counseling and written and oral communication.
 - Raters should enclose their letters of recommendation along with the provided rating sheet in an envelope, sign their names across the sealed flap, and either return to the applicant for later submission or mail directly to the Division at the address below.
 - Raters should be professional references. This excludes friends and family members.
3. Personal statement.
 - Submit a concise two to three page statement concerning your professional goals.
 - Include your professional and applied interests/experiences.
4. Additional requirements may apply for international students.

Mailing Address

University of Missouri-Kansas City
ATTN: ED.S. Counseling Admissions Committee

215 Education Building
5100 Rockhill Road
Kansas City, MO 64110-2499

Student Learning Outcomes

Students graduating from this program will:

- integrate various models of counseling supervision to develop and apply a personal theory of supervision to case studies.
- apply contemporary theories of counseling and evidence based practice to conceptualization of client cases.
- evaluate developmental theories and approaches to counseling special populations.
- be able to provide counseling, case management, intervention, and assessment services in a community setting.
- apply multicultural awareness, knowledge and skills to counseling interventions with diverse clients.
- apply knowledge of mental health consultation processes in designing a prevention program intended to address mental health or social justice needs in the community.
- evaluate current and future trends in career development, theory, and practice.

Curriculum

Program of study includes a minimum of 26 credit hours of coursework, including core courses and 12 or more credit hours for emphasis area, certification, and/or licensure requirements. Additional coursework may be necessary for students who did not complete all of the program pre-requisite courses during their master's degree in counseling. Individual coursework is dependent on the emphasis option chosen and coursework completed during the master's degree in counseling and will be determined with the help of the student's faculty adviser. Students must achieve a grade of B or better in all coursework associated with the Ed.S. program.

- No grade below B in courses will be acceptable.
- Students are required to confer with advisers prior to enrolling in any course leading to the educational specialist degree.

- Courses at the 5600 level cannot be taken until students are admitted to the Ed.S. program. Please note that 5600 level coursework may be offered during daytime hours.

Mental Health Common Core Courses (Required 14-17 Semester Credit Hours)

Code	Title	Credits
CPCE 5620	Advanced Theories And Methods Of Counseling	3
CPCE 5640	Theories And Methods Of Counseling Supervision	2
CPCE 5590	Prevention, Consultation, and Program Evaluation in Community Settings (Prevention, Consultation, and Program Evaluation in Community Settings)	3
CPCE 5503	Psychopathology: Diagnoses And Classification	3
Six credits of practicum and/or internship from the following course options:		6
CPCE 5532	Counseling Practicum II	
CPCE 5533	Couples And Family Therapy Practicum	
CPCE 5539	Continuing Counseling Practicum	
CPCE 5633	Advanced Couples & Family Practicum	

Mental Health Additional Courses (Minimum of 12 semester credit hours required)

Code	Title	Credits
CPCE 5521	Special Counseling Methods - Substance Abuse	3
CPCE 5541	Couples And Family Therapy	3
CPCE 5542	Theories and Techniques of Family Systems Therapy	3
EDUC-R&P 5513	Life Span Human Development	3
CPCE 5527	Theory And Methods Of Sexual Counseling	3
CPCE 5528	Introduction to Play Therapy	3
CPCE 5598	Individual Studies	1-6
EDUC-R&P 5510	Child Behavior And Development	3
EDUC-R&P 5512	Adolescent Development and the School	3

School Counseling Common Core Courses (Required 11 semester credit hours)

Code	Title	Credits
CPCE 5605	Career Development II	3
CPCE 5640	Theories And Methods Of Counseling Supervision	2
CPCE 5532	Counseling Practicum II	3
CPCE 5575C	Internship In Counseling III	3-16

School Counseling Additional Courses (Required 15 semester credit hours)

Code	Title	Credits
CPCE 5502	Fndtns Of Elementary & Secondary School Counseling & Guidance	3
CPCE 5504	School Guidance Programs	3
CPCE 5550	Organization And Administration Of Counseling Programs	3
TCH-ED 404	Education of the Exceptional Child and Youth ((TCH-ED 5404))	3
EDUC-C&I 5512	Strategies For Effective Classroom Management *	3
EDUC-C&I 5517	Teaching Methods And Practices *	3
Select the following for UMKC K-12 certification:		3
EDUC-R&P 5510 & EDUC-R&P 5512 or EDUC-R&P 5513	Child Behavior And Development and Adolescent Development and the School Life Span Human Development	

NOTE: TCH-ED 5404 (TCH-ED 404) , EDUC-C&I 5512, EDUC-C&I 5517, CPCE 5550, EDUC-R&P 5510, EDUC-R&P 5512 and EDUC-C&I 5513 are required for those who do not hold a current teaching certificate. Many people with a teaching certificate would already have taken these courses.

Requirements for Graduation

Students must complete all courses in the Ed.S. program with a B or better in all coursework.

Students must apply for graduation by the posted deadline during their final term of enrollment. All students must be enrolled during the term they intend to graduate.

Students in the school counseling emphasis must pass the Missouri state assessments for school counseling.

Students in the School Counseling emphasis must pass the portfolio requirement.

Educational Specialist: Curriculum and Instruction

Program Goal

The goal of the educational specialist degree in Curriculum and Instruction with an **emphasis in Curriculum and Instruction Leadership** is to build on the master's degree in curriculum and instruction on the theme of Transformative Leadership. The degree is designed for educators who want to assume positions as curriculum leaders.

Most candidates will have a degree in an area related to the field of education. Their faculty advisor, however, may require additional course work. This would depend upon the applicant's background, previous coursework and anticipated school role.

The Educational Specialist Degree in Curriculum and Instruction is designed to further enhance the skills and knowledge necessary to collaborate with other educators and lead in the development of learning opportunities which:

- promote the learning, growth and development of all students, valuing the differences that diverse learners bring to the school experience;
- demonstrate understanding of how knowledge is created, organized and linked to other disciplines;
- engage in curricular interactions with diverse learners through multiple pathways;
- equitably manage and monitor student learning;
- promote reflective teaching and decision-making;
- encourage the development of learning communities to include education professionals, parents and other community members.

Admission Requirements

Applications are accepted on a rolling basis and may be obtained from and submitted to the Office of Admissions.

Students are eligible for full admission to the Ed.S. program in Curriculum and Instruction if they have met two of the three following requirements:

- Master's degree in an educational area with a minimum grade point average of 3.25
- Two years of teaching experience
- Graduate Record Exam (GRE) with score of 155 or better on Verbal component

Student Learning Outcomes

1. Critical thinking: Candidates demonstrate critical thinking through interpretation, problem solving, evaluation, and analysis.
2. Oral and written communication: Candidates express their thinking clearly and professionally in written and oral communication.
3. Fairness and equity: Candidates treat students equitably and demonstrate the belief that all students can learn.
4. Content knowledge and pedagogy: Candidates demonstrate mastery of their content and expertise in pedagogy.
5. Create learning environments and effective assessment: Candidates demonstrate the ability to create quality learning environments
6. and to effectively assess student learning.
7. Self-reflection that leads to continual improvement: Candidates demonstrate a commitment to continual improvement through self-reflection.
8. Collaboration with colleagues and other stakeholders: Candidates demonstrate the ability to work collaboratively with other professionals and stakeholders, such as parents and the community.

Program Requirements

A minimum of 36 hours of approved graduate work beyond the master's degree is required for the educational specialist degree, with at least 60 percent of the courses numbered 5500 and above. Any courses on the 300 and 400 level included in the Ed.S. program of study must be accepted by the advisor and taken for graduate credit.

As soon as possible after admission to graduate study, students should seek to meet with the assigned faculty advisor to plan a program of study. This program must be filed in the Education Student Services Office and approved by the dean's representative during the student's first semester. A majority (80%) of new coursework applied to any graduate degree to be completed at UMKC must be taken at UMKC. Credits of transfer courses may

be applied to the program if approved by the student's advisor and the Division Chair. Courses may be reviewed by a content specialist prior to advisor or Chair approval for similarity in content between courses. Transfer credit not included in a master's degree *must not be more than 7 years old at the time of degree completion or graduation*.

UMKC credit more than seven years old at the time of degree completion that has not been included on a master's degree is not applicable to an Ed.S. degree unless validated to the satisfaction of the School of Education and the School of Graduate Studies. A maximum of 30 percent of coursework on the student's program of study may be validated under this procedure. All validation must be completed by the end of the final semester of enrollment.

Curriculum Summary

Code	Title	Credits
EDUC-R&P 5513	Life Span Human Development	3
EDUC-C&I 5570	Curriculum And Instruction In Technology	3
EDUC-C&I 5505	Introduction To Curriculum Theory	3
EDUC-C&I 5506	Curriculum Design	3
or EDUC-C&I 5640	Curriculum and Teaching for the College Classroom	
EDUC-SP 5513	Methods II: Teaching Students with Mild/Moderate Cross-Categorical Disabilities	3
EDUC-C&I 5618	Survey Of Research In Curriculum	3
EDUC-C&I 5620	Seminars In Theories Related To Curriculum	3
EDUC-C&I 5596	Classroom Assessment	3
EDUC-R&P 5505	Statistical Methods I	3
or EDUC-R&P 5508	Principles And Methods Of Research	
EDUC-C&I 5560	Teaching And Learning In The Urban Classroom	3
EDUC 5621	Practicum In Curriculum And Instruction	6
-OR-		
EDUC 5621	Practicum In Curriculum And Instruction	3
AND		
EDUC-C&I 5595	Action Research For Practitioners	3

Residency

One full-time summer session or one full-time semester is required.

Program Committee

Final program planning is the joint responsibility of the candidate, the advisor and the candidate's committee. The committee shall consist of three faculty members, all from curriculum and instruction or two faculty members from curriculum and instruction and a faculty member from another division of the School of Education or University.

This committee and the candidate shall work cooperatively in reviewing progress in the program, planning the culminating experience and making arrangements for the comprehensive examination.

Comprehensive Examination

Students are required to pass a comprehensive examination in curriculum upon the completion of the culminating experience. This four-hour examination may be either written or oral, at the discretion of the committee.

Educational Specialist: Educational Administration

Program Description

The educational specialist degree with **emphasis in PK-12 school administration** (accredited by the National Council for Accreditation of Teacher Education and the Missouri Department of Elementary and Secondary Education) prepares teachers for specialization in school leadership and administration. The program also provides an opportunity for practicing administrators to enhance their professional skills and to connect with other practitioners from the metropolitan area and region. To this end, the program's emphasis is the development of broad understanding and experiences across the whole professional field, the acquisition of in-depth knowledge in at least one specialized field in educational administration, and integrative experiences demonstrating the application of theory to practice.

Although not essential to completion of the educational specialist degree, the master of arts may be earned by the candidate at approximately the halfway point.

EdS Beginning Principal

The Ed.S. degree with emphasis in educational administration prepares teachers for specialization in school leadership and administration. The program also provides an opportunity for practicing administrators to enhance their professional skills and to connect with other practitioners from the metropolitan area and region. Students in the program gain a broad understanding across the professional field, the acquisition of in-depth knowledge in at least one specialized field in educational administration, and integrative experiences demonstrating the application of theory to practice.

Requirements for Admission

Candidates must:

- Provide a copy of a valid teaching certificate
- Provide a copy of a current permanent or professional school administrator/principal license/certificate to teach.
- Have at least two years of full-time certified teaching, supervisory, or administrative experience, or any combination thereof, in elementary, middle or secondary schools under a fully licensed teaching certificate (temporary or provisional certification does not meet this requirement).
- Provide a transcript demonstrating completion of a course in psychology or education of the exceptional child.
- Possess a master's degree with a GPA of at least 3.25

Student Learning Outcomes

Students graduating from this program will:

- See Student Learning Outcomes and Aligned Instructional and Assessment Activities below

Student Learning Outcomes for Ed.S. PK-12 Administration

The Aspiring School Administrator will:

- use multiple data to describe school climate and culture including demographic information regarding students, faculty, and community;
- conduct a comprehensive analysis of the school's improvement plan and its alignment with student learning outcomes;;
- communicate effectively with all stakeholders: students, staff, parents, community and central office administration;
- engage in activities and best practices related to both formative and summative assessments to promote instructional improvement;
- identify legal implications related to school operations involving all stakeholders: students, staff, parents, community members, and central office administration;
- engage in a reflective exercise related to building-level staff and professional development experiences that promote student learning

Curriculum

A minimum of 33 credit hours is required in the major area. Individual programs will be designed with the assistance of the faculty advisor to develop competencies in the theoretical, technical and functional aspects of educational administration.

The basic prerequisite course for the PK-12 program is:

- EDUC-UL 5501

Completion of the following is required in all programs:

- EDUC-UL 5574

Also required are 3 credit hours of research coursework to include EDUC-R&P 5505.

In addition to 27 hours of course work in education administration, the internship, and research, candidates are required to complete 6 credit hours of course work in the supporting areas of curriculum theory or design and historical or cultural foundations.

Note: Students should identify a faculty advisor in Educational Leadership, Policy and Foundations at the time of admission to the School of Education. Final program planning is a joint responsibility of the candidate and, the faculty advisor.

Requirements for Graduation

In addition to the general School of Education graduate degree requirements, the Ed.S. degree in educational administration also requires:

1. Building Level 1 Administrator Content Assessment (058) - **passing score: 220**
2. Performance Assessment for Aspiring Building Administrators (PAABA) - **passing score: 10**
3. A minimum of **320 supervisor - approved Fieldwork Hours**

4. Ed.S. Degree and program completion in Education Administration – **33 Graduate Hours**

Educational Specialist: Language and Literacy

Student Learning Outcomes

Students graduating from this program will:

- **SLO 1: FOUNDATIONAL KNOWLEDGE** Candidates critically analyze major theoretical, conceptual, historical, and evidence-based foundations of literacy and language, the ways in which they interrelate, and the role of the reading/literacy specialist in schools. **SLO 2: CURRICULUM AND INSTRUCTION** Candidates use foundational knowledge to design and evaluate literacy curricula to meet needs of learners, especially those who experience difficulty with literacy; design, implement, and evaluate small-group and individual evidence-based literacy instruction for learners; and collaborate with teachers to revise, adapt, and/or implement effective literacy practices. **SLO 3: ASSESSMENT AND EVALUATION** Candidates evaluate, select, and use valid, reliable, fair, and appropriate assessment tools and policies to screen, diagnose, and measure student literacy achievement; inform instruction and evaluate interventions; assist teachers in their understanding and use of assessment results; and advocate for appropriate literacy practices and policies to relevant stakeholders. **SLO 4: DIVERSITY AND EQUITY** Candidates critically analyze research, relevant theories, pedagogies, and essential concepts of diversity and equity; the ways in which these interrelate with themselves and others as cultural beings; create classrooms and schools that are inclusive and affirming; advocate for equity at school, district, community levels, and throughout the profession. **SLO 5: LEARNERS AND THE LITERACY ENVIRONMENT** Candidates design and use a variety of print and digital materials to meet the developmental needs of all learners; engage and motivate all learners; evaluate and integrate digital technologies in appropriate, safe, and effective ways; and collaborate with school personnel to foster a positive climate that supports a literacy-rich learning environment. **SLO 6: PROFESSIONAL LEARNING AND LEADERSHIP** Candidates collaborate with peers and colleagues to critically interpret and use evidence to design and facilitate literacy interventions in school- or community-based settings; systematically evaluate, revise, and improve their practice; develop their leadership and facilitation skills; and advocate on behalf of teachers, students, families, and communities.

Mission

The Language and Literacy Educational Specialist Program prepares exemplary literacy educators to meaningfully contribute to schools and communities as teachers, leaders, advocates, and practitioner-researchers. Students in this program study literacy from critical sociopolitical, cultural, psychological, historical, linguistic, and literary perspectives, and apply their knowledge in culturally and linguistically diverse classrooms, districts, and communities. Students develop and evaluate effective, evidence-based instructional strategies, practices, programs, and policies that support literacy learning and achievement at PreK-12, college, or adult levels. The program curriculum emphasizes collaborative inquiry and innovation, equity, advocacy, and professional leadership and learning.

Educational Goals

Goal 1: Candidates will synthesize foundational knowledge related to language and literacy development, including appropriate cognitive, linguistic, motivational, and critical sociocultural theories, relevant research, and essential concepts of diversity and equity.

Goal 2: Candidates will design, implement, and evaluate literacy curriculum and instruction that meets the needs of diverse learners through effective, evidence-based practices, assessments, and environments.

Goal 3: Candidates will collaborate with and provide support to various stakeholders, including professional colleagues and families, to positively impact literacy learning and achievement in PreK-12, college, or adult educational contexts.

Goal 4: Candidates will advocate for ethical, equitable, and inclusive literacy practices, assessments, and learning environments that recognize and value diversity in schools and society.

Goal 5: Candidates will engage in practitioner-research, professional mentoring and leadership, and systematic and ongoing reflection on their practice.

Student Learning Outcomes

Adapted from *Standards for the Preparation of Literacy Professionals 2017*. Specialized Literacy Professionals Matrix by Roles © 2018 by the International Literacy Association.

SLO 1: FOUNDATIONAL KNOWLEDGE

Candidates critically analyze major theoretical, conceptual, historical, and evidence-based foundations of literacy and language, the ways in which they interrelate, and the role of the reading/literacy specialist in schools.

SLO 2: CURRICULUM AND INSTRUCTION

Candidates use foundational knowledge to design and evaluate literacy curricula to meet needs of learners, especially those who experience difficulty with literacy; design, implement, and evaluate small-group and individual evidence-based literacy instruction for learners; and collaborate with teachers to revise, adapt, and/or implement effective literacy practices.

SLO 3: ASSESSMENT AND EVALUATION

Candidates evaluate, select, and use valid, reliable, fair, and appropriate assessment tools and policies to screen, diagnose, and measure student literacy achievement; inform instruction and evaluate interventions; assist teachers in their understanding and use of assessment results; and advocate for appropriate literacy practices and policies to relevant stakeholders.

SLO 4: DIVERSITY AND EQUITY

Candidates critically analyze research, relevant theories, pedagogies, and essential concepts of diversity and equity; the ways in which these interrelate with themselves and others as cultural beings; create classrooms and schools that are inclusive and affirming; advocate for equity at school, district, community levels, and throughout the profession.

SLO 5: LEARNERS AND THE LITERACY ENVIRONMENT

Candidates design and use a variety of print and digital materials to meet the developmental needs of all learners; engage and motivate all learners; evaluate and integrate digital technologies in appropriate, safe, and effective ways; and collaborate with school personnel to foster a positive climate that supports a literacy-rich learning environment.

SLO 6: PROFESSIONAL LEARNING AND LEADERSHIP

Candidates collaborate with peers and colleagues to critically interpret and use evidence to design and facilitate literacy interventions in school- or community-based settings; systematically evaluate, revise, and improve their practice; develop their leadership and facilitation skills; and advocate on behalf of teachers, students, families, and communities.

Curriculum

A minimum of 60 post-B.A. hours are required including a minimum of 30 credit hours beyond the master's degree.

Code	Title	Credits
Reading Concentration and Practicum (21-42 credit hours)		
EDRD 5439	Language and Literacy Across the Disciplines	3
EDRD 5501	Teaching Of Reading	3
EDRD 5502	Early Literacy and Language Development	3
EDRD 5510	Adolescent Practicum in Literacy Assessment and Intervention	3
EDRD 5520	Elementary Practicum in Literacy Assessment and Intervention	3
EDRD 5511	Advanced Literacy Assessment and Evaluation	3
EDRD 5515	Seminar In Reading	3
EDRD 5530	Reading Instruction for K-12 English Language Learners	3
EDRD 5541	Teaching Reading Improvement: Secondary, College, and Adult Levels	3
EDRD 5601	Organizing And Guiding The Reading Program	3
EDRD 5650	Dyslexia and Related Learning Differences	3
EDUC-C&I 5523	Advanced Literature For Children	3
EDUC-C&I 5640	Curriculum and Teaching for the College Classroom	3
EDUC-C&I 5690	Special Problems	1-6
Supporting Education Courses (6-12 credit hours)		
EDUC-SP 5515	Applied Behavior Analysis for Teachers: Understanding and Applying Theories of Behavior	3
EDUC-SP 5516	Collaborating with Families and Other Professionals	3
TCH-ED 5404	Education of the Exceptional Child and Youth	3
Humanistic and Behavioral Studies (6-9 credit hours)		
EDUC-R&P 5510	Child Behavior And Development	3
EDUC-R&P 5512	Adolescent Development and the School	3
EDUC-UL 5525	Cultural Foundations Of Education	3
EDUC-UL 5526	Philosophical Foundations Of Education	3
EDUC-UL 5527	Historical Foundations Of Education	3
EDUC-UL 5528	Sociological Foundations Of Education	3

Requirements for Graduation

Candidates must pass an oral comprehensive exam that represents a summation of their own original research.

General Information on Doctoral Degrees

The School of Education offers a Ph.D. degree program in Counseling Psychology that has been continuously accredited by the American Psychological Association since 1985 and an Ed.D. program in Educational Administration. The School also participates, through the School of Graduate Studies, in the Interdisciplinary Ph.D. program. Two disciplines, curriculum and instruction and educational leadership, policy and foundations are offered through the School of Education. Students may select one or both of those disciplines in addition to disciplines offered through other academic units across campus.

All but a select few Ph.D. programs at UMKC are interdisciplinary. Students desiring to study at the doctoral level in curriculum and instruction and/or educational leadership, policy and foundations in education (which includes the foundation areas of educational theory and educational administration) must apply to the School of Graduate Studies. Detailed information on the general and discipline-specific admission requirements may be found in the [School of Graduate Studies \(p. 1538\)](#) section of the catalog.

General Information on Educational Specialist Degrees

The goal of the educational specialist degree is to develop personnel who are highly competent practitioners/specialists in specific fields of education. The program of study will place emphasis on the extension of the students' abilities to apply theory, methodology and techniques to practical problems related to the individual's field. The breadth of studies will be consistent with the guidelines suggested by the National Board for Professional Teaching Standards. Graduates are expected to be competent translators of practices and research.

The educational specialist degree can be earned in counseling, educational administration, language and literacy, or curriculum and instruction.

Requirements for Admission

Students are eligible for consideration for admission to the Ed.S. degree program in the School of Education when they have met at least one of the following requirements:

- Students must be eligible for regular admission to the School of Education at the graduate level (undergraduate GPA must be at least 3.0 on a 4.0 scale); if applicants have earned graduate credit, their graduate GPA must be at least 3.0.
- The completion of a master's degree from an accredited institution of higher education and a cumulative graduate GPA of at least 3.0.

Applicants who have met one of the above requirements for admission to the School of Education at the Ed.S. level must also meet the divisional admission requirements for the specific degree program (educational administration, counseling, curriculum and instruction, or language and literacy). Consult the section of the catalog outlining the requirements of the divisions.

All educational specialist degree-seeking students are governed both by School of Education requirements and those of the School of Graduate Studies.

Program Requirements

A minimum of 60 hours of approved graduate work beyond the bachelor's degree is required for the educational specialist degree, with at least 60 percent of the courses numbered 5500 and above. Any courses on the 300 and 400 level included in the Ed.S. program of study must be accepted by the advisor and taken for graduate credit.

As soon as possible after regular admission to graduate study, the student should meet with a faculty advisor to develop a program of study. This program must be filed with the Education Student Services Office prior to the completion of 50% of applicable degree coursework for further approval by the Dean of the School of Graduate Studies and filing with the Registrar. A majority of new coursework applied to any graduate degree to be completed at UMKC must be taken at UMKC. Transfer credit not included in a master's degree must not be more than 7 years old *at the time of degree completion or graduation*. Program revisions may be requested later but also must be approved by the student's advisor, the dean's representative, and the Dean of the School of Graduate Studies.

Transfer credit may be allowed for correspondence courses, provided the credits meet the criteria for graduate coursework. Completed courses offered by continuing education programs will be accepted into graduate degree programs in accordance with the guidelines appearing in the Requirements for the Master of Arts.

UMKC credit more than seven years old at the time of degree completion that has not been included on a master's degree is not applicable to an Ed.S. degree unless validated to the satisfaction of the School of Education and the School of Graduate Studies. A maximum of 30 percent of coursework on the student's program of study may be validated under this procedure. All validation must be completed by the end of the final semester of enrollment.

The coursework is divided into the following study areas:

Specialization (21-42 hours)

The specialization is defined as a body of coursework associated with the area of concentration or major. Such courses might deal with the theory, research and methodology of the field.

Supporting Area(s) (9-15 hours each)

In addition to specific courses in a field of study, there are those courses which expand the competence of the specialist. These supporting areas might include study in one or two related areas, or study might be an intensive development of specific skills within the field.

Culminating Experience (3-12 hours)

All students should be able to demonstrate an ability to perform satisfactorily in situations approximating the intended role or specialization. While such experience may be included in regular coursework, at least 3 hours of supervised practicum, internship or field experience should be accomplished where the practice is the focus of the course.

Humanistic and Behavioral Studies (6-12 hours)

The success of a specialist may also depend on a broader understanding and interpretation of the concepts related to the problems and practices of the field, as revealed by study in humanistic and behavioral sciences. Courses or seminars in educational history, philosophy, psychology or sociology, or other appropriate courses, might be included in this area.

Residency

Enrollment as a full-time graduate student during one semester (5 credit hours during summer sessions, 9 credit hours during fall and spring semesters) is required for the educational specialist degree.

Final Examination

Students are required to pass a final examination in the major field or an oral examination upon the completion of the practicum or internship for the educational specialist degree.

Requirements for Retention

Students should assume responsibility for the following steps:

1. Complete all admission requirements.
2. With the faculty advisor, establish a program of study and have it approved by the dean's representative and the School of Graduate Studies.
3. Complete all courses listed on the program of study.
4. Maintain an acceptable GPA (Grades below B- in 300- or 400-level courses taken for graduate credit will not be accepted on the program of study. No grade lower than a C in any 5500-level course is acceptable. A minimum of 80 percent of the program must be completed with grades of B (3.0) or above. Additionally, students must maintain a 3.0 (B) average in all graduate coursework, regardless of whether the courses are on the actual program of study.
5. Apply for the degree (graduation) by the posted deadline during their final term of enrollment. Students are required to be enrolled in at least one credit hour during the term the degree requirements are to be completed.

General Information on Master of Arts Degrees

Requirements for the Master of Arts

Requirements for a master's degree include a minimum of 30 credit hours but vary according to the major and emphasis area. Regardless of program length, at least 60 percent of the coursework on the degree program must be numbered 5500 or above. At least a 3.0 GPA must be maintained, with no grade lower than a C earned in any 5500-level course. Any courses on the 300 and 400 level to be included in a master of arts program must be taken for graduate credit and only by arrangement with the advisor. No grade lower than B- may be earned in any 300- or 400-level course to be used toward a graduate degree. In addition, 80 percent of the credits for the degree must be passed with a grade of B (3.0) or better.

As soon as possible after regular admission to graduate study, the student should meet with a faculty advisor to develop a program of study. This program must be filed with the Education Student Services Office prior to the completion of 50% of applicable degree coursework for further approval by the Dean of the School of Graduate Studies and filing with the Registrar. Program revisions may be requested later but also must be approved by the student's advisor, the dean's representative, and the Dean of the School of Graduate Studies.

Twenty percent of resident graduate coursework may be transferred from other accredited universities' graduate programs. A maximum of 49 percent of acceptable graduate work (no grade below B) may be transferred from other campuses of the University of Missouri. Credits are transferred only with the recommendation of the advisor and the consent of the dean's representative in the School of Education. Transfer credit must not be more than seven years old at the time of program completion.

Transfer credit may be allowed for correspondence courses, provided the credits meet the above criteria. A maximum of six semester hours of continuing education courses that have been taken for graduate credit (workshops, special topics) may be included on a master's program. Students must provide a letter from the transfer institution clarifying the grade equivalent for transfer work posted as "credit" or "pass."

For regular courses taken through continuing education at UMKC to apply on degree programs, the student must be admitted to graduate study and have an approved program on file, including the continuing education courses.

Credit more than seven years old at the time of degree completion must be validated. To validate a course, the student must meet with the instructor of the current equivalent course to devise a plan in which the student's current knowledge of the coursework can be assessed. Faculty may ask the student to write a paper, review current literature, or take examinations to determine whether the student's knowledge of the subject is acceptable. A maximum of 30 percent of the student's program of study may be validated under this procedure. All validation must be completed prior to the completion of the final semester of enrollment for the degree.

A thesis is not required for the master of arts degree, although the option for a thesis is available. A final integrating experience or independent or group research study may be required of those not selecting the thesis option.

Requirements for Retention

Students must:

1. Meet all admission requirements.
2. File a planned program of study in consultation with a faculty advisor, securing approvals from the dean's representative and the School of Graduate Studies.
3. Complete all coursework listed on the approved program of study.
4. Maintain an acceptable graduate GPA with no grades below B- (3.0) in 300- or 400-level courses, no grades below C (2.0) in any 5500-level course, at least 80 percent of the degree program completed with a grade of B (3.0) or above, and a 3.0 average maintained in all graduate coursework, regardless of whether the courses are on the actual degree program.
5. Apply for the degree (graduation) by the posted deadline during the final term of enrollment.
6. Enroll in at least one credit hour during the term they intend to graduate.

Graduate Certificate in Reading Intervention

Student Learning Outcomes

Students graduating from this program will:

- SLO 1: Candidates synthesize major theoretical, conceptual, historical, and evidence-based foundations of literacy and language education that are relevant to their professional and community contexts. SLO 2: Candidates apply foundational knowledge to design, implement, and/or evaluate effective, evidence-based literacy practices, programs, or policies. SLO 3: Candidates administer, analyze, and/or interpret literacy assessments and data; and use written and oral communication to advocate for ethical and appropriate assessment practices and policies to a variety of stakeholders. SLO 4: Learners synthesize foundational theories and relevant research about diversity, literacy, and equity; and create and advocate for inclusive and affirming learning environments. SLO 5: Candidates integrate a variety of print and digital materials that support a physical and social literacy-rich learning environment and meet the developmental needs of all learners. SLO 6: Candidates collaborate with colleagues to critically evaluate, revise, and improve their own practice.

Reading Intervention Graduate Certificate

Mission:

The Language and Literacy Graduate Reading Intervention Certificate prepares exemplary educators from a range of classroom, school, and organizational contexts to gain specialized expertise in literacy learning and development. Students in this program study literacy from critical sociopolitical, cultural, psychological, historical, linguistic, and literary perspectives, and apply their knowledge as teachers, leaders, and advocates. Students develop and evaluate effective, evidence-based instructional strategies, practices, programs, and policies that support literacy learning and achievement at PreK-12, college, or adult levels. The program curriculum emphasizes collaborative inquiry and innovation, equity, advocacy, and professional leadership and learning.

Educational Goals:

Goal 1: Candidates will synthesize and critically analyze foundational knowledge related to literacy development and instruction.

Goal 2: Candidates will design, implement, and evaluate literacy practices, programs, and/or policies to meet the developmental needs of diverse learners.

Goal 3: Candidates will collaborate with a variety of stakeholders to positively impact literacy learning and achievement in PreK-12, college, or adult educational contexts.

Goal 4: Candidates will advocate on behalf of students, teachers, and families for ethical and equitable literacy practices, assessments, and/or learning environments.

Goal 5: Candidates will engage in professional learning, leadership, and systematic and ongoing reflection on their practice.

Student Learning Objectives:

SLO 1: Candidates synthesize major theoretical, conceptual, historical, and evidence-based foundations of literacy and language education that are relevant to their professional and community contexts.

SLO 2: Candidates apply foundational knowledge to design, implement, and/or evaluate effective, evidence-based literacy practices, programs, or policies.

SLO 3: Candidates administer, analyze, and/or interpret literacy assessments and data; and use written and oral communication to advocate for ethical and appropriate assessment practices and policies to a variety of stakeholders.

SLO 4: Learners synthesize foundational theories and relevant research about diversity, literacy, and equity; and create and advocate for inclusive and affirming learning environments.

SLO 5: Candidates integrate a variety of print and digital materials that support a physical and social literacy-rich learning environment and meet the developmental needs of all learners.

SLO 6: Candidates collaborate with colleagues to critically evaluate, revise, and improve their own practice.

Who benefits from this certificate?

Non-degree seeking graduate students who want to gain specialized expertise in literacy learning and development. Consisting of four courses chosen from the list below, the certificate can be completed online in just one year.

Admissions

Candidate must:

- Be admitted into the UMKC School of Graduate Studies as a non-degree seeking student
- Possess a Bachelor's degree and a 3.0 GPA

Curriculum (choose four):

The program is individually tailored to meet the needs of the student. Students select four of the following courses:

Code	Title	Credits
EDRD 5439	Language and Literacy Across the Disciplines	3
EDRD 5501	Teaching Of Reading	3
EDRD 5502	Early Literacy and Language Development	3
EDRD 5510	Adolescent Practicum in Literacy Assessment and Intervention	3
EDRD 5511	Advanced Literacy Assessment and Evaluation	3
EDRD 5515	Seminar In Reading	3
EDRD 5520	Elementary Practicum in Literacy Assessment and Intervention	3
EDRD 5530	Reading Instruction for K-12 English Language Learners	3
EDRD 5541	Teaching Reading Improvement: Secondary, College, and Adult Levels	3
EDRD 5601	Organizing And Guiding The Reading Program	3
EDRD 5650	Dyslexia and Related Learning Differences	3
EDUC-C&I 5523	Advanced Literature For Children	3

Graduate Programs

General Information on Doctoral Degrees (p. 1512)

General Information on Educational Specialist Degrees (p. 1512)

General Information on Master of Arts Degrees (p. 1513)

Counseling and Educational Psychology - Graduate Programs (p. 1497)

Educational Leadership, Policy and Foundations - Graduate Programs (p. 1504)

Teacher Education and Curriculum Studies - Graduate Programs (p. 1498)

Graduation and Certification Requirements

All undergraduate students must abide by the School of Education Policies and Procedures and by the Undergraduate Admission Policies and Procedures in this catalog.

All students completing an undergraduate teacher education degree must meet the following conditions in order to graduate and be recommended for teacher certification:

- 2.75 cumulative GPA/3.0 content GPA/3.0 Professional GPA.
- Completion of at least 120 credit hours if earning first bachelor's degree (although many programs will require more than 120 credits).
- "C" or higher in all Education courses.
- "C" or higher in all subject-area courses required for Middle School and Secondary degrees.
- Passing score on the certification exam(s) required by the State of Missouri

All students completing a baccalaureate degree program in the School of Education must apply to graduate by the posted deadline during their final semester of enrollment. The deadline for making application to graduate is posted on each term's academic calendar and on each student's registration materials. See your academic advisor for questions about these requirements.

History and Mission

History

The School of Education, organized officially as a separate academic division in 1954, was the result of the University of Kansas City's involvement in professional education since 1940. At that early date the University was offering an M.A. in education, heavily liberal-arts laden, with most classes conducted in the summer and evenings. An undergraduate major in elementary education was established in 1952, and the first University of Kansas City doctoral program, the Ph.D. in education, was inaugurated with the organizing of the school in 1954. Since 1954, the school has grown to include three disciplinary divisions with more than 20 programs, offering bachelor of arts, master of arts, graduate certificates, educational specialist, doctor of philosophy, doctor of education and interdisciplinary degree programs. Several degree and certification programs are offered in cooperation with the School of Biological and Chemical Sciences, the Conservatory, and the College of Arts and Sciences.

Mission & Values

The mission of the School of Education is to recruit, prepare, and support outstanding teachers, mental health professionals, and administrators who will create lifelong opportunities through education for America's diverse urban communities. This mission is centered on six key values which embody the knowledge, skills and dispositions expected of our candidates across the School of Education. The goals defined by individual programs are more specific subsets of these broader values:

1. Academic excellence
2. Strategic innovation
3. Inquiry leading to reflective decision-making and problem-solving
4. Skilled and knowledgeable professionals working collaboratively
5. Democracy, diversity, and social justice
6. Creating caring and safe environments

Vision

To be a leading urban-serving school of education in the nation.

Priority Goals

1. Foster and model a collaborative environment
2. Ensure academic excellence
3. Increase research focused on urban education
4. Provide leadership for urban schools and healthy communities
5. Ensure infrastructure for achieving strategic plan
6. Optimize and increase resources

Institute for Urban Education (IUE): Description

The Institute for Urban Education (IUE) Scholarship is an undergraduate scholarship program in the School of Education for students who are interested in teaching elementary or middle school education with a focus in the teaching of mathematics, social science, science, and literacy. The scholarship is specifically targeted at students who have a strong interest in becoming teachers in urban schools.

Students receiving IUE scholarships make a commitment to teach in an urban district following graduation in exchange for financial support. Questions regarding the IUE's programs and offerings should be directed to Student Services at (816) 235-2234.

Interdisciplinary, Ph.D.

All but a select few Ph.D. programs at UMKC are interdisciplinary. Students desiring to study at the doctoral level in curriculum & instruction and/or educational leadership, policy and foundations in education (which includes the foundation areas of educational theory and educational administration) must apply to the School of Graduate Studies. Detailed information on the general and discipline-specific admission requirements may be found in the [School of Graduate Studies \(https://catalog.umkc.edu/colleges-schools/graduate-studies/\)](https://catalog.umkc.edu/colleges-schools/graduate-studies/) section of the catalog.

Master of Arts in Teaching (MAT)

The Master of Arts in Teaching degree program prepares teacher candidates for teaching in urban settings through coursework focused on culturally and linguistically diverse learners. Preparation for teaching occurs through integrated coursework and field experiences that require the application of theoretical and practical knowledge.

The MAT allows students who have an undergraduate degree in a content area to earn a master's Degree at the same time they are gaining certification to teach at the middle or secondary school level. The MAT is open to students desiring certification in English, Language Arts, Mathematics, Social Science, Physics, Chemistry, Earth Science or Biology.

Student Learning Outcomes

Students graduating from this program will:

1. Understand how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.
2. Understand individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.
3. Work with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
4. Understand the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content
5. Understand how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues
6. Understand and use multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.
7. Plan instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.
8. Understand and use a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.
9. Engage in ongoing professional learning and use evidence to continually evaluate their practice, particularly the effects of their choices and actions on others (learners, families, other professionals, and the community), and adapt practice to meet the needs of each learner.
10. Seek appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

Program Description

The alternative MAT is designed for students who have an undergraduate degree. Completion of this program leads to a Master of Arts in Teaching degree with certification at the middle or secondary level. Contingent upon satisfactory completion of all degree coursework, key assessments, and state testing requirements, teacher candidates may be eligible for recommendation by Teacher Education faculty for teacher certification in Missouri.

Program Requirements

The UMKC SOE division of Teacher Education and Curriculum Studies subscribes to the Missouri Teacher Standards (MoTS), which can be found on the website of the Missouri Department of Elementary and Secondary Education - <https://dese.mo.gov/>.

The School of Education requires all teacher candidates to have current professional liability insurance during all field experiences and student teaching. Students must provide verification of current professional liability insurance to the Educational Field Experiences office. Students can obtain this insurance by becoming a “student member” of educational organizations (e.g., MSTA or NEA) that provides such insurance or by purchasing coverage through an independent insurance agent.

Candidates admitted to the Professional Teacher Education Program must uphold all academic and social regulations and policies established by the School of Education. Candidates are subject to any Missouri legislative action or State Board of Education policy that may become effective during the lifetime of this catalog. The responsibility of the School of Education is to recommend qualified candidates for licensure to the state and to ensure our candidates meet or exceed these requirements. While the degree programs outlined in the catalog are aligned with state requirements, certification is dependent on both the degree requirements and successful completion of all state assessments required by the Missouri State Department of Elementary and Secondary Education.

A 3.00 cumulative GPA, and 3.0 professional GPA are required at completion of the program. Grades of C or better are required in all professional education classes. Prospective students and teacher candidates should meet regularly with an academic advisor to determine specific course requirements.

Admission Requirements

- Undergraduate degree from an accredited university (transcript)
- Transcripts which document successful completion of an undergraduate degree from an accredited institution
- Two letters of recommendation that address the candidate's potential to be an educator
- Missouri State Police and FBI background check
- Candidate narrative statement describing the intentions and purposes for becoming a middle or high school teacher in a high-need school district
- Completion (with passing scores) of the Missouri Educator Gateway Assessments (MEGA):
 - Missouri Content Assessment (MoCA)

Residency Requirement

A minimum of 32 credit hours must be completed at UMKC.

Special Notes

- Cohorts of candidates for the MAT are accepted for **fall admission**.
- The MAT is a licensure degree.

Certification Requirements

- Complete DESE application for Initial PC license
- Pass the Missouri Educator Gateway Assessments (see above)
- Minimum GPA requirements: 3.00 cumulative, 3.00 content area, and 3.00 professional education coursework

Coursework

Coursework Common to both Middle School and Secondary Education

Code	Title	Credits
TCH-ED 5404	Education of the Exceptional Child and Youth	3
EDUC-R&P 5502	Advanced Educational Psychology	3
EDUC-R&P 5512	Adolescent Development and the School	3
TCH-ED 5422	Practicum I - Middle and High School	1
EDRD 5439	Language and Literacy Across the Disciplines	3
TCH-ED 5423	Practicum II - Middle and High School	1
EDUC-C&I 5591	Curriculum & Instruction For The 21st Century	3
EDUC-C&I 5518	Assessment of Diverse Learners, Engagement and Motivation	3
EDUC-C&I 5548	English As A Second Language In Content Areas	3
EDUC-C&I 5561	Teaching Diverse Populations In Today's Classrooms	3
TCH-ED 5463	Literacy Intervention across the Disciplines	3
TCH-ED 5312	Legal and Ethical Aspects of Teaching	3
Select One Special Method Course:		3
TCH-ED 432	Special Methods of Teaching English in Middle and High Schools	
TCH-ED 433	Special Methods of Teaching Mathematics in Middle and High Schools	

TCH-ED 435	Special Methods of Teaching Science in Middle and High Schools	
TCH-ED 436	Special Methods of Teaching Social Science in Middle and High Schools	
Select One Student Teaching Course:		
TCH-ED 5437	Student Teaching in Secondary School	9
or TCH-ED 5461	Student Teaching In Middle School	
Total Credits		44

Coursework for Middle School Education (select courses corresponding to your subject area).

Code	Title	Credits
All Middle School		
TCH-ED 5462	Middle School Philosophy and Organization	3
Science		
TCH-ED 5470	Philosophy and History of Science and Technology	3
Total semester credit hours for Middle School Language Arts		47
Total semester credit hours for Middle School Science		47

Coursework for Secondary Education (select courses corresponding to your subject area).

Code	Title	Credits
All Secondary Education		
Students in Art and Foreign Languages will take a total of 9 semester credit hours in either TCH-ED 5419 Student Teaching in Elementary School or TCH-ED 5437 Student Teaching in Secondary School.		
Art		
TCH-ED 402	Integrated Arts	3
Science		
TCH-ED 5470	Philosophy and History of Science and Technology	3
Total semester credit hours for Secondary Education - Art		47
Total semester credit hours for Secondary Education - English		44
Total semester credit hours for Secondary Education - Foreign Languages		44
Total semester credit hours for Secondary Education - Mathematics		44
Total semester credit hours for Secondary Education - Science		47
Total semester credit hours for Secondary Education - Social Science		44

Master of Arts: Counseling

Student Learning Outcomes

Graduates demonstrate skills and knowledge in the following areas:

- Theories and skills of counseling
- The counseling relationship
- Social and cultural foundations of counseling
- Career development
- Assessment
- Research methods
- Professional identity
- Group theory and skills
- Ethical standards and issues
- Diagnostic systems
- Preventive intervention and consultation
- Human development and biological factors in human functioning

Additional School Counseling Student Learning Outcomes*

- Student development
- Program implementation

- Professional relationships
- Leadership and advocacy
- Ethical and professional conduct
- Cultural competence

*The UMKC Counseling Program Goals are based on the Missouri Standards for the Preparation of Educators (MoSPE). The MoSPE Standards for School Counselors are the foundation for certification in Missouri.

Mission Statement

The mission of the Counseling programs at UMKC's School of Education is to prepare students to meet the varied psychological, social, and educational needs of individuals, couples and families in diverse urban communities. Based on national and state standards for excellence in counselor preparation, the programs prepare students to be credentialed as professional school counselors and licensed professional counselors.

Overview of the M.A. in Counseling

The Counseling Program is accredited by the Master's in Psychology and Counseling Accreditation Council. The master's degree is the first professional degree in counseling. Graduates holding this degree will gain the basic understanding and skills necessary for professional practice as a counselor. The program currently offers three emphasis areas leading to the M.A. degree: School Counseling, Couples and Family Counseling and Mental Health Counseling.

Eligibility for school counselor certification is based on meeting DESE requirements for grade point average, the Missouri School Counseling Content Assessment (MoSCA) and the Missouri School Counselor Evaluation (MEES). The other counseling emphases are designed for students who wish to work in a variety of settings other than the public schools. Those earning degrees in counseling become employed in community colleges, four-year colleges, specialized areas in large universities (e.g. career planning and placement), the court system and community-based mental health services. Many students go on for advanced degrees. Students in this program will take all of the coursework needed to be eligible for licensure as a professional counselor in the state of Missouri. Students may also arrange their internship setting placements similar to those in which they plan to work.

Requirements for Admission

- Overall undergraduate 2.75 GPA or better, or 3.0 or better (4.0 scale) in the last 60 semester hours.

Admission Procedures

Applications for the mental health and couples/family emphasis areas are accepted twice a year: by Sept. 1 to be admitted for the spring semester or by March 1 to be admitted for the fall semester. School Counseling applications are accepted and reviewed year-round. It is recommended all application materials be submitted at least one month prior to the beginning of the semester in which the student wishes to enroll.

Students who wish to apply to the program will have to submit two separate applications, one to the University (see A. below) and one to the Division of Counseling and Educational Psychology (see B. below).

A. Send to the UMKC Admission office:

1. Application for Admission (available on-line at www.umkc.edu/admissions (<http://www.umkc.edu/admissions/>)).
2. \$35 (domestic online) or \$50 (international) non-refundable application fee.
3. Official transcripts from all colleges/universities previously attended (in sealed envelope or sent directly from universities).

Mailing Address

University of Missouri-Kansas City
Office of Admissions
120 Administrative Center
5100 Rockhill Road
Kansas City, MO 64110-2499

B. Send to the Counseling and Educational Psychology office:

1. M.A. Counseling Application (detailed instructions available on the application).
2. Three letters of reference (use rating forms in the application packet).
3. Statement defining personal and professional goals.
4. Additional requirements may apply for international students.

Mailing Address

University of Missouri-Kansas City
 ATTN: Division of Counseling and Educational Psychology
 215 Education Building
 5100 Rockhill Road
 Kansas City, MO 64110-2499

Requirements for Graduation

Students must complete all courses in the M.A. program with a B or better in all coursework.

Students must apply for graduation by the posted deadline during their final term of enrollment. All students must be enrolled during the term they intend to graduate.

Students in the school counseling emphasis must pass the Missouri state assessments exams for school counseling.

For more specific information about the master's in Counseling and Guidance see <https://education.umkc.edu/academics/masters-program/ma-in-counseling/>

Degree Requirements

* Note: Only courses with an asterisk may be taken prior to being admitted to the program.

Note: Course can be taken if officially admitted to a graduate degree program.

Code	Title	Credits
Required Core Courses (All Emphases)		
CPCE 5500	Introduction To Professional Counseling *	3
CPCE 5503	Psychopathology: Diagnoses And Classification	3
CPCE 5505	Career Development I #	3
EDUC-R&P 5508	Principles And Methods Of Research *	3
CPCE 5515	Assessment Methods In Professional Counseling	3
CPCE 5520	Theories of Counseling	3
CPCE 5530	Methods Of Counseling	3
CPCE 5531	Counseling Practicum I	3
CPCE 5532	Counseling Practicum II	3
or CPCE 5533	Couples And Family Therapy Practicum	
CPCE 5540	Theories And Methods In Group Counseling	3
CPCE 5551	Counseling in a Pluralistic Society	3
CPCE 5553	Ethics And Professional Issues In Counseling	3
CPCE 5575A	Internship In Counseling I	3
CPCE 5575B	Internship In Counseling II	3
Please select one emphasis area:		18
Couples and Family Emphasis Area		
CPCE 5527	Theory And Methods Of Sexual Counseling	
CPCE 5541	Couples And Family Therapy	
CPCE 5542	Theories and Techniques of Family Systems Therapy	
CPCE 5590	Prevention, Consultation, and Program Evaluation in Community Settings	
EDUC-R&P 5513	Life Span Human Development *	
3 hours elective coursework		
Mental Health Emphasis		
CPCE 5527	Theory And Methods Of Sexual Counseling	
CPCE 5521	Special Counseling Methods - Substance Abuse	
CPCE 5590	Prevention, Consultation, and Program Evaluation in Community Settings	
EDUC-R&P 5513	Life Span Human Development	
6 hours elective coursework		
School Counseling Emphasis		
CPCE 5502	Fndtns Of Elementary & Secondary School Counseling & Guidance	
CPCE 5504	School Guidance Programs	

CPCE 5550	Organization And Administration Of Counseling Programs
TCH-ED 404	Education of the Exceptional Child and Youth (5404 section)
EDUC-R&P 5513	Life Span Human Development (Elementary, Secondary, and K-12 counselors)
EDUC-C&I 5512	Strategies For Effective Classroom Management (Required for those who do not hold a current teaching certificate.) *
EDUC-C&I 5517	Teaching Methods And Practices (Required for those who do not hold a current teaching certificate.) *

Total Credits

60

Master of Arts: Curriculum and Instruction

Degree Overview

The Master of Arts in Curriculum and Instruction (MA in C&I) is a degree sought by teachers who wish to deepen their knowledge of effective pedagogical practice to improve their students' learning. This degree has five options from which to choose:

- General
- Early Childhood
- Multicultural Education
- Subject Matter Specialty
- Teaching English as a Second Language

Requirements for Admission

Students admitted to School of Education graduate programs are governed by School of Education requirements and those of the School of Graduate Studies. Students seeking advanced degrees should consult the School of Graduate Studies section for regulations applicable to all graduate students.

Criteria for admission to a Master of Arts in Curriculum and Instruction degree program include the following:

- Baccalaureate degree from an accredited institution
- 3.0 GPA or higher (on a 4-point scale)
- One-page statement of interest/purpose
- Two letters of recommendation

Student Learning Outcomes

1. Evaluate instructional programs using knowledge of curriculum theory.
2. Interpret and design multiple methods of assessment for the purposes of engaging students in learning, monitoring learning, and guiding decision making.
3. Identify and describe concepts of individual, social, and cultural identities as they relate to planning for teaching and learning in an urban setting.
4. Conduct research that includes collection and analysis of data on at least one variable that has potential to influence student achievement.

Degree Requirements

Core Courses (meet with advisor before enrolling)

The core for all options is made up of 18 credit hours of coursework from six categories: curriculum theory/ design, foundations of education, human development, research, assessment, and culture and diversity. Additionally, all MA in C&I options require a minimum of 12 credit hours devoted to a particular area of interest and a culminating experience of action research (3 credit hours).

Code	Title	Credits
Curriculum Theory/Design		
Select one of the following:		3
EDUC-C&I 5505	Introduction To Curriculum Theory	
EDUC-C&I 5506	Curriculum Design	
Foundations of Education		
Select one of the following:		3
EDUC-UL 5525	Cultural Foundations Of Education	
EDUC-UL 5526	Philosophical Foundations Of Education	
EDUC-UL 5527	Historical Foundations Of Education	

Human Development

Select one of the following: 3

EDUC-R&P 5502	Advanced Educational Psychology
EDUC-R&P 5510	Child Behavior And Development
EDUC-R&P 5512	Adolescent Development and the School
EDUC-R&P 5513	Life Span Human Development

Research

Select one of the following: 3

EDUC-R&P 5505	Statistical Methods I
EDUC-R&P 5508	Principles And Methods Of Research
EDUC-C&I 5544	Theory and Research in Second Language Teaching and Learning

Assessment

Select one of the following: 3

EDUC-C&I 5518	Assessment of Diverse Learners, Engagement and Motivation
EDUC-C&I 5596	Classroom Assessment
EDUC-SP 5508	Assessment for Special Educators
EDUC-R&P 5522	Principles Of Testing
TCH-ED 5442	Observation, Assessment & Screening in Early Childhood Classrooms

Culture and Diversity

Select one of the following: 3

EDUC-C&I 5561	Teaching Diverse Populations In Today's Classrooms
EDUC-C&I 5514	Overview of Culturally Responsive Pedagogy
EDUC-C&I 5519	Discipline Specific Pedagogy for Diverse Learners
TCH-ED 5438	Culturally Responsive Strategies for Teaching Diverse Learners

Culminating Experience

One required: 3

EDUC-C&I 5595	Action Research For Practitioners
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Total Credits 21

General Emphasis

Student Learning Outcomes

Students graduating from this program will:

- 1. Evaluate instructional programs using knowledge of curriculum theory.
- 2. Interpret and design multiple methods of assessment for the purposes of engaging students in learning, monitoring learning, and guiding decision making.
- 3. Identify and describe concepts of individual, social, and cultural identities as they relate to planning for teaching and learning in an urban setting.
- 4. Conduct research that includes collection and analysis of data that has potential to influence student achievement.

Program Requirements

The general option is the most flexible and allows students to create a program to meet their desire to become an accomplished teacher. This degree may be pursued concurrently with teacher certification. Additional coursework is required for certification. In addition to the core courses, students take coursework related to their educational role and supporting coursework in curriculum and instruction.

Code	Title	Credits
Core Courses		
Core Courses (meet with adviser before enrolling)		21
Courses Related to the Student's Educational Role		
Approved coursework may be taken in any college or school of the University ¹		15
Total Credits		36

¹ They should form a coherent body of work related to the student's educational goals.

Early Childhood Emphasis Student Learning Outcomes

Students graduating from this program will:

- 1. Evaluate instructional programs using knowledge of curriculum theory.
- 2. Interpret and design multiple methods of assessment for the purposes of engaging students in learning, monitoring learning, and guiding decision making.
- 3. Identify and describe concepts of individual, social, and cultural identities as they relate to planning for teaching and learning in an urban setting.
- 4. Conduct research that includes collection and analysis of data on at least one variable that has potential to influence student achievement.

Program Requirements

The following courses are required in addition to the core courses listed.

The early childhood emphasis is for those who hold elementary or early childhood teacher certification, or for those who are interested in the field of early care and education. The master's degree alone does not lead to certification in early childhood. Additional courses are required to obtain certification to teach early childhood education.

Code	Title	Credits
Early Childhood Courses		
Select five of the following:		15
EDUC-C&I 5531	Mathematics Learning Difficulties: Identification and Intervention	
EDUC-C&I 5578	Play In Early Childhood Education	
EDUC-C&I 5579	History, Theories, And Issues In Early Childhood Education	
EDUC-C&I 5506	Curriculum Design	
EDUC-C&I 5514	Overview of Culturally Responsive Pedagogy	
EDRD 5501	Teaching Of Reading	
EDRD 5502	Early Literacy and Language Development	
EDRD 5530	Reading Instruction for K-12 English Language Learners	

Subject Matter Emphasis Student Learning Outcomes

Students graduating from this program will:

- 1. Evaluate instructional programs using knowledge of curriculum theory.
- 2. Interpret and design multiple methods of assessment for the purposes of engaging students in learning, monitoring learning, and guiding decision making.
- 3. Identify and describe concepts of individual, social, and cultural identities as they relate to planning for teaching and learning in an urban setting.
- 4. Conduct research that includes collection and analysis of data that has potential to influence student achievement.

Subject Matter Specialty Options

Subject Matter Specialty option focus areas include art, foreign languages, mathematics, and social studies. In addition to the core courses, students take coursework related to their area of certification. For each of the focus areas, the student works with an advisor to establish a program of study designed for the specific subject matter specialty. For foreign languages, see <http://cas.umkc.edu/foreignlanguages/> and contact Alice Reckley (reckleya@umkc.edu), advisor.

Secondary Art

Code	Title	Credits
EDUC-C&I 5513	Effective Communication In The Classroom	3
EDUC-C&I 5515	Integrated Arts As A Model For Classroom Instruction	3
EDUC-C&I 5523	Advanced Literature For Children	3
EDUC-SP 5516	Collaborating with Families and Other Professionals	3

Graduate-Level Art History or Studio Art Course	3
Total Credits	15

Secondary Mathematics

Code	Title	Credits
EDUC-C&I 5511	Developing Multidisciplinary Problem Solving Skills	3
EDUC-C&I 5536	Specialized Secondary School Curriculum Mathematics	3
Three additional courses to be determined with faculty advisor.		9
Total Credits		15

Secondary Social Studies

Code	Title	Credits
EDUC-C&I 5504	Social Studies In the Schools	3
GEOG 5509	Urban Geography	3
Additional credit hours		9
Total Credits		15

Emphasis in Teaching English as a Second Language Student Learning Outcomes

Students graduating from this program will:

- 1. Evaluate instructional programs using knowledge of curriculum theory.
- 2. Interpret and design multiple methods of assessment for the purposes of engaging students in learning, monitoring learning, and guiding decision making.
- 3. Identify and describe concepts of individual, social, and cultural identities as they relate to planning for teaching and learning in an urban setting.
- 4. Conduct research that includes collection and analysis of data on at least one variable that has potential to influence student achievement.

Program Requirements

The following courses are required in addition to the core courses listed:

Code	Title	Credits
Teaching English as a Second Language		
EDUC-C&I 5545	Linguistics for ESOL Teachers	3
EDUC-C&I 5546	Intercultural communication	3
EDUC-C&I 5547	Second Language Acquisition	3
EDUC-C&I 5548	English As A Second Language In Content Areas	3
EDUC-C&I 5549	Practicum In English As A Second Language	3
EDUC-C&I 5542	Methods of Teaching English as a Second Language	3
Total Credits		18

Courses must be approved by a faculty advisor.

Master of Arts: Educational Administration Student Learning Outcomes

Upon completion of the MA in Educational Administration program, the student will:

- have a thorough grounding of higher education/student affairs as a field of study
- understand organizational, management, leadership and supervision theories and issues
- understand developmental theories as they relate to college students
- understand professional requirements and ethics of the field
- develop self-awareness
- develop multicultural competencies
- improve communication skill

- develop skills to use technology to enhance the educational experience
- develop the ability to analyze and interpret current research in the field
- increase skills to apply research
- improve ability to integrate and synthesize information

Missouri Leader Standards (<http://catalog.umkc.edu/colleges-schools/education/master-of-arts-educational-administration/LeaderStandardsContinuum.pdf>)

Standard #1 Vision, Mission, and Goals

Education leaders have the knowledge and ability to ensure the success of all students by facilitating the development, articulation, implementation, and stewardship of a school or district vision of learning supported by the school community.

Standard #2 Teaching and Learning

Education leaders have the knowledge and ability to ensure the success of all students by promoting a positive school culture, providing an effective instructional program, applying best practice to student learning, and designing comprehensive professional growth plans for staff.

Standard #3 Management of Organizational Systems

Education leaders have the knowledge and ability to ensure the success of all students by managing the organizational structure, personnel, and resources in a way that promotes a safe, efficient, and effective learning environment.

Standard #4 Collaboration with Families and Stakeholders

Education leaders have the knowledge and ability to ensure the success of all students by collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources.

Standard #5 Ethics and Integrity

Education leaders have the knowledge and ability to ensure the success of all students by acting with integrity and in an ethical manner.

Standard 6: Professional Development

Education leaders have the knowledge and ability to ensure the success of all students by remaining current on best practices in education administration and school-related areas as evidenced in his/her annual professional development plan.

Professional Standards for Educational Leaders (<http://catalog.umkc.edu/colleges-schools/education/master-of-arts-educational-administration/ProfessionalStandardsforEducationalLeaders2015forNPBEAFINAL.pdf>)

(formerly known as ISLLC Standards)

Standard 1. Mission, Vision, and Core Values

Effective educational leaders develop, advocate, and enact a shared mission, vision, and core values of high-quality education and academic success and well-being of *each* student.

Standard 2. Ethics and Professional Norms

Effective educational leaders act ethically and according to professional norms to promote *each* student's academic success and well-being.

Standard 3. Equity and Cultural Responsiveness

Effective educational leaders strive for equity of educational opportunity and culturally responsive practices to promote *each* student's academic success and well-being.

Standard 4. Curriculum, Instruction, and Assessment

Effective educational leaders develop and support intellectually rigorous and coherent systems of curriculum, instruction, and assessment to promote *each* student's academic success and well-being.

Standard 5. Community of Care and Support for Students

Effective educational leaders cultivate an inclusive, caring, and supportive school community that promotes the academic success and well-being of *each* student.

Standard 6. Professional Capacity of School Personnel

Effective educational leaders develop the professional capacity and practice of school personnel to promote *each* student's academic success and well-being.

Standard 7. Professional Community for Teachers and Staff

Effective educational leaders foster a professional community of teachers and other professional staff to promote *each* student's academic success and well-being.

Standard 8. Meaningful Engagement of Families and Community

Effective educational leaders engage families and the community in meaningful, reciprocal, and mutually beneficial ways to promote *each* student's academic success and well-being.

Standard 9. Operations and Management

Effective educational leaders manage school operations and resources to promote *each* student's academic success and well-being.

General Nature of the Program

The master of arts degree in educational administration, accredited by the National Council for Certification of Teacher Education and the Missouri Department of Elementary and Secondary Education, is designed to provide entry-level preparation for students planning careers in school administration.

The course of study includes a sequence of basic and advanced studies and other applied learning experiences. Students have the opportunity to develop understanding and skills through seminar courses, individual study, and the practice of inquiry in addition to study in required courses. The program is designed to support a focus on professional effectiveness and to foster research, evaluation and assessment activities for students. Instruction and mentored practical experiences will make frequent use of and reference to evaluation and assessment of student performance.

Emphasis Area: Higher Education

Master of Arts in Educational Administration: Higher Education Emphasis

Admissions

The Higher Education faculty review all admissions applications and make admission decisions. Admission for the M.A. in educational administration, with an emphasis in Higher Education, requires that the following steps be successfully completed:

Admission Requirements

1. **Full admission** to the Higher Education Program requires:
 - Completion of the UMKC graduate admission application.
 - An undergraduate 3.0 GPA or higher.
 - Cover sheet.
 - Two letters of reference with recommendation form.
 - A written statement of purpose (500 words maximum) that outlines the student's rationale for application to the program and learning goals.
2. Students who do not meet the undergraduate grade-point average can receive conditional admission to the program. Students must complete a minimum of six hours of core requirements with a grade of "B" or better within the first two semesters of enrollment.
3. Priority application deadlines are as follows:
 - April 1 for summer term
 - July 1 for fall term
 - November 1 for spring term

Student Learning Outcomes

Students graduating from this program will:

- **Grounding in the Field.** Students will demonstrate increased knowledge of the historical development of the higher education system and leadership in the profession.
- **Communication.** Students will demonstrate improved ability to communicate in multiple forms (e.g., orally, written, presentation).
- **Ethics.** Students will be able to identify and appropriately address ethical issues that occur at the post-secondary level and understand how ethical statements from professional organizations guide behavior.
- **Diversity.** Students will understand the multiple forms of diversity found on university campuses. Students will reflect on their own experience and its influences behavior.

Student Learning Outcomes

Program Requirements

The graduate program in Educational Administration with an emphasis in Higher Education prepares administrators and educators for the demands of leadership in colleges or universities and other institutional settings. Through a comprehensive master's program for individuals wanting a graduate degree or through coursework taken for professional development, the program supports administrative leaders and educators who seek to enhance their professional competencies and effectiveness in today's increasingly diverse work place.

Student programs of study at the master's level are developed to reflect required core courses that provide all master's level students with fundamental understandings of higher education, student development, organizational leadership and diversity. In addition, the program offers a range of cognate courses that are tailored to meet specific student interests or learning goals in administrative leadership or student affairs administration. Advising materials and meetings with faculty enable students to create academic programs that meet their unique learning needs. Unless indicated, all courses are available to non-degree seeking students for professional development.

All master's level students will design a full-term internship in collaboration with an on-site supervisor and the instructor of the fieldwork course. The purpose of the internship is to provide students with guided opportunities to enhance skills, expand their professional experience base, and apply course learning in new settings.

Code	Title	Credits
Required Core Courses		
EDUC-UL 5526	Philosophical Foundations Of Education	3
EDUC-UL 5550	Organization And Administration Of Higher Education	3
EDUC-UL 5556	The College Student	3
EDUC-UL 5560	Leadership In Higher Education	3
EDUC-UL 5564	History Of Higher Education	3
EDUC-UL 5566	Racial And Ethnic Diversity, And Cultural Understanding	3
EDUC-UL 5567	Higher Education Capstone	3
Internship		
EDUC-UL 5571	Internship In Higher Education	3
Research and Statistics		
EDUC-R&P 5508	Principles And Methods Of Research	3
Focus Area		
Select one of the following areas:		9
Focus Area: Student Affairs Administration		
EDUC-UL 5551	Student Affairs Administration In Higher Education	
EDUC-UL 5558	Advanced Student Development Theory	
EDUC-UL 5559	Current Issues In Community Colleges	
Focus Area: Foundations of Education		
EDUC-UL 5524	Philosophical Inquiry And Education	
EDUC-UL 5525	Cultural Foundations Of Education	
EDUC-UL 5527	Historical Foundations Of Education	
EDUC-UL 5528	Sociological Foundations Of Education	
Focus Area: Sports Administration & Exercise Science		
PHYS-ED 5561	Social-Cultural Aspects of Sport and Physical Activity	
PHYS-ED 5570	Sport Psychology	
PHYS-ED 5530	Organization And Administration Of Athletics	
Students with no focus area must select three of the following electives: ¹		
EDUC-UL 5525	Cultural Foundations Of Education	
EDUC-UL 5526	Philosophical Foundations Of Education	
EDUC-UL 5528	Sociological Foundations Of Education	
EDUC-UL 5551	Student Affairs Administration In Higher Education	
EDUC-UL 5557	Legal Aspects Of Higher Education	
EDUC-UL 5637	Community College	
EDUC-UL 5652	Financial Aspects Of Higher Education	
EDUC-UL 5558	Advanced Student Development Theory	
CPCE 5505	Career Development I	

EDUC-R&P 5505	Statistical Methods I
PHYS-ED 5561	Social-Cultural Aspects of Sport and Physical Activity
PHYS-ED 5570	Sport Psychology
PHYS-ED 5530	Organization And Administration Of Athletics

Total Credits

36

¹ **Note:** The student may select courses from other disciplines to meet elective hours. All coursework must be approved by the advisor.

Emphasis Area: School (Grades K-12) Administration

Coordinator:

Uzziel Pecina, (816) 235-2716, pecinau@umkc.edu (friendj@umkc.edu)

Admissions

Admission and retention for the M.A. in educational administration, with an emphasis in school (PK-12) administration, requires that the following steps be successfully completed:

Admission into Program

- Completion of a course in education of the exceptional child.
- Attain an undergraduate GPA of at least 2.75.
- Provide copy of a current permanent or professional teaching license/certificate.
- Provide resume showing at least one year of certified teaching experience in elementary, middle or secondary schools under a fully licensed teaching certificate (temporary or provisional certification does not meet this requirement).
- Essay statement regarding past, present and future career goals (500 words or less).
- A minimum of three letters of reference on official letterhead from a direct supervisor of professional teaching experience.

Students who do not meet all of the above admission requirements may receive conditional admission to the program. Full admission is contingent upon completion of a minimum of six hours of core requirements during the first semester of enrollment with a grade of 'B' or better.

Acceptance into Practicum

- Successful completion of all coursework (1) with a B grade or better.

Program Completion and Recommendation for Administrative Certificate

- Successful completion of the practicum.
- Recommendation of the faculty based on coursework completion, development of an administrative platform, and action research presentation.
- Completion of the student exit survey.

Post-Program Completion

- Student completion of ELPF graduate survey relative to preparation program and ELCC standards.
- Employer survey completion (supervisor).

1. No more than 6 post-undergraduate/graduate credit hours may transfer into the M.A. program.
2. Students must file a **Program Plan of Study** while enrolled in the course EDUC-UL 5501.
3. EDUC-UL 5501 is the prerequisite to EDUC-UL 5502 ; and EDUC-UL 5502 is the prerequisite to EDUC-UL 5503. These courses are mandatory and *cannot* be waived. Students must enroll in these courses in sequence.

Master of Arts in Educational Administration: PK-12 Certification

Student Learning Outcomes

Students graduating from this program will:

- See student Learning Outcomes listed below

Student Learning Outcomes

The Aspiring School Administrator will:

- use multiple data to describe school climate and culture including demographic information regarding students, faculty, and community;
- develop a school improvement plan based on data and aligned with best practices;

- communicate effectively with all stakeholders: students, staff, parents, community and central office administration;
- engage in activities and best practices related to both formative and summative assessments to promote instructional improvement; and
- identify legal implications related to school operations involving all stakeholders: students, staff, parents, community members, and central office administration.

Students begin their program of study with a cohort group of other potential school leaders and will take a series of 3-credit-hour block courses. Each cohort will work collaboratively throughout its studies and be led by University faculty.

Students will complete both individual and group projects, over the course of their degree program, and participate in field experiences each semester. While the three-block sequence is intended for school leaders at every level, it is expected that students will tailor their elective coursework and their culminating experience (practicum) to the building level at which they hold their teaching credentials.

Students who complete the master of arts in educational administration may be recommended for initial certification as a building administrator for Missouri. Passing score of 10 on the Missouri School Leaders' Performance Assessment and passing score of 220 on Missouri Pearson Content Exam are required for principal certification in the state of Missouri.

Degree Requirements

Code	Title	Credits
Theoretical and Functional Aspects of Educational Administration		
EDUC-UL 5501	Foundations Of School Leadership & Organization (Block I) ¹	3
EDUC-UL 5502	Building Administration And Management (Block II) ¹	3
EDUC-UL 5503	Student, Staff And Organization Development (Block III) ¹	3
EDUC-UL 5507	Instructional Supervision	3
EDUC-UL 5515	Governmental And Legal Aspects Of Education	3
EDUC-UL 5518	Leadership for School Improvement	3
EDUC-UL 5520	Data Driven Leadership for Reculturing Schools	3
EDUC-UL 5574	Administrative Practicum	3
Related and Supporting Areas		
Research - Select one of the following:		3
EDUC-R&P 5505	Statistical Methods I	
EDUC-R&P 5508	Principles And Methods Of Research	
EDUC-C&I 5505	Introduction To Curriculum Theory	3
EDUC-UL 5525	Cultural Foundations Of Education	3
Total Credits		33

¹ EDUC-UL 5501, EDUC-UL 5502 and EDUC-UL 5503 must be taken sequentially. EDUC-UL 5501 is offered in the fall semester only.

Master of Arts: Language and Literacy

Student Learning Outcomes

Students graduating from this program will:

- **SLO 1: FOUNDATIONAL KNOWLEDGE** Candidates synthesize major theoretical, conceptual, historical, and evidence-based foundations of literacy and language, the ways in which they interrelate, and the role of the reading/literacy specialist in schools. **SLO 2: CURRICULUM AND INSTRUCTION** Candidates use foundational knowledge to design literacy curricula to meet needs of learners, especially those who experience difficulty with literacy; design, implement, and evaluate small-group and individual evidence-based literacy instruction for learners; collaborate with teachers to implement effective literacy practices. **SLO 3: ASSESSMENT AND EVALUATION** Candidates evaluate, select, and use valid, reliable, fair, and appropriate assessment tools to screen, diagnose, and measure student literacy achievement; inform instruction and evaluate interventions; assist teachers in their understanding and use of assessment results; advocate for appropriate literacy practices to relevant stakeholders. **SLO 4: DIVERSITY AND EQUITY** Candidates synthesize research, relevant theories, pedagogies, and essential concepts of diversity and equity; the ways in which these interrelate with themselves and others as cultural beings; create classrooms and schools that are inclusive and affirming; advocate for equity at school, district, and community levels. **SLO 5: LEARNERS AND THE LITERACY ENVIRONMENT** Candidates use a variety of print and digital materials to meet the developmental needs of all learners; engage and motivate all learners; integrate digital technologies in appropriate, safe, and effective ways; and collaborate with school personnel to foster a positive climate that supports a literacy-rich learning environment. **SLO 6: PROFESSIONAL LEARNING AND LEADERSHIP** Candidates collaborate with colleagues to use evidence to design and facilitate literacy interventions in school- or community-based settings; evaluate, revise, and improve their practice; develop their leadership and facilitation skills; and advocate on behalf of teachers, students, families, and communities.

Language and Literacy: MA Degree Program

MA Program Mission

The Language and Literacy MA Degree Program prepares exemplary literacy educators to meaningfully contribute to schools and communities as teachers, leaders, and advocates. Students in this program study literacy from critical sociopolitical, cultural, psychological, historical, linguistic, and literary perspectives, and apply their knowledge in culturally and linguistically diverse classrooms. Students develop and evaluate effective, evidence-based instructional strategies, practices, and programs that support literacy learning and achievement at PreK-12, college, or adult levels. The program curriculum emphasizes collaborative inquiry and innovation, equity, advocacy, and professional leadership and learning.

The Language and Literacy MA program is aligned with national standards for the preparation of specialized literacy professionals, as established by the International Literacy Association and CAEP. It also reflects principles and rigorous standards approved by Missouri's State Board of Education.

MA Educational Goals

Goal 1: Candidates will synthesize foundational knowledge related to language and literacy development, including appropriate cognitive, linguistic, motivational, and critical sociocultural theories, relevant research, and essential concepts of diversity and equity.

Goal 2: Candidates will design, implement, and evaluate literacy curriculum and instruction that meets the needs of diverse learners through effective, evidence-based practices, assessments, and environments.

Goal 3: Candidates will collaborate with a variety of stakeholders, including professional colleagues and families, to positively impact literacy learning and achievement in PreK-12, college, or adult educational contexts.

Goal 4: Candidates will advocate for ethical, equitable, and inclusive literacy practices, assessments, and learning environments that recognize and value diversity in schools and society.

Goal 5: Candidates will engage in professional learning, leadership and systematic and ongoing reflection on their practice.

MA Student Learning Objectives

Adapted from *Standards for the Preparation of Literacy Professionals 2017*. Specialized Literacy Professionals Matrix by Roles © 2018 by the International Literacy Association.

SLO 1: FOUNDATIONAL KNOWLEDGE

Candidates synthesize major theoretical, conceptual, historical, and evidence-based foundations of literacy and language, the ways in which they interrelate, and the role of the reading/literacy specialist in schools.

SLO 2: CURRICULUM AND INSTRUCTION

Candidates use foundational knowledge to design literacy curricula to meet needs of learners, especially those who experience difficulty with literacy; design, implement, and evaluate small-group and individual evidence-based literacy instruction for learners; collaborate with teachers to implement effective literacy practices.

SLO 3: ASSESSMENT AND EVALUATION

Candidates evaluate, select, and use valid, reliable, fair, and appropriate assessment tools to screen, diagnose, and measure student literacy achievement; inform instruction and evaluate

interventions; assist teachers in their understanding and use of assessment results; advocate for appropriate literacy practices to relevant stakeholders.

SLO 4: DIVERSITY AND EQUITY

Candidates synthesize research, relevant theories, pedagogies, and essential concepts of diversity and equity; the ways in which these interrelate with themselves and others as cultural beings; create classrooms and schools that are inclusive and affirming; advocate for equity at school, district, and community levels.

SLO 5: LEARNERS AND THE LITERACY ENVIRONMENT

Candidates use a variety of print and digital materials to meet the developmental needs of all learners; engage and motivate all learners; integrate digital technologies in appropriate, safe, and effective ways; and collaborate with school personnel to foster a positive climate that supports a literacy-rich learning environment.

SLO 6: PROFESSIONAL LEARNING AND LEADERSHIP

Candidates collaborate with colleagues to use evidence to design and facilitate literacy interventions in school- or community-based settings; evaluate, revise, and improve their practice; develop their leadership and facilitation skills; and advocate on behalf of teachers, students, families, and communities.

Program Requirements

This degree can usually be completed within five semesters. Coursework is available in online and hybrid formats.

Code	Title	Credits
Specific Reading Teaching Knowledge Requirements (21-24 hours)		
EDRD 5439	Language and Literacy Across the Disciplines	3
EDRD 5501	Teaching Of Reading	3
EDRD 5502	Early Literacy and Language Development	3
EDRD 5510	Adolescent Practicum in Literacy Assessment and Intervention	3
EDRD 5511	Advanced Literacy Assessment and Evaluation	3
EDRD 5520	Elementary Practicum in Literacy Assessment and Intervention (*Culminating Practicum)	3
EDRD 5601	Organizing And Guiding The Reading Program	3
EDRD 5650	Dyslexia and Related Learning Differences	3
EDRD 5530	Reading Instruction for K-12 English Language Learners	3
EDUC-C&I 5523	Advanced Literature For Children	3
EDRD 5541	Teaching Reading Improvement: Secondary, College, and Adult Levels	3
Professional Requirements (9-15 credit hours)		
EDUC-SP 5515	Applied Behavior Analysis for Teachers: Understanding and Applying Theories of Behavior	3
EDUC-SP 5516	Collaborating with Families and Other Professionals	3
TCH-ED 5404	Education of the Exceptional Child and Youth	3
EDUC-R&P 5510	Child Behavior And Development	3
EDUC-R&P 5512	Adolescent Development and the School	3

Total: Minimum 30 credit hours required

Master of Arts: Special Education

Admission Requirements

Candidates entering the master's program with emphasis in MM/CC disabilities must hold a baccalaureate degree and have an overall 3.0 GPA or higher on a 4.0 scale and successfully complete an interview with program faculty. Official admission to the University of Missouri-Kansas City graduate school is required. Admission deadlines are at least 10 business days prior to the beginning of each new term.

The Master of Arts in Special Education degree program leads to initial teacher certification in Special Education in the state of Missouri. The focus for certification is mild/moderate cross-categorical disabilities. This degree is sought by those who wish to enhance their knowledge and skills in teaching children and adolescents with exceptional learning needs, to serve as advocates for children and their families, and to work collaboratively with colleagues.

Student Learning Outcomes

Students graduating from this program will:

- 1. Understand how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.
- 2. Understand individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.
- 3. Work with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
- 4. Understand the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.
- 5. Understand how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
- 6. Understand and use multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

- 7. Plan instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.
- 8. Understand and use a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.
- 9. Engage in ongoing professional learning and use evidence to continually evaluate their practice, particularly the effects of their choices and actions on others (learners, families, other professionals, and the community), and adapt practice to meet the needs of each learner.
- 10. Seek appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

Program Requirements

Code	Title	Credits
TCH-ED 5314	Cultural Diversity and Teaching English Language Learners	3
EDUC-R&P 5502	Advanced Educational Psychology	3
TCH-ED 5385	Teaching and Learning with Technology	3
TCH-ED 5413	Mathematics in the Elementary School I	3
TCH-ED 5438	Culturally Responsive Strategies for Teaching Diverse Learners	3
TCH-ED 5463	Literacy Intervention across the Disciplines	3
EDRD 5439	Language and Literacy Across the Disciplines	3
EDRD 5502	Early Literacy and Language Development	3
EDRD 5501	Teaching Of Reading	3
EDUC-C&I 5523	Advanced Literature For Children	3
EDUC-C&I 5531	Mathematics Learning Difficulties: Identification and Intervention	3
EDUC-R&P 5512	Adolescent Development and the School	3
EDUC-SP 5506	Special Education Law, Individualized Education Programs (IEP's), and Transition	3
EDUC-SP 5507	Introduction To Mild/Moderate Cross-Categorical Disabilities	3
EDUC-SP 5508	Assessment for Special Educators	3
EDUC-SP 5509	Cognition & Lang Dev In Mild/Mod Cross-Categorical Disabilities	3
EDUC-SP 5510	Practicum in Special Education	1
EDUC-SP 5511	Practicum II – Special Education	1
EDUC-SP 5512	Methods I: Introduction to Teaching Students with Mild/Moderate Cross-Categorical	3
EDUC-SP 5513	Methods II: Teaching Students with Mild/Moderate Cross-Categorical Disabilities	3
EDUC-SP 5514	Understanding and Addressing Challenging Behavior in the Classroom	3
EDUC-SP 5515	Applied Behavior Analysis for Teachers: Understanding and Applying Theories of Behavior	3
EDUC-SP 5516	Collaborating with Families and Other Professionals	3
EDUC-SP 5570	Student Teaching in Special Education	8
Educational foundations elective:		
EDUC-UL 5525	Cultural Foundations Of Education	
EDUC-UL 5526	Philosophical Foundations Of Education	
EDUC-UL 5528	Sociological Foundations Of Education	
Culminating project for the MA in Special Education:		
EDUC-C&I 5595	Action Research For Practitioners	3
Total Credits		76

Minor: Exercise Science

Student Learning Outcomes

Students graduating from this program will:

- Integrate anatomic and biomechanics components of human movement, especially as they interact during athletic performance, bouts of exercise and physical activities of daily life.
- Describe, explain, and apply physiological facts and principles to real life situations, especially as they occur in athletics, and fitness and health promotion establishments.
- Identify the specific anatomical considerations, physical conditioning requirements, diet and exercise regimes, and injury prevention strategies, needed to improve physical health outcomes.

- Describe ways to use theories of behavior change to develop programs addressing a variety of lifestyle changes.
- Demonstrate superior knowledge of exercise science.

Program Requirements

Coursework must be completed with a grade of C- or better.

Code	Title	Credits
HLSC 110	Personal Wellness	3
HLSC 120	Anatomy & Physiology I *	4
HLSC 160	Anatomy and Physiology II *	4
PHYS-ED 300	Mechanical Analysis of Human Movement (prereq: HLSC 120 and HLSC 160 or concurrent enrollment)	3
PHYS-ED 350	Physiology of Sport and Exercise (prereq: HLSC 120 and HLSC 160 or concurrent enrollment)	3
PHYS-ED 370	Psychology of Sport and Exercise	3
PHYS-ED 391	Fitness Assessment and Exercise Prescription	3
Total Credits		23

* If students are transferring an approved course equivalency for Anatomy & Physiology I & II that totals less than eight hours, they are required to take courses from the "strongly recommended" list to ensure they have earned a total of 23 hours to be awarded the Minor in Exercise Science. These courses include PHYS-ED 157, HLSC 200, and PHYS-ED 398.

Ph.D. - Counseling Psychology

Student Learning Outcomes

The main goal of our program is to prepare entry level health service psychologists trained in a counseling psychology model to improve the welfare of individuals and communities through scholarship and applied interventions. This main goal is broken down in four specific aims:

Aim 1: Graduates develop a professional identity as a health service counseling psychologist.

Aim 2: Graduates understand the importance and complexity of cultural and individual diversity, including knowledge of their cultural selves. They acquire the competence to apply knowledge of diversity in all areas of science and practice, and will engage in practice activities and research, attending to minority populations and/or other aspects of diversity.

Aim 3: Graduates understand psychology as a scientific discipline. They are able to create, evaluate, and ethically contribute to the empirical knowledge base of psychological practice and theory. They can carrying out original and independent empirical investigations of psychological phenomena.

Aim 4: Graduates are trained to meet the varied needs of their diverse clients using ethical interventions based in counseling theory and informed by science. Graduates are able to establish effective professional and inter-professional/interdisciplinary relationships and effectively use and provide supervision, consultation, and instruction/teaching.

Overview

The PhD program in Counseling Psychology offers broad and general training that emphasizes multicultural and individual diversity within a scientist-practitioner model. Our program model is intended to educate ethical and flexible health service counseling psychologists who can work in a variety of settings and rely on the underlying philosophies and values of counseling psychology and the scientist-practitioner model. The program has been fully accredited by the American Psychological Association since 1985.

Admission Criteria

The program accepts bachelor's-level and master's-level applicants. Approximately six to ten students are admitted to the Counseling Psychology program each year.

Recommended minimum for bachelor's level applicants:

- The completion of a bachelor's degree with a major in psychology.
- Official GRE scores obtained within the last five years.
- An overall undergraduate 3.0 GPA covering all college work taken prior to the bachelor's degree, or 3.25 for the major courses or the last 60 credits of the bachelor's degree.
- Additional requirements may apply for international students.

Recommended minimum for master's level applicants:

- The completion of a master's degree in counseling or a closely related area.
- Official GRE scores obtained within the last five years.
- Graduate GPA of 3.5 or above.
- Additional requirements may apply for international students.

Applicants will be evaluated using the following dimensions: academic potential, research potential, research interest, interpersonal characteristics, contribution to program diversity, commitment to multiculturalism, professional goals and interest, understanding of the profession of counseling psychology.

Alternative Criteria: students who do not meet the regular recommended criteria may be admitted under alternative criteria provided there is good reason to believe that the regular criteria do not adequately manifest the student's potential to do quality work in the program. The Counseling Psychology faculty reserves the right to require those who are admitted under the alternative criteria to take some background core courses in psychology before or during the first year of their doctoral training in the areas of general psychology, theories of personality, tests and measurement, abnormal psychology, experimental psychology, and introductory statistics. This decision will be made by the admission committee and the student's assigned advisor, and communicated to the student before he/she starts the program.

The admission committee will consist of three or more faculty members and one or more student members. The student member must be in his or her final year of the academic program (i.e., doing the pre-doctoral internship in the subsequent academic year). Using the above criteria, the admission committee will select approximately thirty applicants to be offered interviews. Campus interview will be recommended, but not required. Phone interviews are offered for those who cannot make the campus interview on our Interview Day. Admission will be offered to a small number of the applicants interviewed. In addition, the committee selects a list of those who were interviewed to serve as alternates. Candidates will be notified of the admissions decisions no later than March 15. Candidates are required to act on the notifications by April 15th. If a first-round candidate does not accept, an alternate for the position will be selected from the list of the remaining candidates. Alternates will have 7 days to act on the notification, but if the offer is made on or after April 15, they will have 3 days to give a definite response. In making decisions, the Counseling Psychology Program at UMKC does not discriminate against anyone on the basis of race, gender, ethnicity, sexual orientation, age, religion, nationality, or physical disability and appearance.

Admission Requirements

Admission deadline: December 1st

Please note that the application materials must be submitted to two separate offices:

MATERIALS TO BE SENT TO THE **UMKC ADMISSIONS OFFICE:**

University of Missouri – Kansas City
Office of Admissions
120 Administrative Center
5100 Rockhill Road
Kansas City, MO 64110-2499
Phone: (815) 235-1111

1. UMKC Application for Admission* online at <http://www.umkc.edu/admissions/>
2. Application Fee
3. Official transcripts from all post-secondary institutions
4. Official Graduate Record Examination (GRE), including the GRE writing scores, sent directly from ETS, obtained within the last 5 years. After you have taken the GRE, scores take 5-6 weeks to arrive at UMKC.

MATERIALS TO BE SENT TO **DIVISION OF COUNSELING AND EDUCATIONAL PSYCHOLOGY OFFICE:**

University of Missouri – Kansas City
ATTN: PhD in Counseling Admissions Committee
215 Education Building
5100 Rockhill Road
Kansas City, MO 64110-2499
Phone: 816)235-2722
Email: umkccep@umkc.edu

1. Cover Sheet for the PhD in Counseling Psychology (attached)
2. Curriculum Vita
 - Personal information (address, phone, email)
 - Educational background
 - Relevant clinical and research experiences

- Relevant volunteer work
- Honors or awards
- Membership / leadership in professional organizations
- Presentations and publications

3. Three letters of recommendation

- Raters should be professional references, this excludes family and friends
- Raters should address your suitability for professional studies in counseling
- Raters should address your interpersonal and intellectual functioning and skills in research, counseling and written and oral communication
- Raters should enclose their letters of recommendation along with the provided rating sheet (attached) in an envelope and sign their names across the sealed flap of the envelope

4. Personal statement

- Submit a concise 500 word max statement concerning your professional goals. Also, address your professional and applied interest and experiences.

*Please note that admission to UMKC does not guarantee admission to the Doctor of Philosophy degree program in Counseling Psychology.

Additional Requirement for International Applicants

Success in the counseling profession relies heavily on oral expression and, therefore, the Counseling and Educational Psychology division faculty require that all non-native English speaking international applicants demonstrate their proficiency in English, preferably by taking the internet-based Test of English as a Foreign Language (iBT TOEFL). Applicants are expected to demonstrate their oral English proficiency by obtaining a score of at least 23 points (score range 0-30) on the speaking section and at least 20 points (score range 0-30) on the listening section of the iBT TOEFL before their applications are reviewed by the admissions committee. Please be aware that the minimum admission score for the iBT TOEFL test set by the UMKC International Student Affairs Office is 79, and that the Counseling and Educational Psychology division requires specific minimum scores on the speaking and listening subtests in addition to the University requirement.

While iBT TOEFL scores are strongly preferred by the Counseling and Educational Psychology division faculty, scores on the International English Language Testing System (IELTS) will also be considered as evidence of English proficiency. Applicants taking the IELTS are expected to demonstrate their oral English proficiency by obtaining a score of at least 7 (score range 0-9) on the speaking subsection of the IELTS and a 6.5 (score range 0-9) on the listening subsection. In addition, applicants are expected to obtain a score of 6.5 on the total IELTS before applications are reviewed by the admissions committee. Please note that the minimum admission score for the IELTS test set by the UMKC International Student Affairs Office is 6, and that the division requires specific minimum scores and a higher overall score than the University requirement.

NOTE: Both TOEFL and IELTS scores must not be more than two years old.

Retention

Education majors are expected to maintain a quality of achievement significantly above minimum UMKC standards for degree work. Individual student progress will be monitored throughout the program. Satisfactory progress is required of all students for retention in the teacher preparation program. Students are expected to maintain academic standards, perform satisfactorily in clinical courses, refrain from academic dishonesty, comply with the established University and teacher education timetables and requirements, and refrain from unethical or unprofessional behavior or behaviors that obstruct the training process or threaten the welfare of the student or others. Other circumstances involving student behavior will be addressed by the faculty on an individual basis.

Title II Notice

Title II of the Higher Education Act requires that every institution of higher education provide public information regarding the pass rate of the institution's graduates on the teacher certification or licensure assessment of the state in which the institution is located. Additionally, Title II requires that a comparison of each program's pass rate be made with the average pass rate in the state. Annual reporting on licensure assessments and other measures can be found at <https://education.umkc.edu/about/leadership/annual-reporting-measures/>

Scholarships

School of Education Scholarship Information

Three types of scholarships are available to students: Automatic (considered when applying to UMKC); Additional scholarships to apply for through the UMKC Financial Aid and Scholarships Office, and School of Education scholarships. The SOE scholarships are available to undergraduate and graduate students in our programs.

Applicants

- Must be admitted to the School of Education
- Submit application typically by February 1st (official date will be posted on the School of Education website)
- Must complete a new application each year
- Previous recipients may reapply
- Number and dollar amount of awards vary from year to year
- Awards are not automatically renewable
- Undergraduate students must be enrolled in at least 12 credit hours each semester during the new academic year to receive a scholarship
- Graduate students must be enrolled in at least 6 credit hours each semester during the new academic year to receive a scholarship

Procedures

The procedure for applying for a scholarship will be found on the School of Education website.

Selection Process/Timeline

- December: Scholarship application opens
- February 1st: Applications are due and committee begins review
- April: All applicants are notified if selected
- September: All scholarship recipients will be honored at the SOE scholarship event scheduled in the beginning of the next academic year.

For more information about the SOE Scholarships go to <http://education.umkc.edu/students/scholarships-and-financial-aid/>

Special Services

Public School Placements

The School of Education assists in making placements to enable teachers and other school personnel to complete their various practicum experiences. All field placements require students to have a current background clearance check.

Students admitted to the Teacher Education program are required to complete practicums within one of the School of Education's nine partner districts (Center School District, KCMO, KCKS, Grandview, Hickman Mills, Independence, North Kansas City, Raytown, Turner and UMKC-sponsored charter schools). All Teacher Education programs require students to complete at least a semester-long student teaching experience. During student teaching, students are under the guidance of cooperating mentor teachers and members of the University's education staff. Weekly seminars are a required part of the program.

Career Services at UMKC

The Career Services Office offers a variety of career and job-related services to students and alumni. Through Career Services, students can receive resume, interview and job search assistance. Teacher Education and School Counseling students in their last year of coursework can interview with representatives of area school districts through a Career Day sponsored by Career Services.

Students or graduates seeking a teaching or administrative position are urged to register and keep their records current in the Career Services Office, Atterbury Student Success Center, 5000 Holmes (2nd Floor), phone (816) 235-1636 or check their Web site: <http://www.career.umkc.edu/>.

Education Lab

Two computer labs are located in the School of Education Learning Commons in room 129 in the Education Building. Lab resources include Windows Pro workstations, printers and scanners. For more information including hours of availability, contact SOE Student Services, room 129, phone (816) 235-2716, email umkceducation@umkc.edu.

Student Organizations

The *School of Education Student Government* strives to expand the students' academic concerns and abilities, promote students' involvement in the School of Education and the University, act on all matters concerning students' welfare, aid faculty and students in cooperative work and promote a professional attitude and feeling of responsibility. Community service is also a regular part of the activity of the SOESG. The organization meets on a regular basis and welcomes all students' attendance and participation.

The *American Psychological Association – Student Affiliate Group* encourages professional development within the field of counseling psychology. It also serves as a meeting time for the members to discuss issues and concerns of the counseling psychology doctoral program. It encourages students to organize educational, social and fund raising events, and to act as a liaison with the counseling psychology faculty and the UMKC community.

The *Master's of Counseling Student Organization* (MCSA) is the organization for students pursuing their Master's in Counseling and Guidance. It serves as a source of support and advocacy for students enrolled in the program. In addition to seminars and social events, MCSA has a student mentorship program. For more information, contact your MCSA officers or the division Administrative Assistant at (816) 235-2722.

The *Higher Education Student Association* (HESA) is a student-run organization founded to further the understanding of the purpose and practices of higher education. HESA's purpose is to serve the specific and current needs of students enrolled in or interested in the Higher Education Administration program at UMKC. The goals of the organization are to:

- Create a community among higher education administration students, faculty, and alumni
- Provide a forum for the exchange of ideas on current issues in higher education
- Offer professional experiences in conference participation, planning and organization
- Network with other Higher Education Student associations
- Assist in the professional advancement of members

Undergraduate Programs

The School of Education offers the following undergraduate degree programs:

- B.A., Early Childhood Education (p. 1473)
- B.A., Elementary Education (p. 1478)
- B.A., Middle School Education (p. 1483)
- B.A., Secondary Education (p. 1487)
- Minor, Exercise Science (p. 1533)

Students may contact the School of Education Student Services Office for specific program information.

Students may also elect to pursue a dual degree between Education and Arts and Sciences. Secondary education majors may earn a B.A. or B.S. degree in a major in the College of Arts and Sciences. Elementary and early childhood education majors may earn a bachelor of liberal arts degree in the College of Arts and Sciences. Contact the advising office of the College of Arts and Sciences for more details.

School of Graduate Studies

Administrative Center (<http://www.umkc.edu/virtualtour/administrative-center.asp>), Room 300F
 5115 Oak Street
 (816) 235-1301
 u (graduate@umkc.edu) mkcsgs@umkc.edu
<http://sgs.umkc.edu> (<http://sgs.umkc.edu/>)

Mailing Address

University of Missouri-Kansas City
 School of Graduate Studies
 AC 300F
 5115 Oak Street
 Kansas City, MO 64112

Dean:

Jennifer Lundgren

General Information

The School of Graduate Studies is responsible for monitoring compliance to the campus-wide minimum graduate academic regulations, which are explained in detail in the **General Graduate Academic Regulations and Information** section of this catalog. Working with and through the Graduate Council and Graduate Officers Committee, the School also provides leadership and coordination of all graduate programs, offers programs to prepare graduate students for faculty positions in a variety of educational settings, and administers a number of competitive graduate fellowships.

The School also serves as the academic and administrative home for students admitted to the Interdisciplinary Ph.D. program. All other graduate students are admitted to the school or college in which their degree programs are housed.

- Mission and Administrative Organization of Graduate Education
- Institute for Human Development
 - Interdisciplinary Leadership Certificate in Disability Studies
- Graduate Certificate in College Teaching and Career Preparation
- Interdisciplinary Ph.D. Program

- Program Administration
- Program Description
- Doctoral Faculty Participation in the Interdisciplinary Ph.D. Program
- Application Procedure and Minimum Criteria for Admission
- Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements
 - Change of Disciplines by Admitted Students
 - Interim Advisor
 - Qualifying Requirements for Full Admission
 - Research Advisor and Supervisory Committee
 - Interdisciplinary Ph.D. Plan of Study
 - Interdisciplinary Ph.D. Residency Requirement
 - Transfer Credit
 - Comprehensive Examination
 - Program Time Constraints
 - Dissertation Research Proposal Development and Approval
 - Dissertation and Completion of Degree
 - Interdisciplinary Ph.D. Student Appeal Process
- Interdisciplinary Ph.D. Satisfactory Progress Policy (p. 1553)
- Student Learning Outcomes
- Interdisciplinary Ph.D. Discipline-Specific Requirements
 - Art History
 - Biomedical and Health Informatics
 - Cell Biology and Biophysics
 - Chemistry
 - Computer Networking (p. 1561) and Communication Systems
 - Computer Science (p. 1564)
 - Curriculum and Instruction
 - Economics
 - Educational Leadership, Policy and Foundations
 - Electrical and Computer Engineering
 - Engineering
 - English
 - Entrepreneurship
 - Geosciences
 - History
 - Humanities Consortium
 - Mathematics
 - Molecular Biology and Biochemistry
 - Music Education
 - Oral and Craniofacial Sciences
 - Pharmaceutical Sciences
 - Pharmacology
 - Physics
 - Political Science
 - Public Affairs and Administration
 - Social Science Consortium: Economics, Political Science and Sociology

Courses

SGS 5501 Disability and Community Support Credits: 3

This is an academic service-learning course that will integrate 15 classroom contact hours with 60 service hours within a framework of Disability Studies.

Prerequisites: LAW 8815S.

SGS 5590A Special Topics Credits: 1-6

SGS 5651A Preparing Future Faculty I Credit: 1

Course is the first in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. Course development and exploring the various roles and responsibilities of university faculty members are the emphases of the first two courses.

Prerequisites: Year I Preparing Future Faculty Fellow or doctoral student recommended by two faculty members in student's doctoral program.

SGS 5651B Preparing Future Faculty II Credit: 1

Course is the second in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. Course development and exploring the various roles and responsibilities of university faculty members are the emphases of the first two courses.

Prerequisites: SGS 5651A.

SGS 5652A Preparing Future Faculty III Credit: 1

Course is the third in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. The emphasis in SGS 5652A and SGS 5652B is on the teaching/classroom experience including using technology effectively. Students may enroll simultaneously in SGS 5651A and SGS 5652A.

Prerequisites: Year 2 Preparing Future Faculty Fellow, or recommendation by two faculty members in student's doctoral program.

SGS 5652B Preparing Future Faculty IV Credit: 1

Course is the fourth in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. The emphasis in SGS 5652A and SGS 5652B is on the teaching/classroom experience with a focus on using technology effectively. Students who have completed SGS 5651A and SGS 5652A may enroll simultaneously in SGS 5651B and SGS 5652B.

Prerequisites: SGS 5652A.

SGS 5653A Preparing Future Faculty V Credit: 1

Course is the fifth in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. The emphasis in SGS 5653A and SGS 5653B is on academic collaboration and preparing for the academic job market. Students may enroll simultaneously in SGS 5652A and SGS 5653A.

Prerequisites: EDUC-R&P 5639 and either Preparing Future Faculty Fellow or recommendation by two faculty members in student's doctoral program.

SGS 5653B Preparing Future Faculty VI Credit: 1

Course is the last in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. The emphasis in SGS 5653A and SGS 5653B is on academic collaboration and preparing for the academic job market. Students who have completed SGS 5652A and SGS 5653A may enroll simultaneously in SGS 5652B and SGS 5653B.

Prerequisites: SGS 5653A.

Mission and Administrative Organization of Graduate Education

UMKC currently offers more than 50 graduate degrees at the master's, educational specialist and doctoral levels, plus a number of graduate certificates. Graduate students represent about 35 percent of the total campus enrollment. The graduate student population is diverse in ethnicity, gender and racial background. As an urban university, our programs strive to accommodate adult working students. Nearly two-thirds of all graduate students are enrolled part time and the average age is 35.

The Graduate Council, representing a cross section of campus graduate faculty, sets policy, establishes minimum graduate education standards and monitors the quality of graduate education at UMKC. The graduate faculty in the various graduate degree programs may set standards more stringent than the minimums outlined in this catalog section, and in such cases, the program standards take precedence over the campuswide minimum regulations. The School of Graduate Studies is responsible for monitoring compliance to the campuswide minimum graduate academic regulations; providing leadership and coordination of all graduate programs; and serves as the academic home for students admitted to the Interdisciplinary Ph.D. program. Information on the Interdisciplinary Ph.D. program (p. 1538) may be found in the School of Graduate Studies section of this catalog.

Interdisciplinary Leadership Certificate in Disability Studies

Minimum Requirements for Admission

Possession of a baccalaureate degree from a regionally accredited institution is required. Application for admission to the Leadership Certificate in Disability Studies program must be made to the School of Graduate Studies.

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate appropriate depth and breadth of knowledge in their disciplines.
- Use skills of interdisciplinary scholarship and research to integrate multiple perspectives.

- Work effectively in a collaborative environment.
- Effectively communicate results of their research to diverse audiences.
- Understand and value diverse approaches to problems.
- Use self-reflection for personal and professional improvement.

Program Requirements

The Interdisciplinary Leadership in Disability Studies certificate program is offered through the School of Graduate Studies and the Institute for Human Development. Disability Studies is a relatively new, interdisciplinary field that studies disability from a social and cultural context. The certificate can be completed either in conjunction with a graduate degree program or as a free-standing credential. Students in such diverse fields as sociology, psychology, nursing, pharmacy, law, social work, public administration, urban planning and design and education are well suited for this certificate. Students who receive the certificate will be prepared to influence public policy, professional practice, societal arrangements and cultural values that shape the meaning of disability.

Required Courses

Code	Title	Credits
LAW 8815R	Disabilities And The Law	2-3
SOC-WK 5563	Life Span Issues in Developmental Disabilities	3
SGS 5501	Disability and Community Support	3

Curriculum Requirements

At least 60 percent of the certificate course work must be at or above the 500 level.

Credit Hours

A minimum of 12 credit hours is required for the certificate.

Requirements for Retention

Students must maintain a 3.0 grade point average while enrolled. The minimum acceptable grade for 400 level courses is B, and for 500 level and above courses, B-.

Time Limit for Completion of Certificate Program

All work toward the Leadership Certificate in Disability Studies must be completed in 4 years.

Contact Information

For additional information contact:

UMKC Institute for Human Development
215 W. Pershing Road, 6th Floor
Kansas City, MO 64108
(816) 235-1770

Graduate Certificate in College Teaching & Career Preparation

Minimum Requirements for Admission

Applicants to the "Preparing Future Faculty" Graduate Certificate in College Teaching and Career Preparation can be current UMKC graduate students or graduate students who reside in states where UMKC is authorized to deliver online education to residents. All applicants must have the recommendation of their primary graduate advisor or their supervisory committee chair and their faculty mentor, who may serve both these types of roles.

Although space in the program is limited and current doctoral students will be given first preference, all graduate students who are recommended by a faculty member in their discipline area may also be considered for admission to the program.

The course requirements include six 1-credit hour seminar courses completed in four consecutive semesters. The remaining 6 credit hours in the program include one teaching theory practicum course and an elective course chosen from a provided selection that is to be determined by the student in consultation with the Director of the Graduate Certificate Program and/or the graduate faculty member who will serve as their faculty mentor.

Student Learning Outcomes

Students graduating from this program will:

- develop a syllabus for an introductory course in the student's field that includes student learning outcomes and assessment of learning outcomes.
- develop a teaching philosophy statement, curriculum vitae, cover letter for a job application, and presentation of a research agenda in an electronic teaching portfolio.
- demonstrate an understanding of how expectations for teaching, research and service are incorporated into a faculty member's day-to-day activities.
- explore the differences among different types of institutions for faculty teaching, research, and service expectations in higher education.
- collaborate with peers and mentors to demonstrate expanded knowledge of effective pedagogical techniques and theories of cognition and motivation, including online educational settings, to support diverse learners.

Student learning outcomes for the program are designed to meet the student's individual needs and research interests, and satisfy discipline-specific requirements.

Program Requirements

In today's competitive academic job market, academic institutions increasingly desire faculty members who not only possess the appropriate academic credentials, but can demonstrate that they are prepared to be excellent teachers and well-rounded colleagues. The 12 credit hour graduate certificate in College Teaching and Career Preparation is intended primarily for doctoral students who are preparing for college-level teaching careers, regardless of the discipline(s) in which they plan to teach; however, students from all graduate degree programs, and who are recommended by a faculty member in their discipline area, will also be considered for admission. The structure of this graduate certificate program balances the emphases on both career exploration and teaching excellence.

The certificate complements the discipline knowledge of graduate programs by (1) focusing on strategies for successful teaching, including incorporating technology into the college classroom and in online learning environments, and (2) familiarizing students with the demands of college teaching and the nature of the academic environment in a variety of institutions of higher education. Courses that satisfy program requirements are taken for graduate credit; and, upon completion, the certificate is officially noted on the student's transcript.

Curriculum Requirements

The "Preparing Future Faculty" Graduate Certificate in College Teaching and Career Preparation requires a minimum of 12 credit hours. A six-course series of Preparing Future Faculty (PFF) seminar courses is the core of this 12 credit hour graduate certificate curriculum. The one-credit hour seminar courses are graded on a credit/no credit basis and are offered year-round for four semesters, with a new cohort beginning each Fall semester. Students in the PFF Seminar courses not only refine their teaching skills, but also explore the opportunities at, and differences among, a variety of institutions of higher education -- public, private, 2-year and 4-year. For the remaining six credits of the certificate program, students complete a 3-credit hour theoretical teaching practicum course, EDUC-C&I 5640, plus one of the following 3-credit hour courses as approved by the graduate certificate program director: EDUC-R&P 5639 **OR** EDUC-UL 5556.

All courses are taught completely on-line, with 3 on-campus monthly PFF lecture sessions in the Fall and Spring semesters that can be attended face-to-face or via distance education technology.

Code	Title	Credits
Required Core Courses		
Seminars		6
SGS 5651A & SGS 5651B	Preparing Future Faculty I and Preparing Future Faculty II	2
SGS 5652A & SGS 5652B	Preparing Future Faculty III and Preparing Future Faculty IV	2
SGS 5653A & SGS 5653B	Preparing Future Faculty V and Preparing Future Faculty VI	2
One additional course		3
EDUC-R&P 5639	Educational Psychology: Focus on Teaching in Higher Education	3
EDUC-UL 5556	The College Student	3
Teaching Practicum		3
EDUC-C&I 5640	Curriculum and Teaching for the College Classroom	3
Total Credit Hours		12

Requirements for Retention

Students must maintain a cumulative 3.0 graduate GPA while enrolled and receive no grade below a B- in courses applied to the certificate program.

Time Limit for Completion of Certificate Program

3 years maximum.

Interdisciplinary Ph.D. Program

Mission, Philosophy and History

Research is rapidly expanding as global problems and issues require scholars with an interdisciplinary approach to problem solving. It will no longer be enough to know one area, one discipline, one field. Inquiry and discovery are crossing disciplines. For this reason, in 1990, UMKC developed and introduced an interdisciplinary doctoral degree program that spans traditional boundaries across disciplines while helping students develop knowledge and skills for independent research on the fundamental questions of the present and the future.

The Interdisciplinary Ph.D. program is designed to provide self-directed students with academic training at the highest level of scholarship, while allowing their participation as colleagues in research of fundamental importance. Students in the program develop the ability to integrate principles and theories from at least two disciplines (Primary and Co-Discipline), using approaches, methods, ethical principles, and tools to pursue a research line of inquiry.

There are currently 20 Primary disciplines and 21 Co-Disciplines accepting applications for the Interdisciplinary Ph.D. program. Enrollment in the program includes more than 360 students. More than 800 students have graduated during the program's existence.

The following core values and attributes underscore UMKC's Interdisciplinary Ph.D. program:

Learning is enhanced by a search for knowledge across discipline boundaries.
Therefore, the program:

- Is student-centered.
- Enables students to acquire the skills of interdisciplinary scholarship and research.
- Broadens students' exposure to multiple academic fields.

Interdisciplinary research draws on discipline-based knowledge, generating integrated solutions to problems that cross discipline boundaries.
Therefore, the program:

- Is problem-oriented.
- Integrates the attributes of a broad-based interdisciplinary approach with the grounding of a traditional academic focus.
- Provides a solid grounding in theories, concepts and methodologies of two or more disciplines.

Learning thrives in an environment open to a diversity of ideas, cultural backgrounds, discipline perspectives and approaches to problems.
Therefore, the program:

- Instills an appreciation of different disciplines.
- Integrates the disciplinary perspectives to give students the methodological and theoretical tools to thrive in a wide range of scholarly and professional environments.

Society derives great benefit from collaborative efforts that transcend discipline boundaries to solve problems. Therefore, the program:

- Prepares individuals to be multi-functional; to combine disparate skills to solve problems.
- Provides opportunities for individuals to gain skills in working within a collaborative environment.

In the course of pursuing a Ph.D., there are many skills students obtain that are transferable to other occupations. Acquisition of transferable skills allows graduates to compete for positions in a variety of work settings. Transferable skills such as analytical thinking and problem solving, verbal communication, project management, and technical writing and design, allow students to be nimble throughout their careers, changing positions and career directions.

Program Description

Applicants to the Interdisciplinary Ph.D. program must meet both the general and the discipline-specific criteria for admission and be recommended for admission by the doctoral faculty review groups in the chosen discipline(s). Upon approval by the graduate dean, students are admitted to the School of Graduate Studies. The School of Graduate Studies monitors student progress in the program, enforces program regulations and facilitates communication among the disciplines. A discipline coordinator, usually a doctoral faculty member, coordinates admission reviews and monitoring progress of students within each discipline.

Doctoral students in this program take coursework and conduct their research in at least two disciplines. The content of their program of study is formulated by the student, in consultation with UMKC doctoral faculty, to meet their individual needs and research interests and to satisfy discipline-specific requirements.

Program Goals

Students in the interdisciplinary Ph.D. Program will acquire:

1. grounding in the primary and co-disciplines;
2. the ability to integrate the principles and theories of each of the disciplines;
3. the ability to effectively communicate findings and approaches to solving interdisciplinary research problems;
4. research skills in each discipline such as approaches, methods, ethical principles, and tools to pursue a research line of inquiry;
5. the ability to form effective teams with diverse scholars across disciplines to solve novel research questions.

Disciplines currently participating:

Administrative and Information Sciences

- Educational Leadership, Policy and Foundations (School of Education)

Biological and Chemical Sciences

- Biomedical and Health Informatics (p. 1555) (School of Medicine)
- Cell Biology and Biophysics (School of Biological Sciences)
- Chemistry (College of Arts and Sciences)
- Molecular Biology and Biochemistry (School of Biological Sciences)
- Oral and Craniofacial Sciences (School of Dentistry)
- Pharmaceutical Science (School of Pharmacy)
- Pharmacology (School of Pharmacy)

Humanities and Arts

- English (College of Arts and Sciences)
- Humanities Consortium (p. 1587) (College of Arts and Sciences) *(only available as a co-discipline option)*
- Music Education (Conservatory) *(only available as a primary discipline option)*

Physical, Mathematical, Engineering and Computer Sciences

- Computer Networking and Communication Systems (School of Computing and Engineering)
- Computer Science (School of Computing and Engineering)
- Electrical and Computer Engineering (School of Computing and Engineering)
- Engineering (School of Computing and Engineering)
- Geosciences (College of Arts and Sciences)
- Mathematics (College of Arts and Sciences)
- Physics (College of Arts and Sciences)

Social and Behavioral Sciences

- Curriculum and Instruction (School of Education)
- Economics (College of Arts and Sciences)
- History (College of Arts and Sciences)
- Social Science Consortium: Economics, Political Science and Sociology (p. 1607) *(only available as a co-discipline option)*

The above list of participating disciplines constitutes a dynamic list that can change annually as members are added to or dropped from the doctoral faculty, or as the resources in various academic units change. Applicants should contact the School of Graduate Studies Office for information about modifications to the above list that might have occurred since this catalog was prepared.

Admission to UMKC's Interdisciplinary Ph.D. program is highly competitive. Enrollment in the program is limited, and admission is granted only to students who have a mature commitment to advanced study and scholarship. Admission is also subject to availability of adequate faculty and other resources within an applicant's chosen discipline(s).

After being admitted to the Interdisciplinary Ph.D. program, and no later than the end of the semester in which the student completes the Comprehensive Examination, each student must satisfy the interdisciplinary doctoral residency requirement by completing at least 18 credits, exclusive of dissertation research (5696-5699), within 24 months. Students may be admitted either provisionally or fully to the program; however, within 24 months of being fully admitted, each student must develop a Plan of Study proposal in consultation with the doctoral faculty members who have agreed to serve on the student's supervisory committee. Although no fixed set of courses is required, students are expected to prepare a rigorous Plan of Study that includes at least 30 didactic course hours beyond the baccalaureate degree, exclusive of thesis and dissertation research credits. More credit hours may be required by either the student's supervisory committee, the student's disciplines, the Interdisciplinary Ph.D. Executive

Committee, or the Dean of the School of Graduate Studies. The number of credits included on the Plan of Study shall be predicated upon the extent of the student's previous academic preparation, the discipline-specific requirements of the student's disciplines, and the nature of the student's field of study.

Students must take and pass a Comprehensive Examination containing components of each discipline to which they have been admitted to determine if they are ready to advance to candidacy and the final phases of their Ph.D. program. Typically the Comprehensive Examination will be conducted as the student nears completion of the didactic coursework listed on the plan of study. The final phases of the program shall comprise:

- Completion of significant research
- A written dissertation acceptable to the doctoral faculty
- Successful oral defense of the research work and dissertation

Program Administration

Quality control of the Interdisciplinary Ph.D. program rests with those faculty members certified by the University of Missouri to chair and serve on doctoral supervisory committees. These doctoral faculty members are responsible for the design and implementation of a student's doctoral plan of study and for the assessment of the qualifications of a student they recommend to the Curators for the Ph.D. degree. To help students formulate an appropriate plan of study, the doctoral faculty are divided into five broad groups corresponding to research interests and expertise. The groupings do not preclude an interdisciplinary plan of study and research involving more than one of these five groups, but are intended only to provide a structure that will assist students and doctoral faculty in developing a plan of study for each Interdisciplinary Ph.D. student. A 15-member executive committee of the doctoral faculty, chaired by the Dean of the School of Graduate Studies, formulates the policies that govern Interdisciplinary Ph.D. studies. Ten members of the committee are elected by the doctoral faculty. The Chancellor, in view of the election results and in consultation with the Dean of the School of Graduate Studies, appoints five members. There are three members from each of the five broad research areas. This process ensures representation from across the primary areas of responsibility assigned to the campus by the Curators. The Interdisciplinary Ph.D. Executive Committee is also charged with formulating, monitoring and reviewing goals of the Interdisciplinary Ph.D. program and recommending changes in goals, procedures and policies to the faculty. Any proposed major change must be ratified by the doctoral faculty of the campus.

Doctoral Faculty Participation in the Interdisciplinary Ph.D. Program

Major responsibility for assessment of Doctoral Faculty qualifications rests at the department level where nominations for membership are initiated. Doctoral Faculty must be duly nominated and approved regular (tenured or tenure-track) members of the faculty with the rank of assistant professor or higher. In UMKC's Interdisciplinary Ph.D. program, three members of a student's supervisory committee must be members of the UMKC doctoral faculty, and the research advisor must be from the primary discipline area.

There are three classifications of Graduate Faculty membership at the University of Missouri-Kansas City: (a) Graduate Faculty, (b) Ex-officio graduate faculty and (c) Adjunct Graduate Faculty. The Graduate Dean approves these appointments on an annual basis.

The supervisory committee shall be composed of one doctoral faculty from each of the primary and co-disciplines with a maximum of three from any one discipline. Up to two of the remaining members of each committee can hold either graduate or adjunct graduate faculty status. Final approval of the composition of each supervisory committee shall be obtained in writing by the advisor (or committee chair) from the Dean of the School of Graduate Studies. Where graduate or adjunct graduate faculty are included, the advisor shall provide a strong justification for their inclusion.

For purposes of the Interdisciplinary Ph.D. program, a discipline is defined as an academic unit, such as a department or division (with a chair/head) within a school, college or academic program. To be able to participate as a discipline in the Interdisciplinary Ph.D. program, a discipline, meeting the above definition, must have at least four regular doctoral-faculty members.

Doctoral Faculty Discipline Affiliation

Continuing doctoral faculty are reviewed for five-year reappointment and nominations for new appointments are considered throughout each academic year. Consequently, the list of doctoral faculty is dynamic and subject to change. Current lists are available from the School of Graduate Studies.

Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission

When preparing an application for admission, applicants must designate which one of the disciplines is to become the applicant's primary discipline for initial advising, record-keeping and receiving/sending mail in the event that admission is granted. A student's research advisor must be affiliated with the student's primary discipline.

All applicants are encouraged to review the requirements for the Primary and Co-discipline(s) by visiting the Interdisciplinary Ph.D. website (<https://sgs.umkc.edu/interdisciplinary-ph-d-studies-at-umkc/>). It is recommended that applicants talk to the Interdisciplinary Ph.D. Discipline Coordinators in their areas of interest BEFORE applying to the program. Discipline Coordinators offer valuable program, academic and application information.

Please read through all steps below before beginning your application!

To apply to the Interdisciplinary Ph.D. program, visit <https://futureroo.umkc.edu/apply/>

- Select “Graduate” and “Start New Application”
 - There will not yet be an option to choose the Interdisciplinary Ph.D. program.
- Complete the “Personal Info” section and “Continue.”
- Within the “Academic Information” section, you will choose your intended starting semester.
 - Put a check mark as to whether you have previously enrolled as a degree-seeking student at UMKC.
 - For “Degree Program,” select “Interdisciplinary Studies Ph.D.” Two more drop-down menus will appear for you to select your discipline choices.
 - Click “Continue” after selecting your choices.
- Complete the “Academic History.” Your official transcripts will be required for every institution listed here (exception: if you attended UMKC, you do NOT need to order the UMKC transcripts).
- In the “Test Scores” section, each test score entered requires the official scores to be sent to the university.
- Within “Letters of Recommendation,” you have the choice of your recommender uploading or mailing the letter. For an upload, the recommender will receive an email with a link. He/she needs to fill out the online form AND upload the letter.
 - Note that if you already have the letters in hand, you can upload them at the end of this process after submitting the application.
- Complete the “Additional Information” section.
- Complete the “Signature” section with your full name.
- Review your application and “Submit” it.
 - **Note: You cannot alter any information in the above steps after you click “Submit” here.**
- If you have other documents to submit, please use the next page to upload them under the appropriate categories (examples include a resume, writing sample, cover letter, or recommendation letters you already have).

To check your application status, please visit <https://futureroo.umkc.edu/status/> (<https://futureroo.umkc.edu/status/>)

Official transcripts should be sent directly to the UMKC Admissions Office. Please check with the Admissions Office (http://www.umkc.edu/admissions/contact_us.cfm) (domestic applicants) or the International Student Affairs Office (<http://www.umkc.edu/isao/>) (ISAO – international applicants) regarding the receipt of your official transcript(s). Your application cannot be reviewed until official transcripts have been received.

Test scores should be sent directly to UMKC from ETS - Institution code: 6872

Waiver requests for TOEFL/IELTS/GRE: Applicants must talk with the Interdisciplinary Ph.D Discipline Coordinators in their areas of interest BEFORE requesting a waiver for the official test score requirements. After talking with the Coordinators, a waiver request can be submitted in writing through the Application site. Upload your waiver request in a PDF format. Choose “Other” for the document type listed in the drop down menu.

If you have questions regarding the application process, please contact the School of Graduate Studies at 816-235-1301 or umkcsgs@umkc.edu.

Additional Information

1. The deadlines for applications to the Interdisciplinary Ph.D. program vary by discipline. All application materials must be uploaded, and test scores and official transcripts must be received in Admission Offices by the earliest discipline deadline. (For example, if one discipline’s deadline is February 1st and the other March 15th, then application materials must be received by the February 1st deadline.)
2. The timeline for applicants to expect admission decisions varies by discipline. Most admission decisions are made approximately four to six weeks after the latest deadline. For example, if one discipline deadline is February 1st and the other March 15th, an admission decision should be received, approximately, by April 15th to April 30th.
3. Applicants will be notified of admission decisions by mail. Newly admitted international applicants will receive necessary admission documentation by courier service from the International Student Affairs Office.
4. Admission decisions cannot be provided over the telephone.

Application for admission to Interdisciplinary Ph.D. study is made through the UMKC Admissions Office or, in the case of international applicants, through the UMKC International Student Affairs Office (ISAO). For additional program information, applicants should contact the School of Graduate Studies. E-mail requests may be sent to umkcsgs@umkc.edu (graduate@umkc.edu); the phone number is (816) 235-1301. Application information and an online application system are also available from the School of Graduate Studies Website.

Mailing Address

University of Missouri-Kansas City
School of Graduate Studies
AC 300F
5115 Oak Street

Kansas City, MO 64112-2499

The general criteria for admission for Interdisciplinary Ph.D. program study are as follows:

- Graduate Record Examination (GRE) scores will be evaluated by the disciplines *[If an applicant's GRE scores are more than five years old, and other predictors of ability to do doctoral-level work in the applicant's file are marginal, the applicant may be asked to retake the GRE general test before an admission decision is made].*
- A grade-point average of at least 2.75 (on a 4.0 scale) covering all college work taken prior to the bachelor's degree, or a grade-point average of at least 3.0 covering all post-baccalaureate work completed to date.
- Recommendation for provisional or full admission by the doctoral faculty review group in participating disciplines for a primary discipline and at least one co-discipline area.

Graduates of schools outside the United States may be considered for admission to this doctoral program at UMKC, subject to the following criteria.

1. They must have completed a course of study at least the equivalent of a U.S. baccalaureate degree.
2. They must have above-average grades in previous college study.
3. They are required to establish proof of adequate English proficiency as part of the UMKC admissions process. Applicants from countries in which English might be one of the official languages, but is not necessarily the first language of the majority of the population, must attain a minimum composite score of either 79 on the iBT Test of English as a Foreign Language (TOEFL), or a score of 6.0 on the IELTS to be considered for admission.¹ The results of the examination must be received in the UMKC International Student Affairs Office before the application deadline. Exceptions to this policy:
 - Non-native speakers who hold degrees or diplomas from post-secondary institutions in English-speaking countries (such as the United States, Antigua, Australia, Bahamas, Barbuda, Belize, Canada, Dominica, Fiji, Gambia, Ghana, Guyana, Ireland, Jamaica, Liberia, Mauritius, New Zealand, Sierra Leone, Solomon Islands, South Africa, St. Christopher (St. Kitts), St. Lucia, St. Vincent, Tobago, Trinidad, Uganda, United Kingdom [England, Scotland, Wales and Northern Ireland], Zambia and Zimbabwe), provided they have spent a minimum of two years in successful full-time study there and English was the medium of instruction.
 - International transfer students from other institutions in the United States or Canada who have spent a minimum of two years in successful full-time study.
4. In addition to 1 through 3 above, international graduate students must satisfy any program-specific admission criteria. For instance, the Graduate Management Admission Test (GMAT) is required for applicants for graduate study toward the M.B.A. degree. Several programs require TOEFL scores that are well above the minimum stated previously. The Graduate Record Examination (GRE), including the appropriate Advanced Test, is either required or strongly recommended for all other international graduate applicants. International students planning to apply are directed to consult the appropriate degree program listing for additional criteria and medical requirements. There are detailed instructions for the application process for international students available on the International Student Affairs Office (ISAO) website: <http://info.umkc.edu/ISAO/future-students/apply/>

¹ In the United States, the Educational Testing Service, Princeton, NJ 08541, U.S.A., can be contacted for application forms to take this test. Contact <http://www.ils.org/> for information on the International English Testing System. Detailed information can be obtained from U.S. embassies, consulates general, bi-national centers and other offices throughout the world.

Participating disciplines may establish whatever additional criteria or higher standards they consider to be appropriate and such discipline-specific criteria will take precedence over the general criteria. Applicants should note that several discipline areas have set more rigorous admission requirements, and a number of discipline areas have established qualifying requirements for students who intend to include that discipline in their doctoral programs. These discipline-specific requirements range from specific prerequisite coursework, to successful completion of a qualifying examination, to having the equivalent of a master's degree in the area, to having higher scores on specific segments of the GRE and are listed in greater detail later in this section.

Students may apply for admission with or without meeting the general criteria of the School of Graduate Studies and any additional criteria established by the discipline areas. Meeting these criteria does not automatically make any student eligible for admission. In exceptional circumstances, students who do not meet the general criteria of the School of Graduate Studies and the disciplines may be admitted.

The School of Graduate Studies' minimum requirements for admission to the Interdisciplinary Ph.D. program are determined by the doctoral faculty in the academic units in which the student will be doing work, and by the UMKC doctoral faculty through representation on the Interdisciplinary Ph.D. Executive Committee. Admission to the program is subject to availability of adequate faculty and other resources within an applicant's chosen disciplines and the approvals of the Dean of the School of Graduate Studies and the Interdisciplinary Ph.D. Executive Committee.

Application Procedure

The deadlines for applications varies by discipline.

Although new students in most disciplines may be accepted in all terms, some disciplines will only consider applications for the fall term.

Applicants are responsible for:

1. Submitting a completed **Application for Admission or Readmission to Interdisciplinary Ph.D. Studies** form to the UMKC Admissions Office, or in the case of international applicants, to the UMKC International Student Affairs Office (ISAO). All applications must be accompanied by the appropriate non-refundable application fee (\$45 for domestic applicants or \$75 for international applicants).
2. Uploading the following supplementary materials (shown below) into the online application site.
 - *A narrative statement / Statement of intent* outlining professional background and educational plans.
 - *Three letters of recommendation.* (The applicant provides referee contact information in the online application site. The referee receives an email invitation to upload the reference letter into the site.)
 - *Any supplemental material requested by the discipline(s).* Note that several disciplines require professional writing samples, tentative outlines of plans of study, or other supplemental materials to complete the application packet. Applicants should consult the discipline-specific information to determine whether supplemental materials are required by the disciplines they select.
 - *Resume / Vita*
3. Having the following supplementary documentation sent to the UMKC Admissions Office or in the case of international applicants, to the UMKC International Student Affairs Office (ISAO):
 - *Official test scores (GRE, TOEFL, etc.).* The applicant must request the testing agency to send official GRE test scores to the School of Graduate Studies. According to the Educational Testing Service:
 - GRE test scores are part of your reportable history for five years after the testing year in which you tested (July 1 – June 30). As of July 1, 2015, GRE scores earned July 1, 2010, to the present will be available in your reportable GRE score history.
 - Scores from individuals who tested between July 1, 2010 and July 31, 2011, were purged from the GRE database in mid-July 2016.
 - *Official transcripts from all colleges attended.* All applicants must submit an official transcript from the school where their bachelor's degrees were obtained. This transcript must show all courses, grades and credits attempted or completed at the undergraduate level. Unless the transcript of the degree-granting institution shows the complete record of undergraduate work taken at all other schools, an official transcript from each of the other institutions must be supplied. In addition, applicants must submit an official transcript from each school where other coursework has been taken or degrees have been obtained after the bachelor's degree.
 - *Waiver requests for TOEFL/IELTS/GRE:* Applicants must talk to the Interdisciplinary Ph.D. Discipline Coordinators in their areas of interest BEFORE requesting a waiver for the official test score requirements. After talking with the Coordinators, a waiver request can be submitted in writing through the online application system as an additional document.

International applicants must submit the following additional forms:

1. Official Statement of Finances form (Guidelines: <http://info.umkc.edu/ISAO/wp-content/uploads/2016/04/Admission-Requirements-Financial-Statement-Guidelines040816.pdf>)
2. Affidavit of Support – if a friend of family member is providing Statement of Finances
3. If transferring from another U.S. institution:
 - a. Transfer-In Form
 - b. Copy of passport
 - c. Copy of visa
 - d. Current I-20 or DS-2019
 - e. I-94 Form

All credentials submitted in support of the application for admission to the Interdisciplinary Ph.D. program become UMKC property. They will not be returned to the applicants and UMKC cannot copy them for release to a third party.

The deadlines for applications to the Interdisciplinary Ph.D. program vary by discipline. All application materials must be received by the earliest discipline deadline. (For example, if one discipline's deadline is February 1st and the other March 15th, then application materials must be received by the February 1st deadline.) If required test scores, transcripts, recommendation forms or supplementary documentation appropriate to the applicant's discipline selections are missing at the application deadline for the disciplines, the application will not be reviewed by the faculty review groups in the specified disciplines for admission in the term requested.

An applicant can expect the review and recommendation process to take approximately 4 to 6 weeks after the latest discipline deadline. For example, if one discipline deadline is February 1st and the other March 15th, an admission decision should be received, approximately, by March 31st to April 15th. The faculty review groups in some disciplines review all applications as a group, while in other disciplines, applications are reviewed and acted upon on a revolving basis, as received. The review and recommendation process within the disciplines varies in length depending upon the disciplines' review policies.

For questions about the contents of their admission files, or to determine whether their official transcripts or test scores have been received, applicants may contact the Admissions Office (816) 235-1111 or admit@umkc.edu. International applicants may check on the status of their applications by contacting the ISAO at <http://www.umkc.edu/isao/> (816) 235-1113 or isao@umkc.edu. Applicants may also contact the School of Graduate Studies, (816) 235-1301 or umkcsgs@umkc.edu for information on the status of their applications.

Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements

The following requirements pertain specifically to students pursuing Interdisciplinary Ph.D. programs. However, Interdisciplinary Ph.D. students are subject to, and also should refer to, those regulations common to all graduate students and the dissertation requirements common to all doctoral students included in the General Graduate Academic Regulations and Information section of this catalog. Students should also consult the specific requirements for the disciplines to which they have been admitted. Where discipline requirements are more stringent than the general requirements, the discipline requirements take precedence.

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Change of Discipline by Admitted Students

Once a student is admitted to Interdisciplinary Ph.D. study, any change of disciplines requires a review process by the disciplines, similar to the initial admission review. Forms to initiate this review may be obtained from the School of Graduate Studies or downloaded from their website.

Interim Advisor

Once an Interdisciplinary Ph.D. student is admitted to the School of Graduate Studies, the Coordinators of the chosen disciplines will serve as the student's interim advisors in those disciplines unless/until a suitable doctoral faculty member is identified. Students who have had minimal prior graduate study will be encouraged to explore research opportunities before choosing fields of endeavor.

As the student progresses and develops focused research interests, the interim advisors are expected to assist in identifying potential research advisors among doctoral-faculty members in appropriate research areas with whom the student can discuss research plans. The interim advisors also provide academic guidance until the student selects a research advisor, has satisfied all qualifying requirements and is classified as fully admitted. The interim advisor in the student's primary-unit discipline reports on the student's progress to the dean of the School of Graduate Studies. If another faculty member has not been identified as the research advisor by the time the student is fully admitted and ready to formulate the plan of study, the interim advisor in the primary unit discipline will automatically become the student's research advisor.

Qualifying Requirements for Full Admission

Admission to the Interdisciplinary Ph.D. program is granted on a provisional or fully admitted basis as determined by the doctoral faculty review group of the student's chosen discipline(s). Upon their acceptance as provisional Ph.D. students, applicants are notified of the specific qualifying requirements they must satisfy before they can be classified as fully admitted Ph.D. students. Provisional admission does not guarantee advancement to full admission, and full admission does not guarantee advancement to Ph.D. candidacy.

When all qualifying requirements have been completed, the primary advisor requests that the student's classification be changed to fully admitted.

Research Advisor and Supervisory Committee

The chair and a majority of the members of a student's supervisory committee must be from disciplines certified as eligible to participate in the Ph.D. program. The student's committee chair must be a regular doctoral faculty member from the student's primary discipline, and has the final authority over the student's program. A graduate or adjunct graduate faculty member may be the dissertation director if approved by the primary discipline.

The advisor assists the student in identifying other members of the doctoral faculty to form a supervisory committee appropriate to the student's research goals. A request for appointment of supervisory committee is included as part of the written proposal for the student's Ph.D. plan of study.

The supervisory committee shall consist of at least four members composed of one doctoral faculty from each of the primary and co-disciplines. Up to two of the remaining members of each committee can hold either graduate or adjunct graduate faculty status. Final approval of the composition of each supervisory committee shall be obtained from the Dean of the Graduate school. Where graduate or adjunct graduate faculty are included, the advisor shall provide a strong justification for their inclusion.

An outside reader may also be included on the supervisory committee as a non-voting member.

Annual Evaluation of Progress

Interdisciplinary Ph.D. students must submit a summary of their accomplishments over the previous year and a projection of the progress they intend to make during the next academic year. This annual evaluation form is distributed to students in two parts, one in the spring and one in the fall. The faculty advisors will review the student's report and provide feedback. Failure to meet this requirement may result in a hold being placed on the student's enrollment.

Plan of Study

Within 24 months of admission, a student chooses a research advisor and forms a supervisory committee. In consultation with the research advisor and other members of the proposed supervisory committee, the student prepares a proposed Ph.D. plan of study, obtains all required signatures and submits the proposed plan to the School of Graduate Studies for review and final approval. This submission *must occur within 24 months* of the semester admitted to the program. Failure to meet this requirement may result in a hold being placed on the student's enrollment.

In addition to any coursework completed prior to admission that is being credited toward discipline-specific requirements, the written Interdisciplinary Ph.D. plan of study includes courses and other activities at UMKC that should normally be completed approximately two years from the time the Ph.D. student is fully admitted, a preliminary research statement about overall plans for dissertation study and research, and a list of the proposed members of the supervisory committee.

The Interdisciplinary Ph.D. Plan of Study Guidelines

- The plan of study must include coursework from all the student's disciplines and must satisfy all of the applicable discipline-specific core requirements.
- Didactic coursework on the plan of study will include a minimum of nine credit hours in a co-discipline area.
- All plans of study must include a minimum of 12 hours of dissertation research (5696-5699) credit.
- At least two-thirds of the total courses included on the plan of study must be numbered 5500 or above if taken at UMKC, or, if taken from an institution with a course-numbering system that differs from UMKC's, they must be courses intended primarily for graduate students.
- UMKC courses at the 100 and 200 levels, and courses with equivalent lower-division numbers taken at another institution, are not available for graduate credit and may not be applied toward the hours required for the degree nor included in the discipline percentages.
- At least 75 percent of the coursework on the plan, exclusive of dissertation credits, must be in disciplines certified as eligible to participate in the Interdisciplinary Ph.D. program.
- Students' needs will be examined on a case-by-case basis by their supervisory committees, and appropriate language or related research skill requirements will be incorporated into each student's plan of study.
- The plan of study will include a brief description of the course focus and the name of the supervising professor for any independent study courses listed.
- The plan of study will specify which courses are being used to satisfy the residency requirement.
- The plan of study will outline the comprehensive examination expectations.
- The plan of study will include a preliminary research plan for the dissertation research, including key bibliographic references.

If modifications to discipline-specific requirements are made after the student is admitted, the student has the option of proceeding under either the requirements in place at the time the student entered the Ph.D. program or the current requirements.

Plan of Study Approval Process

Once the supervisory committee members and student have agreed on and signed the plan of study, appropriate academic officers corresponding to the student's choice of disciplines [dean(s) or program director(s), department chair(s), division head(s), etc.], must then review and certify by signature that the courses and all other resources are currently available at UMKC and in the respective units for the student to initiate the plan of study. The student then submits the certified plan of study to the Dean of the School of Graduate Studies for review and approval.

The School of Graduate Studies will accept Interdisciplinary Ph.D. plan of study proposals for review and final approval only if:

- The Ph.D. coursework falls within the guidelines outlined above.
- The student will enroll at UMKC for dissertation credit under the supervision of a UMKC doctoral faculty member.
- The plan includes written assurance from the appropriate academic officers that:
 - a. adequate faculty, laboratories, library support and all other necessary resources are presently available at UMKC to support the proposed Ph.D. plan of study, and
 - b. the courses included in the plan are either presently available at UMKC or can be taken by the student as a visiting student in a time period less than that required to satisfy the residency requirements on the other campus.

The School of Graduate Studies will either approve of the plan as presented or will return the plan to the student with recommendations for modification. Once the proposed plan of study and supervisory committee are approved by the Interdisciplinary Ph.D. Program Director, a confirmation letter will be sent to inform the student and committee of the approval. The approved plan will also be filed with the Registrar. Any further

modifications of the plan of study must be made in consultation with the student's supervisory committee and approved by the School of Graduate Studies.

Residency Requirement

Interdisciplinary Ph.D. students must satisfy the doctoral residency requirement by satisfactory completion of at least 18 credits in no more than 24 consecutive months. When satisfying the residency requirement, all Interdisciplinary Ph.D. students are subject to the following restrictions:

1. The doctoral residency requirement must be satisfied no later than the end of the semester in which the student completes his or her comprehensive examinations.
2. Students must achieve a cumulative graduate grade-point average of at least 3.0 in all courses counted toward satisfying the residency requirement.

Transfer Credit

Ph.D. plans of study are tailored to the needs of individual students based on their prior academic work as evidenced by transcripts and other credentials. An approved plan of study may recognize class work from other institutions as determined by the student's supervising committee, either as qualifying courses or as relevant to a program of study.

Graduate credit earned before entering a UMKC doctoral program may be applied to the doctoral degree if it is of acceptable quality and appropriate to the student's program of study as determined by the student's academic unit and supervisory committee. The total amount of graduate credit earned from all other academic institutions before admission to a UMKC doctoral program and applied to the doctoral degree cannot exceed half the number of credit hours, exclusive of dissertation research credits, required for the degree. For graduate coursework completed at UMKC prior to admission to a doctoral program, any number of credit hours required for the doctoral degree, exclusive of dissertation research, can be satisfied using previous UMKC graduate credit if approved by the student's academic unit and supervisory committee. All graduate coursework, completed prior to admission and not used to earn the master's degree or educational-specialist degree, must be no more than seven years old at the time the doctoral program of study is approved.

After admission to the doctoral program, if a student wishes to take graduate coursework at another institution and apply it to their doctoral program, the student must receive written approval from the doctoral program's graduate officer and from the student's supervisory committee chair, as appropriate, before the coursework is taken. Such coursework is not considered as transfer credit. Upon completion of the coursework, the student must have the official transcript forwarded to the UMKC registrar.

Comprehensive Examination

To advance to degree candidacy, Interdisciplinary Ph.D. students are required to pass a Comprehensive Examination that integrates components of each discipline to which they have been admitted. Either the written or oral or both component(s) of the Comprehensive Examination must include an evaluation of the student's ability to integrate content, theory and/or methods from each specified discipline. The doctoral Comprehensive Examinations must be completed at least seven months before the date of graduation.

The following requirements must have been met before students can take the Comprehensive Examination(s):

1. Successful completion of all qualifying requirements and full admission to the School of Graduate Studies.
2. Appointment of a research advisor and supervisory committee.
3. Filing and approval of the Ph.D. plan of study and completion of essentially all coursework or other study required for the degree.

The student must be enrolled when taking the Comprehensive Examination. Comprehensive Examinations are not administered when UMKC is not officially in session. The Comprehensive Examination may be written, oral or both. A student, through his or her advisor, applies to the Director of the Interdisciplinary Ph.D. program for an examining committee. This committee consists of members of the student's supervisory committee and others approved by the Director of the Interdisciplinary Ph.D. program. The examination is arranged and conducted by the examining committee. Upon completion of the examination, the student's research advisor sends a report of the results, carrying the signatures of all members of the examining committee, to the Director of the Interdisciplinary Ph.D. program, who then informs the student and the registrar. A student is considered to have passed the Comprehensive Examination if no more than 20 percent of the committee members vote for failure of the student. If failure is reported, the examining committee will either recommend termination as a Ph.D. student or suggest additional work or other remedial measures. Furthermore, a student who has failed may not take a second examination for at least 12 weeks. Failure of the second Comprehensive Examination shall automatically preclude candidacy at this institution.

Program Time Constraints

The doctoral student must take and pass the doctoral Comprehensive Examination and advance to candidacy within five years from the beginning of doctoral coursework (within four years if entering with a master's degree in the same or closely related field). After the establishment of degree candidacy, a maximum of five years will be allowed for completion of degree requirements. Failure to complete the work within the periods specified will necessitate re-evaluation of the entire program and may result in a notice of termination. In compelling circumstances and on the written

recommendation of a majority of the student's supervisory committee members, the Director of the Interdisciplinary Ph.D. program may grant a one-year extension. Some academic units may impose more stringent time requirements.

Dissertation Research Proposal Development and Approval

The student's supervisory committee must approve the research activities associated with a dissertation. These activities must be performed under the direct and continuing supervision of the supervisory committee chair. If the proposed research involves the use of human subjects, animals or radioactive materials, the student and the research advisor must obtain prior written approval of the proposed research by the appropriate Institutional Review Board, the Animal Care and Use Committee or the Radiation Safety Committee.

For the approval process, the Ph.D. candidate must submit a brief dissertation research proposal. The dissertation proposal shall include the following:

- An abstract.
- A statement regarding the general purpose of the research.
- Background information, including a review of the relevant literature, the rationale for the research and a concise statement of the hypotheses to be investigated and/or the research questions to be answered.
- Methods.
- Appropriate protocol or application if human subjects, animals or radioactive materials are to be used in the research.

This proposal must be approved in writing by all members of the student's supervisory committee and filed with the School of Graduate Studies. It is in the best interest of the Ph.D. student to complete the approval process of the dissertation research proposal before significant progress is made on the completion of the dissertation. Any important changes in the research outlined in the proposal must be approved by the supervisory committee.

Dissertation and Completion of Degree

Doctoral Dissertation Requirement

All UMKC Ph.D. degrees require a dissertation as the final component of the program. The doctoral faculty view the dissertation as one of the most important aspects of the student's experience because:

- It is a work of original research or scholarship that makes a contribution to existing knowledge.
- It is an educational experience that demonstrates the candidate's mastery of research methods and tools of the specialized fields.
- It demonstrates the candidate's ability to address a major intellectual problem.

For regulations pertaining to formatting the dissertation and the process for approval, the reader is directed to Thesis and Dissertation Preparation and Approval Process, included under Graduate Academic Regulations in this catalog section.

Final Dissertation Examination

Final examinations in defense of the dissertation are open to all members of the doctoral faculty, who may attend as interested observers. The format and procedures of the defense are determined by the supervisory committee and its chair. The date, time and location must be announced and published at least two weeks before each final examination takes place. This examination may be conducted only after the dissertation has been approved by the Dean of the School of Graduate Studies, and may not be administered when UMKC is not officially in session.

The defense of the dissertation is approved when a majority of the supervisory committee recommend approval and sign the Report of the Result of Final Doctoral Examination form. Within 48 hours of the defense, the supervisory committee chair will report the results of the final dissertation examination in writing to the candidate.

Deposit of Approved Dissertation with Libraries

For regulations pertaining to deposit of the approved dissertation with the libraries, please refer to Thesis and Dissertation Preparation and Approval Process, included under Graduate Academic Regulations in this catalog section.

Interdisciplinary Ph.D. Student Appeal Process

Students should process any petitions for waiver of policy or other academic appeals to their interim advisors or research advisors. The advisors should attach their recommendation and forward the request to the doctoral faculty review groups within the disciplines.

If the appeal does not require a policy decision, action on the appeal may be handled at the discipline level. If a policy decision is required or if, after action by the discipline, the student wishes a higher level of review of the case, the appeal or petition, complete with documentation of all reviews up to that point, may be forwarded to the Dean of the School of Graduate Studies for action or referral to the appropriate subcommittees of the Interdisciplinary Ph.D. Executive Committee.

Interdisciplinary Ph.D. Discipline-Specific Requirements

All Interdisciplinary Ph.D. applicants and students must first meet the general requirements of the School of Graduate Studies for admission and retention in the Interdisciplinary Ph.D. program. (General Graduate Academic Regulations and Information, Application Procedure and Minimum Criteria

for Admission, Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.) In addition to these general academic regulations that have been outlined in previous sections of the general catalog, disciplines may set more stringent discipline-specific requirements that take priority over the general requirements. Discipline-specific requirements for disciplines eligible to participate in the Interdisciplinary Ph.D. program are listed in alphabetical order by name of discipline. These guidelines are subject to ongoing review and revision, and the doctoral faculty reserves the right to make judicious changes in discipline-specific requirements. The student is referred to coordinators in the disciplines for the most current information.

Interdisciplinary Ph.D. Satisfactory Progress Policy

The UMKC Graduate Academic Regulations establish the maximum timeline for academic progress (see policy KC-ACA-3786) and ineligibility due to unsatisfactory progress or performance (see policy KC-ACA-3741). The satisfactory progress of doctoral students in the Interdisciplinary Ph.D. program is assessed annually by a student's primary doctoral mentor, discipline coordinator, supervisory committee (when appropriate) and the Interdisciplinary Ph.D. program director on the basis of academic performance, as well as by meeting the various deadlines for language examinations, qualifying and comprehensive examinations, dissertation proposal defense, and any other discipline specified requirements.

A student who fails to maintain satisfactory progress will be advised in writing by the Discipline Coordinator and the Interdisciplinary Ph.D. Program Director of the corrective steps needed, the timeline for meeting those steps, and apprised of the consequences of failing to take those steps. Failure to satisfactorily take corrective action by the established timeline could result in a recommendation by the Interdisciplinary Ph.D. Program Director to the Dean of the School of Graduate Studies for program dismissal and ineligibility for further graduate study. A student who fails to maintain satisfactory progress may also lose eligibility for financial aid or funding (e.g., assistantship, fellowship).

A student can be classified as "not making satisfactory progress" and recommended for possible dismissal at any point in their academic training, regardless of whether they are within the maximum time constraints outlined in the UMKC Graduate Academic Regulations.

Students who fail to make satisfactory academic progress and are consequently recommended for dismissal and ineligibility for further study have the right to submit documentation to the Dean of the School of Graduate Studies for review and consideration when determining the student's eligibility status. Per the UMKC graduate academic regulations, students have the right to appeal the Graduate Dean's decision to the Provost (p. 462).

Student Learning Outcomes

The course requirements for the program are not predetermined, but rather formulated by the student in consultation with the UMKC doctoral faculty who will serve on their supervisory committee, to meet the student's individual needs and research interests, satisfy discipline-specific requirements and assure upon graduation students are able to:

- Students will demonstrate a thorough degree of knowledge in the primary discipline and co-discipline.
- Students will demonstrate interdisciplinarity in their writing by integrating methods, theories, paradigms, concepts, etc. from more than one discipline.
- Students will demonstrate an ability to use proper investigation techniques for their chosen disciplines.
- Students will effectively use oral and written forms of communication to convey their ideas.

Art History

Art History is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies. **This discipline is currently NOT accepting new students for the primary or the co-discipline.** Questions should be directed to the Graduate Advisor, Dr. Cristina Albu, at (816) 235-2985 or AlbuC@umkc.edu.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Except in unusual circumstances, students who select Art History as the primary discipline in the Interdisciplinary Ph.D. program must begin their work during the fall term. Applications must be received by the School of Graduate Studies no later than January 15. The Art History doctoral faculty will review applications and make recommendations for admission by the end of February. Applications that are incomplete as of January 15, and completed applications submitted after this deadline, may not be considered until the following year.

Scholarship awards and Graduate Teaching Assistantships are made in the spring, to begin the following fall; students may sometimes be able to apply for Graduate Teaching Assistantships in the fall, for the following spring.

In rare cases, with the approval of the discipline Coordinator and faculty advisor, students may apply in the fall for the following spring.

Applicants who choose Art History as their primary discipline, or applicants whose coursework in Art History will comprise at least 50 percent of the Ph.D. plan of study, must meet the criteria for admission specified by the School of Graduate Studies.

Applicants are expected to hold an M.A. in art history, anthropology or history (or earn its equivalent during course work) and a minimum graduate-level GPA of 3.5 on a 4.0 scale.

Students with a B.A. degree must apply to our M.A. program, as the first step.

Students with some graduate work beyond the B.A., but without the M.A. degree, *may* be considered for the Interdisciplinary Ph.D; they will be expected to complete all requirements for the M.A. degree.

In advance of the application (at least one month, but best to allow at least 6 weeks), eligible applicants should contact the discipline coordinator. The coordinator will help the student identify a faculty adviser.

Before an application is reviewed, a member of our doctoral faculty must agree to oversee the project. Faculty members generally accept applications only within their realms of expertise.

The discipline coordinator is available to help students with most aspects of the application process.

In addition to the required application form, test scores, recommendations and transcripts, applicants must provide:

1. A brief statement of academic and professional goals
2. A plan that specifies a research topic, demonstrates its interdisciplinary nature, and considers how interdisciplinary methods would be utilized (consult your faculty adviser)
3. Provide a research writing example (a research paper).

Suggested Compatible Co-disciplines

Curriculum and Instruction (p. 1568), Economics (p. 719), English (p. 1580), History (p. 1584), Humanities Consortium (p. 1587), Social Science Consortium (p. 1607)

Primary and Co-discipline applicants granted *provisional* admission will receive notification of deficiencies and of the conditions that must be met before full admission can be considered.

The Art History doctoral faculty makes recommendations to the dean of the School of Graduate Studies on each application; recommendations reflect the majority vote of the doctoral faculty.

Alternate Admission Criteria

In exceptional cases, candidates who do not meet either the School of Graduate Studies' or the Art History program's minimum requirements for admission may be admitted under alternate criteria. This may include satisfactory performance in a 5000-level course in the program, plus written recommendations of faculty to serve on the doctoral committee.

Core Requirements

Art History as a Primary Discipline

Code	Title	Credits
Required Courses		
ART-HIST 5501	Scope And Methods Of Art History ¹	3

¹ Research methodology courses.

Remaining credits depend upon what courses the student has taken before coming into the program. Students will generally design a total plan of study (primary discipline and co-discipline coursework) that includes 60 hours beyond the baccalaureate degree (including 12 credit hours for the dissertation) or 30 hours beyond the master's degree if that degree is in Art History.

Art History as a Co-discipline

Code	Title	Credits
Required Courses		
ART-HIST 5501	Scope And Methods Of Art History	3

Remaining credits depend on the student's research interests and graduate-level course work before entering the program.

Requirements for Comprehensive Exams

Oral and written Comprehensive Exams are required, with questions based on courses taken and dissertation topic; one question will focus on the primary discipline, one on the co-discipline.

Other Discipline-Specific Special Requirements

Normally, reading knowledge of two foreign languages is required, as determined by the Supervisory Committee for each student. Students will master a reading knowledge of two foreign languages for Art History as a Primary discipline or as a Co-discipline.

The Supervisory Committee must include two art historians.

Biomedical and Health Informatics

Discipline Coordinator

Jenifer E. Allsworth, Ph.D. (816) 235-1781, allsworthj@umkc.edu

Biomedical and Health Informatics is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and [Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements](#). Information on applying to the Biomedical and Health Informatics discipline can be found at the School of Medicine website for the primary discipline and co-discipline.

Discipline Overview

Biomedical and Health Informatics is the “scientific field that deals with biomedical information, data, and knowledge – their storage, retrieval, and optimal use for problem solving and decision making. It accordingly touches on all basic and applied fields in biomedical science and is closely tied to modern information technologies, notably in the areas of computing and communication, i.e. medical computer science.” (Definition from Stanford University, Medical Informatics.) The National Center for Biotechnology Information defines Bioinformatics as the “field of science in which medicine, biology, computer science, and information technology merge to form a single discipline. The ultimate goal of the field is to enable the discovery of new biological insights as well as to create a global perspective from which unifying principles in biology and health can be discerned.”

Curriculum Overview

The goal of the Biomedical and Health Informatics Ph.D. discipline is to train researchers to contribute to the translation of basic science findings into patient care and ultimately into community standards and policy. Given the diversity of specialties that are included in the field of biomedical and health informatics, individual training will vary depending on the student’s career goals. Graduates of this discipline will be able to apply knowledge and skills in the area of biomedical and health informatics by: generating a research hypothesis; proposing, conducting, and reporting research; performing appropriate statistical analysis; and, communicating scientific information.

Admissions

Applicants must meet both the general and the discipline specific criteria for admission and be recommended for admission by the doctoral faculty review groups in at least two disciplines. Upon approval by the graduate dean, students are admitted to the School of Graduate Studies.

General Admissions Requirements

Please visit the Interdisciplinary Ph.D. Program Admissions Page (<http://sgs.umkc.edu/iphd-landing-page/>) to learn about the general application requirements.

Discipline Specific Admissions Requirements

Please visit the School of Medicine website for information on applying to the Biomedical and Health Informatics primary discipline and co-discipline to learn about the discipline specific application requirements. Your application to the Biomedical and Health Informatics primary discipline or co-discipline is NOT complete until you submit a one-page goal statement explaining your interest in the discipline through the School of Medicine Supplemental Application.

Suggested Compatible Disciplines

Cell Biology and Biophysics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/cell-biology-biophysics/>), Computer Science (<https://catalog.umkc.edu/colleges-schools/graduate-studies/computer-science/>), Engineering (<https://catalog.umkc.edu/colleges-schools/graduate-studies/engineering/>), Mathematics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/mathematics/>), Molecular Biology and Biochemistry (<https://catalog.umkc.edu/colleges-schools/graduate-studies/molecular-biology-biochemistry/>), Oral and Craniofacial Sciences (<https://catalog.umkc.edu/colleges-schools/graduate-studies/oral-craniofacial-sciences/>), Pharmaceutical Sciences (<https://catalog.umkc.edu/colleges-schools/graduate-studies/pharmaceutical-sciences/>), Pharmacology (<https://catalog.umkc.edu/colleges-schools/graduate-studies/pharmacology/>), Public Affairs and Administration (<https://catalog.umkc.edu/colleges-schools/graduate-studies/public-affairs-administration/>), Social Science Consortium (<https://catalog.umkc.edu/colleges-schools/graduate-studies/social-science-consortium-economics-political-science-sociology/>)

Core Program Requirements

Biomedical and Health Informatics as a Primary Discipline

In order to complete the Interdisciplinary Ph.D. with Biomedical and Health Informatics as the primary discipline, students complete a minimum of 48 credit hours in post-baccalaureate studies consisting of the following:

- 36 credit hours of didactic course work
 - 21 credit hours of primary discipline course work
 - 9-12 credit hours of co-discipline course work
 - 6 credit hours of elective course work
- 12 credit hours of dissertation research

No more than 60% of didactic course work in the student's overall Plan of Study can be from any one discipline. A minimum of 9 credit hours of graduate coursework in the co-discipline is required by the Interdisciplinary Ph.D. Program. Specific requirements of the student's chosen co-discipline may require additional credit hours beyond the nine listed here.

Core coursework in the Biomedical and Health Informatics Primary discipline will include a minimum of 18 credit hours of courses in the table below. Courses taken to meet this requirement may be adjusted to reflect the courses taken in the chosen co-discipline.

Code	Title	Credits
Biostatistics (select 2 of the following)		6 hours required
MEDB 5501	Applied Biostatistics I	
MEDB 5502	Applied Biostatistics II	
MEDB 5503	Mixed-Effects Models	
MEDB 5535	Quantitative Aspects of Epidemiologic Research	
Research Methodology and Research Ethics		6 hours required
MEDB 5510	Clinical Research Methodology	
MEDB 5561	Responsible Conduct of Research	
Informatics (select 2 of the following)		6 hours required
MEDB 5520	Introduction to Medical Informatics	
BIOLOGY 5525	Bioinformatics and Data Analysis	
COMP-SCI 5565	Introduction to Statistical Learning	
COMP-SCI 5590	Special Topics (Machine Learning)	

Elective Coursework

The number of credit hours of elective graduate coursework that a student completes will vary depending on the number of credit hours required by their co-discipline; the total number of graduate coursework credit hours across their primary discipline, co-discipline, and electives must equal a minimum of 36 credit hours. Students may work with their advisors to tailor elective coursework based on their specific areas of interest. For example, students interested in genomics will take different elective courses than students interested in a clinical research emphasis. At least 75% of the total coursework must be from disciplines that are certified as eligible to participate in the Interdisciplinary PhD program.

Discipline Specific Requirements

- Qualifying Examination: The qualifying examination must be successfully completed before the student can enroll in dissertation and research hours and focus on their dissertation research.
- Comprehensive Examination: The comprehensive examination will consist of both a written component and an oral component that reflects dissertation research.
- Dissertation Research: Dissertation research will be conducted while the student is enrolled in Pre-Dissertation and Research (MEDB 5696) and Dissertation and Research (MEDB 5699) credit hours. Twelve credit hours in Dissertation and Research must be completed before the dissertation will be approved. Dissertation research will be reported in both a written format (three publication-ready manuscripts) and an oral format (formal presentation of dissertation research).
- Written Dissertation: The final format of the dissertation work to be submitted to the university will follow general dissertation formatting guidelines and will include the three publication-ready manuscripts.

- Graduate Seminar: Primary discipline students are required to attend and actively participate in the Multidisciplinary Seminar (MEDB 5540) until successful completion of the Qualifying exam, which will include providing research presentations.

Biomedical and Health Informatics as a Co-discipline

Based on students' experience and the requirements of their primary discipline, they will be required to complete at least 9 credit hours from the co-discipline as specified by the UMKC Interdisciplinary Ph.D. Program. While the following courses are suggested core components for the Biomedical and Health Informatics co-discipline, students will work with the discipline coordinator to create an individualized plan of study for their co-discipline courses.

Code	Title	Credits
MEDB 5501	Applied Biostatistics I	3
MEDB 5502	Applied Biostatistics II	3
MEDB 5510	Clinical Research Methodology	3
Depending on prior coursework, the below may be substituted.		
MEDB 5511	Principles and Applications of Epidemiology	3
MEDB 5514	Human Genome Epidemiology	3
MEDB 5520	Introduction to Medical Informatics	3
MEDB 5535	Quantitative Aspects of Epidemiologic Research	3

Note: All students will be expected to have Biostatistics as a core competency for this co-discipline; however, it is assumed that students with a primary discipline in Mathematics will not need additional course work in statistical analysis.

Prerequisite Coursework

Prerequisite coursework may not count toward the student's required graduate credits.

For the department's policy on academic progression, please contact the discipline coordinator.

Cell Biology and Biophysics

Discipline Coordinator

Karen Bame, (816) 235-2243, bamek@umkc.edu

Cell Biology and Biophysics faculty who are members of the Doctoral Faculty (<http://sgs.umkc.edu/for-faculty-and-staff/doctoralgraduate-faculty-lists/>)

Cell Biology and Biophysics is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

A cumulative GPA of at least 3.0 (on a 4.0 scale) on all college work for bachelor's degree or post-baccalaureate work. Due to the sequencing of coursework, new students selecting cell biology and biophysics as their primary discipline will normally only be admitted in the fall term.

Qualifying Requirements for Full Admission

Minimum of 16 hours of approved graduate coursework at UMKC toward the Ph.D. program with a grade-point average of at least 3.0 on a 4.0 scale. International students must establish English proficiency.

Suggested Compatible Co-disciplines

Chemistry (p. 1223), Molecular Biology and Biochemistry (p. 1591), Pharmaceutical Sciences (p. 1599), Pharmacology (p. 1600), Oral and Craniofacial Sciences (p. 1594), Physics (p. 1602)

Core Program Requirements

Cell Biology and Biophysics as a Primary Discipline

Minimum Core

33 credit hours of courses and 15 credit hours of dissertation research for a total of 48 credit hours of post-baccalaureate credits, distributed as indicated below. The core courses should be completed by the end of the second academic year after admission to the graduate program on a full-time basis (individual arrangements will be made for part-time students).

Code	Title	Credits
LS-CBB 5530	Cell and Molecular Biology I	3
LS-CBB 5520	Cell and Molecular Biology II	3
LS-CBB 5596	Advanced Experimental Cell Biology I	2
or LS-CBB 5597	Advanced Experimental Cell Biology II	
LS-CBB 5612	Seminar in Cell Biology and Biophysics (2 x 1 cr. hr.)	2
LS-CBB 5690	Analytical Methods in Cell Biology and Biophysics	1-4
or LS-MBB 5690	Analytical Methods in Molecular Biology and Biochemistry	
BIOLOGY 5501	Proposal Writing	1
7 cr. hr. in discipline or related discipline courses (LS-CBB, LS-MBB, BIOL, PHARM, etc.) 15 cr. hr. LS-CBB 5699, Dissertation Research		

Seminar courses are part of this component of required courses, up to a maximum of three for the program, as are additional credits of Advanced Experimental Molecular or Cell Biology (a total of four credits in experimental laboratory courses, independent of thesis research, is required). 5700-level courses may not be used to satisfy cell biology and biophysics discipline-specific course requirements.

Any of the above courses, whether part of the primary or related discipline requirements, will be credited toward the 33-credit Ph.D. course requirement if taken as part of any graduate program at UMKC and if a grade of "B" or better is received.

In addition to the basic 33-credit course core, each student's Supervisory Committee may require up to nine credit hours in additional elective courses in any University-approved doctoral discipline as preparation for specific areas of research. No more than seven credit hours of 5500-level courses, or their equivalents, can be taken at institutions outside UMKC.

For Students with Cell Biology and Biophysics as a Co-discipline

Code	Title	Credits
LS-CBB 5530	Cell and Molecular Biology I	3
LS-CBB 5520	Cell and Molecular Biology II	3
LS-CBB 5612	Seminar in Cell Biology and Biophysics	1
Additional SBC graduate courses (LS-CBB, LS-MBB or BIOL) for a minimum of 10 cr. hr.		

A sufficient amount of other core courses to constitute the required percentage of their overall program of study. 5700-level courses may not be used to satisfy cell biology discipline-specific course requirements.

Requirements for Comprehensive Exams

Full-time students with cell biology as their primary discipline must take their comprehensive examination before the beginning of the third academic year after admission to Ph.D. study. Part-time Ph.D. students in this discipline must complete their comprehensive examination immediately after completion of the 25-hour course requirement on their Ph.D. plan of study.

Format

For students with this discipline as their primary discipline, written and oral examinations are required.

Written Portion

The written examination, for students who have cell biology and biophysics as their primary discipline consists of an NIH-style grant proposal that the student will prepare. The topic of the research proposal will be determined by the student in consultation with the student's supervisory committee.

Oral Portion

The oral examination has two aspects: (1) questions covering the grant proposal prepared by the student for the written examination and (2) other related material in the student's area of specialization, including fundamental knowledge of the student's chosen disciplines.

Other Discipline-Specific Special Requirements

Students with this discipline as a primary discipline must participate in the teaching program of the School of Biological and Chemical Sciences.

Students with this discipline as a primary discipline or co-discipline must participate in seminars.

Retention in Program

No more than one C grade will be permitted in basic core coursework. If a student with this discipline as the primary discipline receives more than one C grade in a basic course, he or she will be dropped from the doctoral program. Students with this discipline as a co-discipline who receive more than one C grade will be dropped from the discipline.

The doctoral faculty in Cell Biology and Biophysics meets formally at the end of each academic year to discuss and evaluate all graduate students' progress. Each student's committee also meets with the student at least once a year. After the annual doctoral faculty meeting, each student receives a written evaluation of his or her status and a report is placed in the student's file.

Chemistry

Discipline Coordinator

Zhonghua Peng, (816) 235-2288, pengz@umkc.edu

Chemistry faculty who are members of the doctoral faculty.

Chemistry is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the [School of Graduate Studies](#).

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in [Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission](#) and [Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements](#).

Discipline-specific Admission Requirements

Chemistry as a Primary Discipline

Normally, only applications to full-time academic status will be considered. To qualify for full admission (Note: full admission is unrelated to full-time academic status), applicants are expected to have the equivalent of an American Chemical Society-approved bachelor's degree in chemistry, which includes coursework in general chemistry, analytical chemistry, one year of organic chemistry, inorganic chemistry and one year of physical chemistry requiring calculus and physics as prerequisites. (For example, see UMKC's B.S. program in the Chemistry section in this catalog.) Applicants will be admitted as provisional students with a limited number of undergraduate deficiencies. They will be notified, at the time admission is offered, of any requirements to be met for reclassification as fully admitted. Undergraduate courses included in these requirements must be completed with grades of "C" or higher.

Applicants should take particular note of the physical chemistry requirement.

Applications are only accepted through the online system, and include:

1. Official, confidentially transmitted transcripts.
2. Statement of purpose.
3. Three confidentially transmitted letters of recommendation (academic and/or professional).
4. English language proficiency requirement.

Suggested Compatible Co-disciplines

Curriculum and Instruction (p. 1568), Engineering (p. 1579), Geosciences (p. 1583), Mathematics (p. 1589), Pharmaceutical Sciences (p. 1599), Pharmacology (p. 1600), Physics (p. 1602)

Chemistry as a Co-discipline

Applicants are expected to have undergraduate coursework in general chemistry and organic chemistry. Applicants accepted as provisional students will be notified, at the time admission is offered, of any requirements to be met for reclassification as fully admitted. Undergraduate courses included in these requirements must be completed with grades of "C" or higher.

Core Program Requirements

Chemistry as a Primary Discipline

Coursework Requirements

Students are to see the principal graduate advisor, or their research advisor, for advising and signature prior to registering each semester.

Students must successfully complete a minimum of fifteen credit hours and a maximum of eighteen credit hours of didactic chemistry graduate coursework, among which one course must be from Group A, one course from Group B, and a minimum of two additional courses (six credit hours) from any graduate chemistry course numbered 5500 to 5589, excluding CHEM 5520R, CHEM 5530A, CHEM 5530B and CHEM 5540R. The remaining required chemistry credit hours may be satisfied with directed studies (CHEM 5590). In addition, students must complete one credit hour of chemistry seminar (CHEM 5611). A grade of C+ (2.3) or less in more than two chemistry courses applicable to the Ph.D. program will result in termination from Ph.D. candidacy.

Code	Title	Credits
Group A		
CHEM 5531	Classical Thermodynamics	3
CHEM 5532	Chemical Kinetics	3
CHEM 5533	Quantum Chemistry	3

CHEM 5534	Molecular Spectroscopy	3
CHEM 5535	Statistical Thermodynamics	3
Group B		
CHEM 5521R	Mechanisms Of Organic Reactions	3
CHEM 5522	Synthetic Organic Chemistry	3

In addition, students must successfully complete twelve (12) to fifteen (15) credit hours of 400-level or above coursework in other disciplines, among which a minimum of nine (9) credit hours must be in their co-discipline(s). A minimum of three (3) credit hours in the codiscipline must be at the 5500+ level. Students may be required to take additional courses as outlined by their plan of study.

Any of the above chemistry courses will be credited toward the Ph.D. coursework requirement if taken as part of any previous graduate program at UMKC and a grade of B- (2.7) or better is received. Also, students who have received a grade of B- (2.7) or better in graduate chemistry coursework taken as part of a degree program at another institution may have up to six credit hours of equivalent required coursework waived upon approval of a majority of the supervisory committee. A written request for this waiver is to be submitted and approved before submission of the student's plan of study.

Courses/Experiences Providing Instruction in Research Methodology

Expertise in research methodology will be acquired under the mentorship of the research advisor and supervisory committee. The student's progress will be assessed annually by his/her supervisory committee and the results will be forwarded to the School of Graduate Studies.

Number of Credit Hours Required beyond Bachelor's Degree

A total of 46 credit hours are required, among which 30 credit hours are from didactic courses, 15 credit hours from dissertation research and 1 credit hour of chemistry seminar. Among the 30 didactic hours, a minimum of 15 credit hours and a maximum of 18 credit hours are from chemistry, and a minimum of 9 credit hours are from the co-discipline. Up to six credit hours of chemistry courses may be waived, as described above under Coursework Requirements.

Chemistry as a Co-discipline

Coursework Requirements

Students are required to complete a minimum of three courses (nine credit hours) at the 400-level or above from classes offered by the Department of Chemistry or in conjunction with other units as approved in the student's plan of study. At least three of these credit hours must be at the 5500+ level and taken from courses offered by the Department of Chemistry. The systematic courses CHEM 5520R and CHEM 5530 may be used to satisfy the "400-level or above" requirement, but not the "5500+ level" requirement. CHEM 5590, CHEM 5599 and CHEM 5699 may not be used to satisfy these requirements. Students who receive a grade of C+ (2.3) or less in two or more courses used to satisfy these requirements will be disqualified from using Chemistry as their co-discipline.

Any of the above chemistry courses will be credited toward the Ph.D. coursework requirement if taken as part of any previous graduate program at UMKC and if a grade of B- (2.7) or better is received. Transfer credit from another institution cannot be applied to Chemistry's co-discipline requirement.

Special Requirements

Chemistry as a Primary Discipline

Placement Examinations

Incoming students take placement examinations in analytical inorganic, organic and physical chemistry. Placement examinations are typically administered the week preceding the first week of classes of the fall and spring semesters. Students scoring below the 50th percentile in the organic and/or physical chemistry exams are required to enroll in CHEM 5520R and/or CHEM 5530A /CHEM 5530B, respectively. Enrollment in other graduate organic or physical chemistry courses is not permitted until CHEM 5520R and/or CHEM 5530A /CHEM 5530B, respectively, is(are) successfully completed. CHEM 5530A /CHEM 5530B is currently offered concurrently with CHEM 431 or CHEM 432. A student is required to take either CHEM 5530A/CHEM 431 or CHEM 5530B/CHEM 432 or both, depending on his/her performances in the various sub-disciplines of the physical chemistry placement exam. Should a student be required to take both CHEM 5530A/CHEM 431 and CHEM 5530B/CHEM 432, the average grade of the two CHEM 5530 courses will be considered for the fulfillment of the physical chemistry deficiency. Two grades of C+ (2.3) or lower, or one grade of less than C- (1.7) in CHEM 5520R / CHEM 5530 will result in termination from the degree program. These courses may not be counted toward the coursework requirements above. Students must complete all additional coursework required as a result of the placement exam scores by the end of their first three regular semesters.

Research Advisor

Full-time students are to select a research advisor from the doctoral faculty of the Department of Chemistry and a supervisory committee by the end of their first regular (e.g. fall or spring) semester on campus. For chemistry as the primary discipline, the student's supervisory committee shall consist of the research advisor in chemistry and two additional chemistry doctoral faculty as well as at least one doctoral faculty member from each co-discipline.

Seminar

Students are required to attend and participate in all regularly scheduled and special Chemistry Department seminars and colloquia. Students are required to present a one-hour chemistry seminar (CHEM 5611) during their second year following full admission to the Ph.D. program, based on their dissertation research project. This seminar will include a thorough review of the literature pertinent to their project and a description of the objectives, the proposed methodology and the significance of this research. An abstract is to be posted and distributed one week prior to the presentation date.

Time Constraints and Financial Support

Students must complete all requirements for their degree within seven years from the date of full admission to the Ph.D. program. Under compelling circumstances and on the written recommendation of a majority of the supervisory committee, a single extension for up to one year may be requested for approval by the dean of the School of Graduate Studies. Full-time (as defined in the current UMKC catalog) Ph.D. students may receive financial support (in the form of fellowships or teaching assistantships) from the Department of Chemistry for a maximum of five years. Students from countries not having English as their first language, and who are to be supported as GTAs, must meet the UMKC standards for international students to become certified as GTAs. Full information on that process can be found here: Policy on Award of Teaching Assistantships (p. 465).

Dissertation

All supervisory committee members are to receive a final draft of the dissertation for approval of form and content at least two weeks before submission to the dean of the School of Graduate Studies for certification. Candidates should submit preliminary drafts well in advance of this deadline. After the dissertation is certified for acceptance, the student must present an oral defense of his/her research in the form of a dissertation seminar. The supervisory committee will make a final determination of the acceptability of the dissertation immediately following this presentation. Only minor changes may be made to the dissertation at this point.

Expectations for Interdisciplinary Work

Chemistry as a Primary Discipline

Students develop and pursue a plan of study that includes coursework from the primary discipline and co-discipline(s). The interdisciplinary nature of the student's program is emphasized in the comprehensive examination, which includes material from all disciplines in the plan of study.

Chemistry as a Co-discipline

The Department of Chemistry will cooperate with the student's primary discipline in assessing the interdisciplinary nature of the student's progress.

Comprehensive Examination Guidelines

Chemistry as Primary Discipline

All students are required to prepare a research proposal describing a research project. An abstract is to be posted and distributed, and a written copy of this proposal (in standard NSF or NIH format) given to all members of the examination committee (consisting of the student's supervisory committee and others selected by the Dean of the School of Graduate Studies) at least one week prior to presentation in a proposal seminar. This seminar must be presented to all members of the examination committee by the end of the second year following full admission to the Ph.D. program.

A written comprehensive examination will be prepared and administered by the examination committee before completion of the student's third year following full admission to the Ph.D. program. This examination will be based on the student's coursework and on general knowledge in all areas of his/her specialization. All efforts will be made to emphasize the multidisciplinary nature of the student's program in this examination. If the student fails the written portion of the comprehensive examination, he/she may petition the examination committee to allow for a single opportunity to retake it. This second examination must be completed no earlier than 12 weeks and no later than six months from the date of completion of the first examination.

The research proposal and the written comprehensive exam constitute parts of the comprehensive exam. An IPhD student may elect to enroll in 3 credit hours of CHEM 5590, the grade for which will be CR/NC-only and will be based on the outcome of the comprehensive exam; retroactive enrollment is allowed. An Interdisciplinary PhD student with chemistry as the primary discipline, who has passed the comprehensive exam can have up to 9 credit hours of CHEM 5590/CHEM 5599/ CHEM 5699 counted towards a non-thesis MS degree in Chemistry.

Chemistry as a Co-discipline

The comprehensive examination will be determined by the student's primary discipline in cooperation with the co-discipline(s).

Computer Networking and Communication Systems

Discipline Coordinator

Sejun Song, (816) 235-5661, songsej@umkc.edu

Computer Networking and Communication Systems faculty who are members of the doctoral faculty.

Computer Networking and Communication Systems is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

A student who meets the minimum discipline requirements stated below will be considered for regular admission to the Ph.D. program. A student who does not meet some of the requirements but shows high potential for advanced-level work may be considered for provisional admission. Admission also depends on factors such as number of seats available, resources available in the area of student's interest, the quality of previous work, etc. A student not qualifying for admission to the Ph.D. program may be considered for admission to the M.S. computer science or electrical engineering program. Requirements for admission are similar whether the applicant is requesting Computer Networking and Communication Systems as the primary discipline or co-discipline.

Academic Preparation

The applicant must have a bachelor's degree in computer science, computer engineering, electrical engineering, or related field requiring substantial training in at least one of the above fields and in mathematics with a GPA of 3.5 or better on a 4.0 scale, cumulative as well as in the major field. A master's degree is preferred for admission.

Aptitude for Advanced Work

The student must demonstrate an aptitude for advanced-level work through national/international standardized examinations such as the GRE. The expected performance level is the 85th percentile in the quantitative portion of the GRE examination.

Proficiency in English

The student must demonstrate his or her proficiency in oral and written communication in English through national/ international standardized English examinations such as TOEFL, verbal portion of the GRE, etc. The expected proficiency level is the 50th percentile in the verbal portion of the GRE or a TOEFL score of at least 550 on the paper-based test or 213 on the computer-based test. For tests taken after Sept. 26, 2005, the minimum required score is 80. UMKC students may also satisfy this requirement by obtaining an English Proficiency Certification from the English Department.

Note: As per University policy, all international students are tested for proficiency in English upon arrival on campus, irrespective of their scores in TOEFL or verbal portion of GRE, or any other test. A student's advisor may also require the student to take the above test, irrespective of the student's native language. As a result of this test, the student may be required to improve his or her oral and written communication in English before enrollment in the courses of the chosen disciplines.

Recommendations

The student must provide at least *three* recommendation letters from the professors from his or her previous institution(s). If the applicant has been out of school for several years, recommendation letters from his or her supervisors (technical) will be acceptable. However, even in this situation, a recommendation letter from his or her last academic institution is highly recommended. A recommendation from a faculty member in the Computer Science Electrical Engineering (CSEE) Department at UMKC must be provided if the student has taken courses from or worked with the CSEE faculty.

Statement of Goals and Objectives

The applicant must provide a 250- to 500-word essay on his or her goals and objectives of pursuing the Ph.D. in the chosen fields.

Admission at an Advanced Level

An applicant who has already completed significant graduate coursework (15 or more semester hours of the post-master's work or 30 or more hours of the post-bachelor's work) toward a Ph.D. at another institution must provide reasons for changing institutions. The applicant must also provide a letter of endorsement from a doctoral faculty member in Computer Networking and Communication Systems indicating willingness to be the student's research advisor.

Alternate Admission Criteria

The applicant may have received a bachelor's degree or a master's degree in computer science, computer engineering, electrical engineering or electronics or any other related field with substantial training in mathematics. An applicant not meeting the minimum admission requirements, or not having sufficient academic preparation (stated below under prerequisite knowledge) for advanced work in the chosen discipline(s), may be considered for provisional admission by the Computer Science and Electrical Engineering Department's Ph.D. committee if the committee sees high potential for advanced work from the rest of the applicant's credentials. Evidence of high potential might be pertinent work experience, published papers or extremely high achievement in related areas. In any case, the required GPA (or GPAs) must be at least 3.0. Applicants with an established research or publication record in a quantitative science are encouraged to apply to this discipline.

Qualifying Requirements for Full Admission

Prerequisite Knowledge

A Ph.D. student selecting Computer Networking and Communication Systems as the primary discipline is expected to have the level of preparation represented by the following courses before attempting advanced study. Every student must have coursework in mathematics at MATH 250 or above level, and at least four of the following course sequences (or their equivalent):

Code	Title	Credits
COMP-SCI 291	Discrete Structures II	3
COMP-SCI 303	Data Structures	3
COMP-SCI 404	Introduction to Algorithms and Complexity	3
E&C-ENGR 330	Electronic Circuits	3
E&C-ENGR 380	Signals and Systems	3
COMP-SCI 394R	Applied Probability	3
COMP-SCI 420	Introductory Networking and Applications	3
COMP-SCI 421A	Foundations of Data Networks	3
E&C-ENGR 477	Introduction to Wireless Networking	3
COMP-SCI 431	Introduction to Operating Systems	3
E&C-ENGR 474	Introduction to Communication Systems	3
E&C-ENGR 426	Microcomputer Architecture and Interfacing	3

A Ph.D. student selecting Computer Networking and Communication Systems as a co-discipline is required to have at least three of the CS/ECE courses listed above.

Length of Time to Complete Qualifying Requirements

When a student is admitted provisionally, the CSEE Ph.D. committee will specify the conditions and length of time available to satisfy conditions to achieve regular-admission status.

Suggested Compatible Co-disciplines

Computer Science (p. 1564), Economics (p. 719), Electrical and Computer Engineering (p. 1573), Engineering (p. 1579), Geosciences (p. 1583), Mathematics (p. 1589), Physics (p. 1602)

A co-discipline outside of this list may be considered only in exceptional cases.

Core Program Requirements

The amount of work required for the Ph.D. depends on the student's level of preparation. For example, a student entering the Ph.D. program after earning a bachelor's degree may expect to do significantly more work compared to a student who enters after earning a master's degree.

Qualifying and Comprehensive Examination Guidelines

The Qualifying Exam is a written test administered by the CSEE Department's Ph.D. committee. The test questions are from a set of fundamental courses spanning computer science, electrical and computer engineering, and telecommunication and computer networking. The Comprehensive Exam is administered by the doctoral committee of the candidate. A student can either take a written test or opt for an oral presentation covering both primary discipline and co-discipline areas. Discussion with and agreement from the student's doctoral committee is required before choosing the best option.

The candidates should contact the CSEE Division office and the chair of their doctoral committee for more information.

Computer Networking and Communication Systems as a Co-Discipline

The number of hours required for a student who chooses Computer Networking and Communication Systems as a co-discipline will be at least 12 graduate credit hours. Up to three of these credit hours may be at the 400-level. Each student is required to take CSEE 5110 as part of the minimum 12 credit hours. Contact the Discipline Coordinator for the list of approved courses.

Financial Aid

Various forms of financial aids (such as graduate research assistantships, graduate teaching assistantships, graduate fellowships) are available through the Computer Science and Electrical Engineering Department and the School of Graduate Studies. Contact the discipline coordinator for more information.

Computer Science

Discipline Coordinator

Yugyung Lee, (816) 235-5932, leeyu@umkc.edu

Computer Science is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the [School of Graduate Studies](#).

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in [Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission](#) and [Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements](#).

Discipline-Specific Admission Requirements

A student who meets the minimum discipline requirements stated below will be considered for regular admission to the Ph.D. program. A student, who does not meet some of the requirements but shows high potential for advanced-level work, may be considered for provisional admission. Admission also depends on factors such as number of seats available, resources available in the area of student's interest, the quality of previous work, etc. A student who does not qualifying for admission to the Ph.D. program, may be considered for admission to the M.S. in computer science program. Requirements for admission are similar, whether the applicant is requesting computer science as the primary or co-discipline. Minimum Recommended Ph.D. Admission Requirements:

1. GPA (Bachelor or equivalent Degree): 3.5 in the scale of 4 (or equivalent)
2. GPA (MS or equivalent Degree if any): 3.5 in the scale of 4 (or equivalent)
3. GRE (Quantitative) minimum score: 80%
4. TOEFL iBT minimum Score: 89 or IELTS minimum score: 6.5
5. Prior Projects or Publications (Preferred)*
6. Internationally Acceptable Accreditation of the Prior Degree Awarding Institutes

* Prior research project and/or publication record is not required for admission into CS Ph.D. program. However, doctoral faculty members give very high value to the students with such backgrounds.

Direct or Expedited PhD Program

It is not required to have an MS or equivalent degree to apply to CS Ph.D. program. We accept well qualified and motivated students with a Bachelor degree directly into our Ph.D. program. We actively encourage students in the Direct Ph.D. Program to try to complete the doctoral study within 4 or 5 years after the Bachelor degree. To complete the Ph.D. degree in an expedited timeline, first, the student has to be dedicated and well qualified. Second, the student must make a comprehensive plan at the beginning of the doctoral study to complete all the relevant steps within a strict timeline, which is challenging but not impossible.

Clarification of Minimum Requirements and Decision Process

Academic Preparation

The applicant must have a bachelor's degree and/or a master's degree in computer science, computer engineering, electronics, communications engineering or any other field requiring substantial training in at least one of the above fields and in mathematics with a GPA of 3.5 or better on a 4.0 scale, cumulative as well as in the major field; and a GPA of 3.5 or better on a 4.0 scale, in all post-baccalaureate or post-master's degree work.

Aptitude for Advanced Work

The student must demonstrate an aptitude for advanced-level work through national/international standardized examinations such as the GRE. The expected performance level is the 80th percentile in the quantitative portion of the GRE examination. The student must also show an excellent performance in all of his or her coursework.

Proficiency in English

The student must demonstrate his or her proficiency in oral and written communication in English through national/international standardized English examinations such as TOEFL, verbal portion of the GRE, etc. Because of this test, the student may be required to improve his or her oral and written communication in English before enrollment in the courses of the chosen disciplines.

Note: For students with a North American (USA and Canada) B.S. or M.S. degree the English Proficiency requirement is exempt.

Recommendation Letters

The student must provide at least **three** recommendation letters, identifying clearly his or her academic achievements and exceptional quality, from the professors from his or her previous institution(s). If the applicant has been out of school for several years, recommendation letters from his or her supervisors (technical) will be acceptable. However, even in this situation, a recommendation letter from his or her last academic institution is highly recommended. A recommendation from a faculty member in the Computer Science Electrical Engineering (CSEE) Department at UMKC must be provided if the student has taken courses from or worked with the CSEE faculty.

Statement of Goals and Objectives

The applicant must provide a 250- to 500-word essay on his or her goals and objectives of pursuing the Ph.D. in the chosen fields. This is an important document for reviewing the application. Applicants, therefore, are advised to provide a clear account of their academic achievements and plans for higher study.

Admission at an Advanced Level

An applicant who has already completed significant graduate coursework (15 or more semester hours of post-master's work or 30 or more hours of post-bachelor's work) toward a Ph.D. at another institution must provide reasons for changing institutions. The applicant must also provide a letter of endorsement from a computer science doctoral faculty member indicating willingness to be the student's research advisor.

Ph.D. Admission Decision Process

Ph.D. admission decision is made by the CS Ph.D. Committee considering individual doctoral faculty member's needs and preferences. The role of CS Ph.D. Committee is to ensure that Ph.D. applicants satisfy the minimum requirements (GPA, GRE, TOEFL/IELTS, reputation of prior degree awarding institutes and other scholarly achievements). If the requirements are satisfied and a doctoral faculty member accepts the new applicant only then the CS Ph.D. Committee takes a positive decision about a particular applicant. In rare occasion, we bring exceptionally well-qualified students without the acceptance from a doctoral faculty.

Qualifying Requirements for Full Admission

Prerequisite Knowledge

A Ph.D. student selecting Computer Science (CS) as the primary (coordinating) Ph.D. discipline is expected to have the level of preparation represented by a four-year undergraduate degree in computer science. The applicant may have received a bachelor's degree or a master's degree in computer science, computer engineering, electrical engineering or electronics, or any other related field with substantial training in mathematics. An applicant with only a B.S. degree in computer science must have at least a GPA of 3.5/4.0 and an applicant with at least a year of graduate work must have at least a GPA of 3.5/4.0 before attempting advanced study.

Selection of a Co-Discipline and Suggested Compatible Co-Disciplines

To broaden the knowledge of the PhD students, the Interdisciplinary Ph.D. program requires each student to select a co-discipline closely related to the primary discipline. The following are suggested compatible co-disciplines for CS students:

Biomedical and Health Informatics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/biomedical-health-informatics/>), Cell Biology and Biophysics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/cell-biology-biophysics/>), Chemistry (<https://catalog.umkc.edu/colleges-schools/graduate-studies/chemistry/>), Computer Networking and Communication Systems (<https://catalog.umkc.edu/colleges-schools/graduate-studies/telecommunication-computer-networking/>), Economics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/economics/>), Electrical and Computer Engineering (<https://catalog.umkc.edu/colleges-schools/graduate-studies/electrical-computer-engineering/>), Engineering (<https://catalog.umkc.edu/colleges-schools/graduate-studies/engineering/>), Geosciences (<https://catalog.umkc.edu/colleges-schools/graduate-studies/geosciences/>), Mathematics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/mathematics/>), Molecular Biology and Biochemistry (<https://catalog.umkc.edu/colleges-schools/graduate-studies/molecular-biology-biochemistry/>), Oral and Craniofacial Sciences (<https://catalog.umkc.edu/colleges-schools/graduate-studies/oral-craniofacial-sciences/>), Pharmaceutical Sciences (<https://catalog.umkc.edu/colleges-schools/graduate-studies/pharmaceutical-sciences/>), Pharmacology (<https://catalog.umkc.edu/colleges-schools/graduate-studies/pharmacology/>), Physics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/physics/>)

A co-discipline outside of this list may be considered only in exceptional cases. These co-disciplines require 3 or 4 courses to be taken by the CS Ph.D. students to fulfill the co-discipline requirements.

Notes:

- CS Ph.D. students do not need to apply to a Co-Discipline at the time of admission.
- CS Ph.D. students have to select a co-discipline in the first semester after coming to UMKC.
- CS Ph.D. students are advised to consult their primary (CS) adviser to select an appropriate co-discipline.
- CS Ph.D. students can change their co-discipline any time before the comprehensive exam.

Transfer of Course Credit

New Ph.D. students with some prior graduate level course works from another university can apply to transfer up to 6 credit hours in each discipline (primary and co-discipline).

Length of Time to Complete Qualifying Requirements

When a student is admitted provisionally, the CSEE Ph.D. Committee will specify the conditions and length of time available to satisfy them to achieve full admission status.

Alternate Admission Criteria

The applicant may have received a bachelor's degree or a master's degree in computer science, computer engineering, electrical engineering or electronics, or any other related field with substantial training in mathematics. An applicant not meeting the minimum admission requirements, or not having sufficient academic preparation (stated below under prerequisite knowledge) for advanced work in the chosen primary discipline(s), may be considered for provisional admission by the CSEE Department Ph.D. committee if the committee sees high potential and preparation for advanced work from the rest of the applicant's credentials. Evidence of high potential might be pertinent work experience, published papers or extremely high achievement in related areas. In any case, the required GPA (or GPAs) must be at least 3.0 on a 4.0 scale, and the coursework deficiencies for doctoral study in computer science must not be more than 18 semester hours. Applicants with an established research or publication record in a quantitative science are encouraged to apply.

Application for an MS Degree while Enrolled in CS Ph.D. Program

CS Ph.D. students may apply to receive an MS degree upon passing the qualifying and comprehensive exams provided that the coursework required for MS degree under course only option is completed. This is a very good option for students in CS Direct Ph.D. Program. However, this is subject to primary Ph.D. supervisor's approval.

Note: If a CS Ph.D. student fails to pass the Qualifying Exam in two attempts or cannot successfully complete the Comprehensive Exam, the student will not be allowed to apply for transfer to the MS program or apply to receive an MS degree even if the coursework required for MS degree under course-only option is completed. Please consult your CS Ph.D. supervisor and/or CS Ph.D. Discipline Coordinator for details.

Core Program Requirements

The amount of work required for the Ph.D. depends on the student's level of preparation. For example, a student entering the Ph.D. program after earning a bachelor's degree may expect to do significantly more work compared to a student who enters after earning a master's degree.

Computer Science as a Co-Discipline

- Students who choose CS as a co-discipline need to take 3 CS graduate courses (9 credit hours).
- Students who choose CS as a co-discipline do not need to take the CS Ph.D. Qualifying Exam.
- CNS and ECE Ph.D. students are automatically eligible for CS Co-Discipline.

Discipline Course Requirements

The total Interdisciplinary Ph.D. course credit (didactic) requirement is 30 hours which is divided into (a) primary discipline (12 credits), (b) co-discipline (9 credits), and (c) the remaining 9 credits can be completed either by doing graduate level courses at UMKC in any participating discipline or credits can be transferred from students' previous institutions. This credit transfer must be approved by the CSEE Department Ph.D. committee.

Full-time Status and Doctoral Residency Requirement

US Domestic students can enroll into any number of credit hours per semester during the regular academic year (Fall and Spring). International students are usually required to enroll in 9 credit hours per semester during the regular academic year (Fall and Spring) to maintain full-time (visa) status. However, for international graduate (PhD and MS) students with 50% FTE (20 hours per week) appointments as Graduate Research/Teaching Assistants the requirement is 6 credit hours of enrollment per semester for full time equivalence. Enrollment is not required in Summer. Interdisciplinary Ph.D. students must satisfy the doctoral residency requirement by satisfactory completion of at least 18 credits within 24 consecutive months.

Financial Aid

Various forms of financial aid (such as graduate research assistantships, graduate teaching assistantships, graduate fellowships) are available through the Computer Science Electrical Engineering Department and the School of Graduate Studies. Contact the discipline coordinator for more information. Most of our Ph.D. students are funded through Graduate Research Assistantship (GRA) and/or Graduate Teaching Assistantship (GTA). GRA support is provided by individual doctoral faculty members from their research grants. GTA support comes from Department Chair's instructional fund. However, the GTA support is also provided based on the recommendation of the Ph.D. advisor. The Department Chair normally honors the requests for GTA support if there are available GTA slots. Therefore, every Ph.D. student must have a faculty advisor to get funding in the form of GRA or GTA. Once a Ph.D. student is admitted the Department Chair and the doctoral faculty members will try our best to provide funding to the student throughout the Ph.D. study. However, the applicants must keep in mind that the number of funding slots (GRA and GTA) for the Ph.D. students are not unlimited. The supports are provided based on respective faculty adviser's recommendations and Department Chair's needs. The awarding of GRA and GTA funding is a competitive process. The students are required to maintain high academic standing and demonstrate strong research performance to get continuous support throughout the Ph.D. study. Our Department's policy is to provide support to as many Ph.D. students as possible. Additionally, the UMKC School of Graduate Studies provides many different types of fellowships, awards and scholarships to qualified graduate students through a competitive selection process. Please visit the website of the School of Graduate Studies for further details.

Note:

- A GTA can only be awarded to a student after the student has successfully demonstrated his or her teaching potential to a committee and has successfully passed the English language test.

- If a student receives financial aid in the form of GTA/GRA from the CSEE Department or its doctoral faculty members after the full admission and enrolment into CS Ph.D. program, the student must complete the doctoral study. If a funded Ph.D. student decides to leave the program at any stage before the completion no terminal MS or equivalent degree will be awarded.

Monthly Stipend for Ph.D. Students with GRA/GTA Appointments

Ph.D. students with 50% FTE (20 hours per week) appointments as GRA/GTA will receive a stipend of around \$6000 (subject to availability of funds) per semester during the Fall and Spring semesters. This stipend will be paid in 4 or 5 monthly installments. All GRA/GTA appointments (if awarded) are for one regular academic year (Fall and Spring) for the new students. Beyond the first year, the GRA/GTA supports are subject to availability and performance. There is no guaranteed financial support for the Summer semester.

Tuition Rates and Credits

UMKC offers in-state tuition rates to all (domestic and international) Ph.D. students. Ph.D. students with 50% FTE (20 hours per week) GRA/GTA support from CSEE department will receive a tuition fee coverage of up to 6 credit hours per semester at in-state rate. Therefore, all Ph.D. students (domestic and international) with 50% FTE (20 hours per week) GRA/GTA appointment can maintain full-time status (6 credit hours per semester) with all tuition and fees covered by UMKC and CSEE Department. This tuition and fee coverage is in addition to the stipend mentioned above. However, there are some additional fees and expenses that have to be paid by the students at the time of registration, such as health insurance, books and supplies, and living costs.

Timeline and Steps Toward the Completion of CS Ph.D. Degree

New Ph.D. students are strongly advised to make a clear plan in consultation with the CS Ph.D. advisor as soon as they start their doctoral study to complete the following steps within the required time line:

1. Annual Evaluation: Every Ph.D. student is required to complete an annual evaluation. It is an online survey sent in two parts - one in the fall and one in the spring. The Annual Evaluation allows the student to discuss the previous year's achievements and the next year's goals, then the primary and co-discipline advisors provide feedback and guidance.
2. Ph.D. Qualifying Examination: Students taking an CS Ph.D. Discipline as the primary (coordinating) unit should make the first attempt to pass the qualifying exam during the first three (3) regular semesters after fully admitted to the doctoral study at UMKC. The student must pass both parts of the qualifying exam within four (4) regular semesters. Summer term is not counted.
3. Plan of Study: The Ph.D. Plan of Study form, signed by the student, members of the student's proposed Supervisory Committee, and the Academic Administrators in the student's disciplines, must be filed with the School of Graduate Studies no later than the end of the second year (24 months) after the student has been fully admitted. The Interdisciplinary Ph.D. Plan of Study may be filed prior to that time.
4. Formation of Ph.D. Supervisory Committee: The Supervisory Committee shall consist of at least five members composed of one doctoral faculty from each of the primary and co-disciplines, with a maximum of three from any one discipline. Regarding the formation of the committee the student should consult the primary (CS) Ph.D. supervisor, who will be the Chair of the Committee. Names and signatures of the committee members have to be submitted with the Plan of Study.
5. Fulfilling Ph.D. Residency Requirement: Ph.D. students must satisfy the doctoral residency requirement by satisfactory completion of at least 18 credits within 24 consecutive months.
6. Comprehensive Examination: The format and general requirements for the Comprehensive Exam vary according to the Ph.D. discipline. The Comprehensive Exam is administered by the candidate's supervisory committee. A student can either take a written test or opt for an oral presentation covering both primary and co-discipline areas. Discussion with and agreement from the student's doctoral committee is required before choosing the best option. Candidates should contact the CSEE Department's office and the chair of their supervisory committee for more information.
 - a. The CS Ph.D. discipline usually requires the students to make a formal presentation on the background study, current progresses and future plans regarding the selected research problems for doctoral study. CS students can take the Comprehensive Exam any time after passing the CS Ph.D. Qualifying Exam and the approval of the Plan of Study by the School of Graduate Studies.
7. Interdisciplinary Ph.D. Research Proposal: After the completion of the Comprehensive Exam, each Ph.D. student must submit a written Research Proposal to the School of Graduate Studies.
8. Doctoral Dissertation: The format and general requirements for the Doctoral Dissertation exam vary according to the discipline. The CS Ph.D. discipline requires the students to make a formal presentation on the outcomes of the doctoral research in front of the committee members. CS comprehensive exam and dissertation defense presentations are open to all students and faculty members. In addition, it is recommended that students submit a draft copy of the dissertation to the committee members prior to the presentation. The defense of the dissertation is approved when a majority of the supervisory committee members recommend approval and sign the Report of Results of Final Dissertation Examination form. Students can schedule the Dissertation Defense six months after the comprehensive exam. Link to Graduate School Forms (<https://sgs.umkc.edu/forms/>).
9. Final Dissertation Submission: During the semester of the Dissertation Defense, Ph.D. students must formally submit their Ph.D. dissertation according to the format and instructions of the School of Graduate Studies.

Notes:

- Ph.D. students are allowed to apply for extensions/exceptions/changes under exceptional circumstances.
- Part-time Ph.D. students may apply for flexibility of the timeline regarding the above-mentioned steps.
- Students are advised to regularly check the updates and modifications by the Schools of Graduate Studies.

Ph.D. Qualifying Exam for Computer Science Discipline

The qualifying exam is conducted to confirm that the student has a sound understanding of the fundamentals of computer science and has developed good problem-solving skills and research potential. This document includes the syllabus and describes the procedure for taking the qualifying exam in the Computer Science discipline.

Eligibility

The student must be fully admitted to the Ph.D. program at UMKC. Students admitted provisionally will have to satisfy all requirements stipulated in the letter of admission before being fully admitted.

Duration for Clearing Qualifying Exam

Both full-time and part-time students must take the Ph.D. qualifying exam by the third semester from the date of full admission. For example, if a student is fully admitted in the Fall 2015 semester, then he or she must take the qualifying exam by the Fall 2016 semester. Failure to do so will disqualify the student from continuing in the Ph.D. program. Upon consultation with his/her interim advisor, a student may choose to take the qualifying exam earlier than the third semester. If a student fails the qualifying exam in the first attempt then he or she **MUST** retake it in the subsequent semester. Failure to clear the exam in the second attempt disqualifies the student from remaining in the Ph.D. program with Computer Science as the primary discipline.

Qualifying Exam Application Dates

The Ph.D. qualification certification application will be received twice a year, the end of each semester.

Qualifying Exam Application Format

The CS Discipline Ph.D. qualification certification application will need to include (1) the following two components (Written and Oral) and (2) advisor's recommendation letter. It must be sent to the CS discipline Ph.D. coordinator (Dr. Lee, leeyu@umkc.edu).

Written component: Meet Either criterion 1 or 2

1. Proof of a minimum GPA of 3.5 (A- or higher) on a 4.0 scale for CS5592 Design of Advanced Algorithm or equivalent qualification (e.g., transferred courses, passed equivalent Ph.D. Qualifying exam before transferring to UMKC)
2. Proof of publications in top conference* or journals* including formal methods or algorithms

Oral component:

1. Proof of a minimum GPA of 3.5 (A- or higher) from at least one Ph.D. level seminar course in CS department, UMKC (e.g., CSEE5690 Research Methods and Experimental Design, CSEE5690 Recent Advances in Deep Learning).

After reviewing the application, the committee will cast votes of "pass" or "fail" on both the oral and written components. Failure to do so will disqualify the student from continuing in the Ph.D. program. Upon consultation with his/her advisor, a student may choose to submit the qualification certification application earlier than the third semester. If a student fails the qualification certification application in the first attempt, he or she **MUST** resubmit it in the subsequent semester. Failure to clear the qualification certification in the second attempt disqualifies the student from remaining in the Ph.D. program with Computer Science as the primary discipline.

Curriculum and Instruction

Discipline Coordinator

Candace Schlein, (816) 235-5754, schleinc@umkc.edu

Curriculum and Instruction is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Applicants who designate Curriculum and Instruction as their primary discipline will be expected to have a Master's degree; and a GPA of at least 3.5 on a 4.0 scale, covering all post-baccalaureate work completed to date.

If the discipline is selected as the primary discipline and the dissertation research will have a primary orientation in Curriculum and Instruction, the student must obtain the agreement of a member of the doctoral faculty in Curriculum and Instruction to serve as research advisor before the student can be admitted.

The applicant must provide the following supplementary documentation:

1. Written recommendations from appropriate professors and practitioners in the field (selected by student).
2. Brief narrative stating research interest
3. Sample research or scholarly writing

Suggested Compatible Co-disciplines

Chemistry (p. 1223), Educational Leadership Policy and Foundations (p. 1572), English (p. 1580), History (p. 1584), Mathematics (p. 1589), Physics, (p. 1602) Social Science Consortium (p. 1607)

Core Program Requirements

All students with Curriculum and Instruction as primary discipline are required to complete:

Code	Title	Credits
Curriculum and Instruction Course Requirements (24 hours minimum)		
EDUC-C&I 5618 or EDUC-C&I 5620	Survey Of Research In Curriculum Seminars In Theories Related To Curriculum	3
EDUC-C&I 5626	Seminar in Multicultural Perspectives In Education	3
EDUC-C&I 5570 or EDUC-C&I 5571	Curriculum And Instruction In Technology Cognition & Technology	3
EDUC-C&I XXX	15 hours of EDUC-C&I Electives	15
Research Course Requirements (12 hours minimum)		
EDUC-R&P 5608	Introduction To Graduate Research	3
EDUC-R&P 5505	Statistical Methods I	3
EDUC-R&P 5555	Statistical Methods II ^{3 credits; taken instead of EDUC-R&P 5605/5606}	3
EDUC-R&P 5605 & EDUC-R&P 5606	Quantitative Analysis I: Regression And Analysis Of Variance and Quantitative Analysis II : Multivariate Data Analysis ^{6 credits total; must be taken as a sequence}	6
EDUC-R&P 5612	Applied Quantitative Research in Education ^{3 credits; Preq of EDUC-R&P 5555 or 5605}	3
EDUC-R&P 5615	Qualitative Research Theory & Design Educational Setting. Part 1	3
EDUC-R&P 5616	Qual Data Collection And Analysis In Educational Settings. Part 2 ^{3 credits; Prereq of EDUC-R&P 5615}	3
All courses taken to fulfill this requirement must be completed during I.Ph.D. program; students may not count coursework completed for previous degree programs to these requirements.		
Special Topics (or equivalent experiences or coursework)		
Special Topics in the Responsible Conduct of Research: An Introductory Overview		
Special Topics in the Responsible Conduct of Research: Human Subjects Research		
EDUC-C&I 5697	Dissertation Curriculum And Instruction	12

All students with Curriculum and Instruction as a co-discipline are required to complete:

Code	Title	Credits
Core Courses		
Select one of the following:		3
EDUC-C&I 5505 or EDUC-C&I 5506 or EDUC-C&I 5591	Introduction To Curriculum Theory Curriculum Design Curriculum & Instruction For The 21St Century	
EDUC-C&I 5618 or EDUC-C&I 5620	Survey Of Research In Curriculum Seminars In Theories Related To Curriculum	3
EDUC-C&I 5626	Seminar in Multicultural Perspectives In Education	3
EDUC-C&I 5570 or EDUC-C&I 5571	Curriculum And Instruction In Technology Cognition & Technology	3

One elective course (3-credit hours)

3

Total Credits

15

Ph.D. study in Curriculum and Instruction prepares students with diverse academic and professional backgrounds to meet equally diverse career and scholarly goals. Moreover, rather than being a homogeneous field with a relatively uniform approach to Ph.D. study, Curriculum and Instruction encompasses several separate specialized areas, each with its own requirements and expectations regarding doctoral work. Hence, students accepted for the Interdisciplinary Ph.D. program with Curriculum and Instruction as their co-discipline may have backgrounds in one of the educational fields represented in the School of Education, in one of the disciplines represented in the College of Arts and Sciences, or in a professional field such as criminology, computer science or law. Students accepted with Curriculum and Instruction as their primary discipline would typically have prior academic training and experience in curriculum and instruction. Advisors would tend to be specialists in reading education, physical education, special education, educational psychology, mathematics education, science education or curriculum and instruction. The doctoral student in Curriculum and Instruction may be preparing for teaching and research in higher education, for a curricular or supervisory position in a public school district or for work in a government agency, private foundation or an educational training role in business and industry. Consequently, a single set of minimum standards cannot possibly fit all Ph.D. programs for which Curriculum and Instruction is the primary discipline or co-discipline. Instead, sensitivity to individual student needs and goals, as well as regard for the different approaches to doctoral study represented in the several fields within Curriculum and Instruction, require flexibility and diversity in program planning.

Within the context described, a minimum of 24 hours in Curriculum and Instruction is required of students with Curriculum and Instruction as their primary discipline and a minimum of 15 hours in Curriculum and Instruction is expected of students selecting Curriculum and Instruction as their co-discipline. In no case will a program be drawn up or approved that contains only coursework previously completed. Additional requirements may be set by the student's doctoral supervisory committee on the basis of the individual's program goals, previous academic preparation and relevant prior experiences.

Comprehensive Examination Requirements

(Written and Oral examinations required)

Last week of August, February, and October.

Economics

Discipline Coordinator

Scott Fullwiler, (816) 235-5700, scottf@umkc.edu

Economics is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in [Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission](#) and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

In addition to the general criteria for admission, the criteria for admission to the Interdisciplinary Ph.D. program in Economics are:

1. A score of at least 154 in verbal reasoning, a score of at least 154 in quantitative reasoning and at least a 4.0 on the analytical portions of the general Graduate Record Examination.
2. A grade-point average of at least 3.0 (on a 4.0 scale) covering all college work taken prior to the bachelor's degree, or a grade-point average of at least 3.0 (on a 4.0 scale) covering all post-baccalaureate work completed to date.
3. Recommendations for provisional or full admission by the doctoral faculty review group in at least two participating disciplines.
4. Applicants for whom English is not the native language and have studied less than two years (full time) in a U.S. academic program or a comparable program in an English-speaking country are required to obtain a TOEFL score of at least 550 on the paper-based test or 213 on the computer-based test. In addition, to qualify for **full admission** status, international students must achieve a score of at least 4.0 on the Test of Written English (TWE) portion of the TOEFL examination. Students admitted provisionally because of the TWE requirement may take a TWE equivalency test through UMKC's Applied Language Institute once they arrive on campus.
5. Applicants must have at least 18 undergraduate semester credit hours in economics, including intermediate microeconomics and macroeconomics and a course in elementary statistics. In addition, it is strongly recommended that applicants have some of the following courses: econometrics, mathematical economics, history of economic thought, heterodox economics, economic history, calculus and linear algebra. Students with fewer than 18 credit hours will be admitted only on a provisional status.
6. Applicants matriculated into the M.A. Economics program at UMKC may apply for admission to the Interdisciplinary Ph.D. program in Economics as soon as they have completed 15 credit hours and have earned a grade-point average of 3.25 or better.
7. Applicants who wish to transfer to the UMKC Interdisciplinary Ph.D. program in Economics from other institutions must have obtained a grade-point average of at least 3.0 covering all their graduate work. Transfer students must apply for transfer credits toward the Interdisciplinary Ph.D. as soon as possible after completion of a minimum of 12 credits at UMKC with a grade-point average of 3.0 or better. Up to 30 transfer credit hours

may be granted. No transfer credit will be granted for any courses not relevant to the Interdisciplinary Ph.D. in Economics or for any course with a GPA of less than 3.0.

The deadline for receipt of completed applications and supporting documentation is Feb. 1 for the fall semester and Sept. 1 for the spring semester.

Alternate Admission Criteria

Applicants who do not fit the above criteria may petition the Economics doctoral committee with evidence of scholarly publication, research and recommendations, but the decision rests with the committee.

Qualifying Requirements for Full Admission

At the time admission is offered, provisional students will be notified of any course deficiencies or qualifying requirements to be met for full admission. The faculty will make a decision with regard to full admission based upon the student's performance in meeting the qualifying requirements.

Suggested Compatible Co-disciplines

Curriculum and Instruction (p. 1568), Educational Leadership Policy and Foundations (p. 1572), History (p. 1584), Public Affairs and Administration (p. 1605), Social Science Consortium (p. 1607)

Core Program Requirements

For Students with Economics as a Primary Discipline

The Interdisciplinary Ph.D. in Economics consists of a minimum of 18 required coursework credit hours in Economics—including:

Code	Title	Credits
ECON 5506	Advanced History Of Economic Thought	3
ECON 5551	Advanced Institutional Theory	3
ECON 5601	Colloquium In Advanced Macroeconomics	3
ECON 5602	Colloquium In Advanced Microeconomics	3
ECON 5625	Colloquium In Econometrics	3
ECON 5688	Colloquium On Political Economy	3
Total Credits		18

If the student has not taken the prerequisites to ECON 5601, ECON 5602 and ECON 5625, he/she will be required to take ECON 5501, ECON 5502, ECON 5521, and ECON 5525 --an additional 12 coursework credit hours (or, a total of 30 hours). All students are strongly urged to take two fields in Economics, each consisting of two three-credit hour courses for a total of 12 additional coursework credit hours. These courses will be taken in Economics and at least one additional field such as sociology, history, public administration, education, mathematics, political science, geosciences, computer science or others, provided that such fields participate in the doctoral program.

Code	Title	Credits
Required Courses		
ECON 5501	Advanced Macroeconomic Analysis	3
ECON 5502	Advanced Microeconomic Analysis	3
ECON 5506	Advanced History Of Economic Thought	3
ECON 5521	Mathematical Economics (Calculus I strongly recommended)	3
ECON 5525	Econometric Methods	3
ECON 5551	Advanced Institutional Theory	3
ECON 5601	Colloquium In Advanced Macroeconomics	3
ECON 5602	Colloquium In Advanced Microeconomics	3
ECON 5625	Colloquium In Econometrics	3
ECON 5688	Colloquium On Political Economy	3
Additional Requirements		
Coursework in an outside field or fields, depending upon the requirements of co-discipline regulations		
Dissertation and oral examination		12
Total Credits		42

For Students with Economics as a Co-discipline

Those students taking Economics as a co-discipline will take a minimum of 12 hours in Economics, at the graduate level, including:

Code	Title	Credits
ECON 5501	Advanced Macroeconomic Analysis	3
ECON 5502	Advanced Microeconomic Analysis	3

Comprehensive Examination Guidelines

Primary discipline students are required to pass a qualifying examination in Economics theory—micro, macro and political economy, and in quantitative methods. Students taking field concentrations must pass a Comprehensive Examination in those fields, or meet the requirement by an alternative means that is accepted by the department.

Co-discipline students must receive grades of "B" or better in ECON 5501 and ECON 5502. In addition, the oral portion of the Comprehensive Examination will require students to integrate knowledge between topics in Economics and the student's coordinating unit.

Educational Leadership, Policy and Foundations

Discipline Contact

Shirley Marie McCarther, (816) 235-2451, mccarthers@umkc.edu

Educational Leadership, Policy and Foundations is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Applicants who designate Educational Leadership, Policy and Foundations as their primary discipline will be expected to have a grade-point average of at least 3.0 on a 4.0 scale, covering all college work taken prior to the bachelor's degree, or a GPA of at least 3.5 on a 4.0 scale, covering all post-baccalaureate work completed to date.

Applications are only reviewed once a year, for admission beginning the next fall term. To be considered, applications must be submitted to the Admissions Office by February 15.

The applicant must provide the following supplementary documentation:

1. Written recommendations from appropriate professors and practitioners in the field (selected by the applicant).
2. An autobiographical sketch. (This should be a brief resume of academic and professional goals and the applicant's personal, academic and career history as it relates to those goals. It should also include reasons for choosing educational leadership, policy and foundations as a field of study.)
3. Evidence of graduate-level writing ability provided by writing samples, prior scholarly writing or the successful completion of an essay examination.

Applicants are required to provide official GRE test scores. GRE scores will be used by doctoral faculty in the discipline as one of several criteria used to evaluate the strength of the application. No other assessment results will be substituted for the GRE. When evaluating applications, faculty members will take into account evidence in the applications of such factors as demonstrated leadership skills, commitment to education, communication and academic skills, a clear and important research agenda, cultural background, etc. There is no minimum aggregate GRE score required for applications to be considered for educational leadership, policy and foundations. Applicants must meet the GRE requirements for their other discipline(s).

In addition, an applicant, the applicant's advisor or any member of the division may request that the applicant meet with and be interviewed by the division faculty.

Alternate Admission Criteria

International applicants will be considered for admission to the Ph.D. program on the basis of background, experience and educational attainments in their home countries. Exceptions to the general criteria for admission to Interdisciplinary Ph.D. study may be made for students whose potential for success in the doctoral program may not be reflected in the general criteria.

Qualifying Requirements for Full Admission

In some cases, the division may ask that 12 hours of work at UMKC, including an education foundations course, be taken prior to full admission.

Students admitted under alternate criteria will be notified upon acceptance of any coursework deficiencies they must satisfy or other preparation they must undertake prior to full admission.

Suggested Compatible Co-disciplines

Curriculum and Instruction (p. 1568), Economics (p. 719), History (p. 1584), Social Science Consortium (p. 1607)

Core Program Requirements

Students with Educational Leadership, Policy and Foundations as a co-discipline will be required to take a minimum of 15 credit hours of core courses. The core curricula will vary, depending on whether students' research is primarily in educational leadership or the social-philosophical foundations of education and on the types of educational setting upon which they wish to focus. Specific courses will be selected with the advice and consent of the student's faculty advisor and supervisory committee. The supervisory committee may elect to accept coursework in an educational-specialist program or other post-master's degree program as counting toward the 15-credit-hour requirement.

Students seeking administrative certification for public school positions should check with their advisors to be sure they include all courses currently required in the states in which they wish to become certified.

The amount of required coursework, beyond the minimum 15-credit-hour core requirement, taken by students with Educational Leadership, Policy and Foundations as their primary discipline, will depend upon their previous preparation in the discipline, their previous research competencies, their personal career goals and their research interests.

All students with Educational Leadership, Policy and Foundations as either the primary discipline or the co-discipline are required to take and complete EDUC-UL 5685, the seminar on problems and issues in education and urban leadership.

Other Discipline-Specific Special Requirements

The student, at a minimum, will be required to take and complete 12 hours of coursework that provides extensive preparation in research methodologies relevant to her or his professional goals and intended dissertation project. The student will select specific courses with the advice and consent of her or his faculty advisor and supervisory committee. Typical courses which would satisfy this requirement include (but are not limited to):

Code	Title	Credits
EDUC-R&P 5505	Statistical Methods I	3
EDUC-R&P 5508	Principles And Methods Of Research	3
EDUC-R&P 5605	Quantitative Analysis I: Regression And Analysis Of Variance	3
EDUC-R&P 5608	Introduction To Graduate Research	3
HISTORY 5591	Archival Methods	3
HISTORY 5687	Doctoral Research Seminar	3
SOCIOL 5510	Sociological Methods I	3
SOCIOL 5511	Sociological Methods II	3
EDUC-UL 5601	Research In Education Administration: Qualitative Theory & Design	3
EDUC-UL 5603	Research In Education Administration: Qualitative Data & Analysis	3

Requirements for Comprehensive Examinations

Students with Educational Leadership, Policy and Foundations as the primary discipline must pass a Comprehensive Examination including both the primary discipline and the co-discipline areas.

Electrical and Computer Engineering

Discipline Coordinator

Ahmed Hassan (hassnAM@umkc.edu), (816) 235-6219,

Electrical and Computer Engineering faculty who are members of the doctoral faculty.

Electrical and Computer Engineering is a Ph.D. discipline with the following five Concentration Areas:

1. Computer, VLSI and Embedded Systems Design
2. Nanotechnology
3. Electromagnetics, Radio Frequency (RF) Circuits, and Signal Processing
4. Computer Vision, Multimedia and Machine Learning
5. Power Electronics and Renewable Energy

Notes:

1. Our Ph.D. Programs are administered by the Interdisciplinary Ph.D. Program (http://web2.umkc.edu/catalog/Interdisciplinary_Ph_D_Program.html) of School of Graduate Studies (http://web2.umkc.edu/catalog/School_of_Graduate_Studies_0.html) at UMKC.
2. As part of Interdisciplinary Ph.D. Program (http://web2.umkc.edu/catalog/Interdisciplinary_Ph_D_Program.html) requirement, ECE Ph.D. students must select a related co-discipline from which they must take 3 or 4 courses to strengthen the knowledge in topics broadly related to their research areas.
3. ECE Ph.D. students **do not need to select the Co-Discipline during the application process**. This has to be done in the first semester after coming to UMKC.
4. The discipline-specific requirements listed here are *in addition* to the requirements listed in the Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission (http://web2.umkc.edu/catalog/Interdisciplinary_Ph_D_Application_Procedure_and_Minimum_Criteria_for_Admission.html) and the Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements (http://web2.umkc.edu/catalog/Minimum_Interdisciplinary_Ph_D_Academic_Regulations_and_Degree_Requirements.html).

Discipline-Specific Admission Requirements

A student who meets the minimum discipline requirements stated below will be considered for regular admission to the Ph.D. program. A student who does not meet some of the requirements but shows high potential for advanced-level work, may be considered for provisional admission. Admission also depends on factors such as number of seats available, resources available in the area of student's interest, the quality of previous work, etc. A student who does not qualifying for admission to the Ph.D. program, may be considered for admission to the M.S. in Electrical Engineering program. Requirements for admission are similar, whether the applicant is requesting Electrical and Computer Engineering as the primary or co-discipline.

Minimum Recommended Ph.D. Admission Requirements:

1. GPA (Bachelor or equivalent Degree): 3.5 in the scale of 4 (or equivalent)
2. GPA (MS or equivalent Degree if any): 3.5 in the scale of 4 (or equivalent)
3. GRE (Quantitative) minimum score = 85%
4. TOEFL iBT minimum Score = 89 or IELTS minimum score = 6.5
5. Prior Projects or Publications (Preferred)*
6. Internationally Acceptable Accreditation of the Prior Degree Awarding Institutes

• *Prior research project and/or publication record is not required for admission into ECE Ph.D. program. However, doctoral faculty members give very high value to the students with such backgrounds.*

Direct or Expedited Ph.D. Program

It is not required to have an MS or equivalent degree to apply to ECE Ph.D. program. We accept well-qualified and motivated students with a Bachelor's degree directly into our Ph.D. program. We actively encourage students in the **Direct Ph.D. Program** to try to complete the doctoral study within 4 or 5 years after the Bachelor degree. To complete the Ph.D. degree in an expedited timeline, first, the student has to be dedicated and well qualified. Second, the student must make a comprehensive plan at the beginning of the doctoral study to complete all the relevant steps within a strict timeline, which is challenging but not impossible.

Clarification of Minimum Requirements and Decision Process

Academic Preparation

The applicant must have a bachelor and/or a master's degree in electrical and/or computer engineering, electronics, communications engineering or any other field requiring substantial training in at least one of the above fields and in mathematics with a GPA of 3.5 or better, cumulative as well as in the major field; and a GPA of 3.5 or better in all post-baccalaureate or post-master's degree work.

Aptitude for Advanced Work

The student must demonstrate an aptitude for advanced-level work through national/international standardized examinations such as the GRE. The expected performance level is the 85th percentile in the quantitative portion of the GRE examination.

- In rare occasion, ECE Ph.D. Discipline Coordinator exempts GRE requirement for students with outstanding publication or scholarly records in internationally renowned journals, conferences or similar forums.

Proficiency in English

The student must demonstrate his or her proficiency in oral and written communication in English through national/international standardized English examinations such as TOEFL, verbal portion of the GRE, etc. Because of this test, the student may be required to improve his or her oral and written communication in English before enrollment in the courses of the chosen disciplines.

- For students with a North American (USA and Canada) B.S. or M.S. degree the English Proficiency requirement is exempt.

How a Ph.D. Applicant Can Request for the Waiver of any Test Score?

As mentioned above, under special circumstance a Ph.D. applicant can request for the waiver of any test (GRE/TOEFL/IELTS) score. Usually **the GRE waiver request is granted** for students who have already demonstrated outstanding performance in research or other scholarly activities prior to applying to UMKC for graduate admission.

Applicants must talk to the respective Ph.D. Discipline Coordinator (https://webmail.umkc.edu/owa/redir.aspx?SURL=XE6le1p_ZuDqPSgMooWMNlzm9UKEnDzT4hrhbMX2tTOOLwTfAjfTCGgAdAB0AHAAOgAvAC8AcwBnAHMALgB1AG0AawBjAC4AZQBkAHUALwBmAG8Acq%3a%2f%2fsgs.umkc.edu%2ffor-faculty-and-staff%2finterdisciplinary-ph-d-coordinators%2f) BEFORE requesting a waiver for the official test score requirements.

After talking with the Coordinators, a waiver request can be submitted in writing through the Supplementary Interdisciplinary Ph.D. Application site (iSAP). Choose "Uploads" from the left-hand menu, then "Add files" to upload your waiver request in a PDF format. Choose "Other" for the document type listed in the drop down menu, then click "Start" to add the TOEFL/IELTS/GRE waiver request to your application.

Recommendation Letters

The student must provide at least three recommendation letters from professors from his or her previous institution(s). If the applicant has been out of school for several years, recommendation letters from his or her supervisors (technical) will be acceptable. However, even in this situation, a recommendation letter from his or her last academic institution is highly recommended. A recommendation from a faculty member in the Computer Science Electrical Engineering (CSEE) Department at UMKC must be provided if the student has taken courses from or worked with the CSEE faculty.

Statement of Goals and Objectives

The applicant must provide a 250 to 500 words essay on his/her goals and objectives of pursuing the Ph.D. in the chosen fields.

Prior Research Projects and Publications (Preferred but not Required)

The applicant is encouraged to submit evidence of prior research projects and/or publications (if any).

Admission at an Advanced Level

An applicant who has already completed significant graduate coursework (15 or more semester hours of post-master's work or 30 or more hours of post-bachelor's work) toward a Ph.D. at another institution must provide reasons for changing institutions. The applicant must also provide a letter of endorsement from a doctoral faculty member in Electrical and Computer Engineering indicating their willingness to be the student's research advisor.

Ph.D. Admission Decision Process

Ph.D. admission is primarily based on individual doctoral faculty members' needs and preferences. The role of the ECE Ph.D. Discipline Coordinator is to ensure that Ph.D. applicants satisfy the minimum requirements (GPA, GRE, TOEFL/IELTS, reputation of prior degree awarding institutes and other scholarly achievements). If the requirements are satisfied, ECE requires (except in rare cases) a doctoral faculty member to accept advisory duties for a student to be admitted.

Communication with our Doctoral Faculty Members

In addition to reviewing the academic credentials of a new Ph.D. applicant, many of our faculty members prefer interviewing the student before making any decision. Therefore, ***we strongly advise new Ph.D. applicants to contact our doctoral faculty members in the areas of their research interests before or after starting the application process.*** However, it is not required that every Ph.D. applicant must contact a relevant doctoral faculty member prior to the application. Whenever we receive a new Ph.D. application we share the information with all ECE doctoral faculty members for their consideration. **ECE Doctoral Faculty Members and Research Areas may viewed on the website:** <http://sce.umkc.edu/degree-programs/doctoral/electrical-computer-engineering/>

Qualifying Requirements for Full Admission

Prerequisite Knowledge

A Ph.D. student selecting Electrical and Computer Engineering (ECE) as the primary Ph.D. discipline is expected to have the level of preparation represented by a four-year undergraduate degree in electrical/computer engineering. The applicant may have received a bachelor's degree or a master's degree in computer science, computer engineering, electrical engineering or electronics, or any other related field with substantial training in mathematics.

Selection of a Co-Discipline and Suggested Compatible Co-Disciplines

To broaden the knowledge of the Ph.D. students UMKC Interdisciplinary Ph.D. program requires each student to select a co-discipline closely related to the primary discipline.

The following are suggested compatible co-disciplines for ECE students:

Computer Networking and Communication Systems (<https://catalog.umkc.edu/colleges-schools/graduate-studies/telecommunication-computer-networking/>), Computer Science (<https://catalog.umkc.edu/colleges-schools/graduate-studies/computer-science/>), Engineering (<https://catalog.umkc.edu/colleges-schools/graduate-studies/engineering/>), Mathematics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/mathematics/>), Physics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/physics/>)

A co-discipline outside of this list may be considered only in exceptional cases. These co-disciplines require 3 or 4 courses to be taken by the ECE Ph.D. students to fulfill the co-discipline requirements.

Notes:

- *ECE Ph.D. students do not need to apply to a co-discipline at the time of admission.*
- ECE Ph.D. students have to select a co-discipline in the first semester after coming to UMKC.
- ECE Ph.D. students are advised to consult their primary (ECE) adviser to select an appropriate co-discipline.
- ECE Ph.D. students can change their co-discipline any time before the comprehensive exam.

Transfer of Course Credit

New Ph.D. students with some prior graduate level course works from another university can apply to transfer up to 6 credit hours in each discipline (primary and co-discipline).

Alternate Admission Criteria

An applicant not meeting the minimum admission requirements, or not having sufficient academic preparation (stated above under prerequisite knowledge) for advanced work in the chosen discipline (s), may be considered for provisional admission by the CSEE Departmental Ph.D. committee if the committee sees high potential for advanced work from the rest of the applicant's credentials. Evidence of high potential might be pertinent work experience, published papers or extremely high achievements in related areas. A student not having an undergraduate degree in electrical and/or computer engineering may be admitted provisionally if the admission committee determines that the student has a strong aptitude for research and is willing to take prerequisite courses as determined by the admission committee based on the student's academic record.

Application for an MS Degree while Enrolled in ECE Ph.D. Program

ECE Ph.D. students may apply to receive an MS degree upon passing the qualifying and comprehensive exams provided that the coursework required for MS degree under course only option is completed. This is a very good option for students in ECE Direct Ph.D. Program. However, this is subject to primary Ph.D. supervisor's approval.

Note:

- If an ECE Ph.D. student fails to pass the Qualifying Exam in two attempts or cannot successfully complete the Comprehensive Exam, the student will not be allowed to apply for transfer to the MS program or apply to receive an MS degree even if the coursework required for MS degree under course-only option is completed. Please consult your ECE Ph.D. supervisor and/or ECE Ph.D. Discipline Coordinator for details.

Core Program Requirements

The amount of work required for the Ph.D. depends on the student's level of preparation. For example, a student entering the Ph.D. program after earning a bachelor's degree may expect to do significantly more work compared to a student who enters after earning a master's degree.

Electrical and Computer Engineering as a Co-Discipline

- Students who choose ECE as a co-discipline need to take 3 ECE graduate courses (9 credit hours).
- Students who choose ECE as a co-discipline **do not need** to take the **ECE Ph.D. Qualifying Exam**.

• **CNS, CS, Engineering and Physics Ph.D. students are automatically eligible for ECE as a co-discipline.**

Full-time Status and Doctoral Residency Requirement

US Domestic students can enroll into any number of credit hours per semester during the regular academic year (Fall and Spring). International students are usually required to enroll in 9 credit hours per semester during the regular academic year (Fall and Spring) to maintain full-time (visa) status. However, for international graduate (Ph.D. and MS) students with 50% FTE (20 hours per week) appointments as Graduate Research/Teaching Assistants the requirement is 6 credit hours of enrollment per semester for full time equivalence. Enrollment is not required in Summer.

Interdisciplinary Ph.D. students must satisfy the doctoral residency requirement by satisfactory completion of at least 18 credits within 24 consecutive months. When satisfying the residency requirement, all Interdisciplinary Ph.D. students are subject to the following restrictions:

1. The doctoral residency requirement must be satisfied no later than the end of the semester in which the student completes his or her comprehensive examinations.
2. Students must achieve a cumulative graduate grade-point average of at least 3.0 in all courses counted toward satisfying the residency requirement.
3. Dissertation research credits (696 to 699) may not be counted toward satisfying the doctoral residency requirement

Financial Aid

Various forms of financial aid (such as graduate research assistantships, graduate teaching assistantships, graduate fellowships) are available through the Computer Science and Electrical Engineering Department and the School of Graduate Studies. Contact the discipline coordinator for more information.

Most of our Ph.D. students are funded through a **Graduate Research Assistantship (GRA)** and/or a **Graduate Teaching Assistantship (GTA)**. GRA support is provided by individual doctoral faculty members from their research grants. GTA support comes from Department Chair's instructional fund. However, the GTA support is also provided based on the recommendation of the Ph.D. advisor. The Department Chair normally honors the requests for GTA support if there are available GTA slots. Therefore, every Ph.D. student must have a faculty advisor to get funding in the form of a GRA or GTA. Once a Ph.D. student is admitted we (the Department Chair and the doctoral faculty members) will try our best to provide funding to the student throughout the Ph.D. study. However, the applicants must keep in mind that the number of funding slots (GRA and GTA) for the Ph.D. students are not unlimited. The supports are provided based on respective faculty advisor's recommendations and Department Chair's needs. The awarding of GRA and GTA funding is a competitive process. The students are required to maintain high academic standing and demonstrate strong research performance to get continuous support throughout the Ph.D. study. Our Department's policy is to provide support to as many Ph.D. students as possible.

Additionally, the UMKC School of Graduate Studies provides many different types of fellowships, awards and scholarships to qualified graduate students through a competitive selection process. Please visit the website of the School of Graduate Studies for further details.

Note:

- **If a student receives financial aid in the form of GTA/GRA from the CSEE Department or its doctoral faculty members after the full admission and enrollment into ECE Ph.D. program, the student must complete the doctoral study. If a funded Ph.D. student decides to leave the program at any stage before the completion, no terminal MS or equivalent degree will be awarded.**

Monthly Stipend for Ph.D. Students with GRA/GTA Appointments

Ph.D. students with 50% FTE (20 hours per week) appointments as GRA/GTA will receive a stipend of around \$6000 (subject to availability of funds) per semester during the Fall and Spring semesters. This stipend will be paid in 4 or 5 monthly installments. All GRA/GTA appointments (if awarded) are for one regular academic year (Fall and Spring) for the new students. Beyond the first year, the GRA/GTA supports are subject to availability and performance. **There is no guaranteed financial support for the Summer semester.**

Other Fees and Health Insurance

Students are responsible for some additional fees, health insurance, books and supplies, and living costs.

Timeline and Steps Toward the Completion of ECE Ph.D. Degree

New Ph.D. students are strongly advised to make a clear plan in consultation with the ECE Ph.D. advisor as soon as they start their doctoral study to complete the following steps within the required time line:

1. **Annual Evaluation:** Every Ph.D. student is required to complete an annual evaluation in two parts - one in spring and one in fall. These are online surveys to evaluate last year's achievements and next year's goals, then the primary and co-discipline advisors provide feedback for the students.
2. **Ph.D. Qualifying Examination:** Students taking an ECE Ph.D. Discipline as the primary unit should make the first attempt to pass the qualifying exam **during the first three (3) regular semesters after fully admitted to the doctoral study at UMKC**. The student must pass both parts of the qualifying exam within four (4) regular semesters. Summer term is not counted.
3. **Plan of Study:** The Ph.D. Plan of Study form, signed by the student, members of the student's proposed Supervisory Committee, and the Academic Administrators in the student's disciplines, must be filed with the School of Graduate Studies **no later than the end of the second year (24 months)** after the student has been fully admitted. The Interdisciplinary Ph.D. Plan of Study may be filed prior to that time.
4. **Formation of Ph.D. Supervisory Committee:** The Supervisory Committee shall consist of at least five members composed of one doctoral faculty from each of the primary and co-disciplines, with a maximum of three from any one discipline. Regarding the formation of the committee the student should consult the primary (ECE) Ph.D. supervisor, who will be the Chair of the Committee. Names and signatures of the committee members have to be submitted with the **Plan of Study**.
5. **Fulfilling Ph.D. Residency Requirement:** Ph.D. students must satisfy the doctoral residency requirement.
6. **Comprehensive Examination:** The format and general requirements for the Comprehensive Exam vary according to the Ph.D. discipline. The Comprehensive Exam is administered by the candidate's doctoral committee. A student can either take a written test or opt for an oral presentation covering both primary and co-discipline areas. Discussion with and agreement from the student's doctoral committee is required before choosing the best option. Candidates should contact the CSEE Department's office and the chair of their doctoral committee for more information.

The ECE discipline usually requires the students to make a formal presentation on the background study, current progresses and future plans regarding the selected research problems for doctoral study. ECE students can take the **Comprehensive Exam any time after passing ECE Ph.D. Qualifying Exam and the approval of the Plan of Study** by the School of Graduate Studies.

1. **Interdisciplinary Ph.D. Research Proposal:** After the completion of the Comprehensive Exam each Ph.D. student must submit a written Research Proposal to the School of Graduate Studies.

2. **Doctoral Dissertation:** The format and general requirements for the Doctoral Dissertation exam vary according to the discipline. The ECE discipline requires the students to make a formal presentation on the outcomes of the doctoral research in front of the committee members. *ECE Comprehensive Exam and dissertation defense presentations are open to all students and faculty members.* In addition, it is recommended that students submit a draft copy of the dissertation to the committee members prior to the presentation. The defense of the dissertation is approved when a majority of the supervisory committee members recommend approval and sign the Report of Results of Final Dissertation Examination form. Students can schedule **Dissertation Defense six months after the Comprehensive Exam.**
3. **Final Thesis Submission:** After the successful completion of the Dissertation Defense, Ph.D. students must formally submit their Ph.D. dissertations according to the format and instructions of the School of Graduate Studies.

Notes:

- Ph.D. students are allowed to apply for extensions/exceptions/changes under exceptional circumstances.
- Part-time Ph.D. students may apply for flexibility of the timeline regarding the above-mentioned steps.
- Students are advised to regularly check the updates and modifications by the Schools of Graduate Studies.

Qualifying Examination Guidelines

The Qualifying Exam is a written test administered by the ECE Ph.D. committee. The test questions are from a set of fundamental courses in electrical and computer engineering. The ECE Ph.D. discipline offers the qualifying exam twice a year, once in the spring semester and once in the fall semester. Students taking an ECE Ph.D. Discipline as the primary (coordinating) unit should take the qualifying exam during the first 18 months after fully admitted. In case a student failed in his/her first attempt, and then he/she should take the failed part of exam again in the next consecutive term. Students who fail both attempts will be disqualified for the Ph.D. admission in ECE. ***The ECE Qualifying Exam is only for students whose primary Ph.D. discipline in ECE. Students from other primary disciplines who select ECE as a co-discipline will not be required to take the ECE Qualifying Exam.***

Qualifying Exam has two parts:

- 1) Compulsory Part (Part-I)
- 2) Concentration Area Based Part (Part-II)

Part-I: Compulsory Part of Ph.D. Qualifying Exam (Math and Circuit Theory): (Open Notes)

1. Part I of the exam will be held twice every year on the **third Friday of April and November**
2. It is compulsory for every student taking the qualifying exam to pass Part I, which will be based on E&C-ENG 276 (Circuit Theory I) and E&C-ENG 341R (Applied Engineering Analysis II).
3. Students are required to attempt only six questions out of ten.
4. Students are required to attempt at least two questions from each E&C-ENGR 276 and E&C-ENGR 341R. Total Time = 3 hours

Part-II: Concentration Area Based Part of the Ph.D. Qualifying Exam: (Open Notes)

1. Part II of the exam will be held twice every year on the Monday following the Part-I of the exam.
2. Students will be tested out from one of the concentration areas selected by the student.
3. Faculty in charge of the courses belonging to that particular concentration area will be asked to submit three questions per course and submit them to the ECE Ph.D. coordinator.
4. From the selected concentration area the students will be required to select three courses.
5. The students will be required to attempt only six questions out of nine questions from the selected 3 courses.
6. Students are required to attempt at least one question from each of the three courses selected for that concentration area. Total Time = 3 hours

ECE Ph.D. Concentration Areas for Qualifying Exam (Part II):

1. Computer, VLSI and Embedded Systems Design
2. Nanotechnology
3. Electromagnetics, Radio Frequency (RF) Circuits, and Signal Processing
4. Computer Vision, Multimedia and Machine Learning
5. Power Electronics and Renewable Energy

ECE Ph.D. Qualifying Exam Dates:

1. Spring Semester Exam: **Part I:** Third Friday of April and **Part II:** Monday following the Part I Exam
2. Fall Semester Exam: **Part I:** Third Friday of November and **Part II:** Monday following the Part I Exam

A Snapshot of Qualifying Exam Guidelines:

1. Please consult your Ph.D. Adviser about area selection and timing of your Ph.D. Qualifying Exam.
2. **Clarification of Open Notes Policy:** Students are allowed to bring 2-page doubled-sided written notes per subject during the exam. Students are not allowed to bring any textbook and other printed materials. Electronic copies of the notes are not allowed.

Restrictions on Electronic Devices: Scientific Calculators are allowed during the both parts of the examination. However laptop, smartphone, tablet, PDA or any other internet connected device will be absolutely prohibited during the both parts of the qualifying examination.

Engineering

Discipline Coordinator

Ceki Halmen, (816) 235-1286, halmenc@umkc.edu

Engineering is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

A student who satisfies the general requirements for admission and meets the minimum discipline requirements stated below will be considered for regular admission to the Ph.D. program with Engineering as a discipline. A student who does not meet some of the requirements but shows high potential for advanced-level work may be considered for provisional admission. Admission also depends on factors such as number of seats available, resources available in the area of the student's interest, the quality of previous work, etc. Requirements for admission are the same whether the applicant is requesting Engineering as the primary discipline or the co-discipline.

1. The applicant must have a bachelor's degree or a master's degree in civil or mechanical engineering or related disciplines with a grade-point average of at least 3.0 on a 4.0 scale in the last 60 hours of undergraduate engineering coursework. In addition, a GPA of 3.5 or better in all post-baccalaureate coursework is required. Pre-program requirements may be specified in case the bachelor's degree is in a discipline different than that to which the candidate is applying.
2. The student must demonstrate an aptitude for advanced-level work by obtaining a cumulative GRE score of at least 302 (verbal + quantitative) and a minimum of 158 on the quantitative portion of the examination. GRE requirements may be waived for applicants with a baccalaureate from an ABET accredited program who have passed the Fundamentals of Engineering (FE) exam.
3. TOEFL or IELTS scores are required for international students without prior U.S. degrees. The minimum required score is 80 or 6.5 on TOEFL or IELTS, respectively. TOEFL requirements may be waived for applicants with a baccalaureate from an ABET accredited program.
4. The student must provide at least three recommendation letters from professors at previous institutions or mentors at work.
5. The applicant must provide a maximum 300-word statement on their goals and objectives in pursuing the Ph.D. The statement at the least should indicate which of the areas (civil or mechanical) the student is interested in and preferably indicate the sub-discipline the student is interested in as well, such as structures, construction management, biomechanical, HVAC etc.
6. Provisional admission may be granted if the minimum GPA and GRE requirements are not met, but other indicators promise the student's success in the program. To be fully admitted to the Interdisciplinary Ph.D. program, the provisionally admitted student must obtain a grade of B or better in the first nine hours of coursework and submit a satisfactory GRE score within their first year of the program.

Suggested Compatible Co-disciplines

Chemistry, Computer Networking and Communication Systems (<https://catalog.umkc.edu/colleges-schools/graduate-studies/telecommunication-computer-networking/>), C (<https://catalog.umkc.edu/colleges-schools/graduate-studies/computer-science/>) Computer Science, Electrical and Computer Engineering, G (<https://catalog.umkc.edu/colleges-schools/graduate-studies/geosciences/>) Geosciences, M (<https://catalog.umkc.edu/colleges-schools/graduate-studies/mathematics/>) Mathematics, M (<https://catalog.umkc.edu/colleges-schools/graduate-studies/molecular-biology-biochemistry/>) Molecular Biology and Biochemistry, O (<https://catalog.umkc.edu/colleges-schools/graduate-studies/oral-craniofacial-sciences/>) Oral and Craniofacial Sciences (<https://catalog.umkc.edu/colleges-schools/graduate-studies/oral-craniofacial-sciences/>), Physics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/physics/>)

Core Program Requirements

Engineering as Primary Discipline

Students without an MS degree need to complete a minimum of 42 credit hours of approved didactic graduate coursework (not research hours) beyond the baccalaureate. At least two-thirds of these hours must be at the 5500/5600 level. The graduate coursework may include courses taken at UMKC or other institutions and approved for transfer by the student's supervisory committee. A minimum of 12 credit hours of dissertation research taken at UMKC (CIV-ENGR 5699, E&C-ENGR 5699 or MEC-ENGR 5699) is required.

Example Minimum Requirements without an MS degree

Code	Title	Credits
Primary discipline (Engineering)		33
Co-discipline (e.g. Mathematics or Physics)		9
Dissertation research		12
Total beyond M.S. degree (minimum of 30 hours)		54

Students with an MS degree need to complete a minimum of 18 credit hours of approved didactic graduate coursework (not research hours) beyond the MS degree. At least two-thirds of these hours must be at the 5500/5600 level. The graduate coursework may include courses taken at UMKC or other institutions and approved for transfer by the student's supervisory committee. A minimum of 12 credit hours of dissertation research taken at UMKC (CIV-ENGR 5699, E&C-ENGR 5699 or MEC-ENGR 5699) is required.

Example Minimum Requirements beyond an MS Degree

Code	Title	Credits
Primary discipline (Engineering)		9
Co-discipline (e.g. Mathematics or Physics)		9
Dissertation research		12
Total beyond M.S. degree (minimum of 30 hours)		30

Engineering as Co-discipline

A student electing Engineering as co-discipline will be required to complete a minimum of 9 credit hours in Engineering graduate courses, of which at least six hours must be at the 5500/5600-level.

Qualifying Examination Guidelines

Students may be required to complete a qualifying exam by the research advisor. If required, the exam will be administered by the graduate committee in conjunction with the research advisor in the first year of study. The exam will consist of two parts: (1) a written exam based on core areas in civil/mechanical engineering OR an engineering problem related to the student's emphasis area, AND (2) an oral defense of the exam and other discipline fundamentals or the problem solution. The department will keep a record of whether the student has passed or failed the exam. The student may request one more attempt to retake the exam in the event of a failed grade. The student will be recommended for termination from the doctoral program after two failed attempts.

Comprehensive Examination Guidelines

To advance to degree candidacy, an Interdisciplinary Ph.D. student is required to pass a Comprehensive Examination administered by the student's research advisor and supervisory committee. This Comprehensive Exam will consist of two parts. Part One will be a written exam over the student's Ph.D. coursework or the submission of a grant proposal to the committee. Part Two will be an oral defense of the student's dissertation research proposal.

English

Discipline Coordinator

John Barton, (816) 235-2764, bartonjc@umkc.edu

English is a discipline in the Interdisciplinary Ph.D. Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

For new students selecting English as a discipline, admission will normally be for the fall term. Application dossiers must be complete by Jan. 15. Because the university closes over the winter holidays and classes may not resume until after Martin Luther King Day, prospective students should initiate contact with the department's Discipline Coordinator and faculty in November.

Applicants who select English as their primary discipline will be expected to have the M.A. in English or equivalent coursework as determined by the English department doctoral committee. Applicants who select English as a co-discipline should have completed a master's degree or equivalent coursework. In most cases, students will be expected to have completed, with a grade of B or better, 12 hours of English courses at the 300- or 400-level (or appropriate equivalents) that are approved by the English department doctoral committee.

An applicant who plans to pursue a degree with English as a discipline is required to provide the English department doctoral committee with the names of three individuals who are academically or professionally qualified to assess the applicant's ability to pursue doctoral work. References

submitted to the School of Graduate Studies for admission to doctoral studies may be judged by the English department doctoral committee as sufficient evaluation, but the department reserves the right to request further information.

Applicants also are required to submit samples of written work to the English department doctoral committee. The applicant must submit a sample of academic prose with a research component that demonstrates the applicant's ability to undertake graduate course work in English and to engage in a scholarly conversation, preferably on a subject closely related to the applicant's proposed doctoral studies. The applicant's narrative statement, submitted with the application form, should provide a well-focused justification of the proposed course of study that is compatible with the department's resources. Applicants should consult with the Interdisciplinary Ph.D. coordinator in English for advice on the preparation of the narrative. Applicants may also seek advice on the narrative from doctoral committee members with special expertise in the applicant's chosen fields of study.

Applications will be evaluated by a committee of the doctoral faculty in the English department; the committee will recommend to the department chair and dean of the School of Graduate Studies whether the applicant should be admitted. These English-specific requirements apply to all applicants intending to have English as primary discipline or co-discipline.

Students who expect to write a dissertation that draws primarily on research in English must apply for English as their primary discipline.

In cases where an applicant has not yet met the foreign language requirement or GRE scores are still pending, provisional admission may be recommended.

Qualifying Requirements for Full Admission

In addition to the below criteria, the committee considers the applicant's writing sample, letters of recommendation, personal statement, and the overall viability of the applicant's proposed dissertation project.

English as Primary Discipline

Relevant Foreign Language Skills

Applicants must demonstrate facility in a foreign language relevant to study in English. The language requirement will ordinarily be met by two years of satisfactory college-level language study. Students may be required to demonstrate additional language skills to undertake or complete their dissertations.

English as a Co-discipline

Foreign Language Skills

Demonstrate foreign language competence in the same manner as students with English as the primary discipline.

Suggested Compatible Co-disciplines

Curriculum and Instruction (p. 1568), History (p. 1584)

Core Program Requirements

All students who list English as a discipline, whether as primary discipline or co-discipline, are required to take ENGLISH 5500 or its equivalent and to include two English doctoral faculty members on their committees. Students enrolling with English as their primary discipline are required to take a total of 18 hours in English, including ENGLISH 5547 and ENGLISH 5500. Students enrolling with English as their co-discipline are required to take a minimum of 12 hours in English, including English 5500 and one of the following: ENGLISH 5519, ENGLISH 5547, ENGLISH 5545, or HMNTY 5510.

Students admitted with English as the primary discipline are subject to the following requirements:

- Only English courses numbered 400 or above will be accepted for the Ph.D. degree. Courses taken in other disciplines may be taken at the 300-level or above.
- No grade below B in any course will be accepted to apply toward the Ph.D. degree.
- In most cases, no more than one-third of coursework in English, exclusive of credit for dissertation work, that is classified as independent study will be accepted for the Ph.D. degree.
- Students will be expected to complete the majority of their coursework at UMKC.
- In certain cases, exceptions to these requirements may be allowed.

Other Discipline-Specific Special Requirements

For foreign language requirement, see "Qualifying Requirements for Full Admission" for this discipline.

Comprehensive Examination Guidelines

The examinations must be taken within a year of completing coursework. Prior to taking exams, students must have a supervisory committee, an approved plan of study on file with the School of Graduate Studies and have completed all required coursework. See Comprehensive Examination

guidelines (<http://catalog.umkc.edu/colleges-schools/graduate-studies/minimum-interdisciplinary-phd-academic-regulations-degree-requirements/#Comprehensive%20Examination>) from the School of Graduate Studies for full details.

At least six months before taking Comprehensive Exams, the student will submit a tentative reading list of primary and critical works for all examinations. The supervisory committee will then meet to review the proposed reading list and address any oversights or imbalances.

PRIMARY DISCIPLINE ENGLISH

Before advancing to Ph.D. candidacy, students whose primary discipline is English will take a series of examinations: general examinations over two designated areas in English studies; the examination required by the co-discipline; and an oral interdisciplinary subject examination.

1. The General Area Examination

Areas for the general area examination will be designated at the time of the submission of the program of study. These may be changed only with the consent of the supervisory committee. The examination is designed to test the breadth of the candidate's knowledge in two areas of English studies whether periods of literary history (e.g., British 19th century, American literature from 1865, British and American literature since 1945) or other areas of expertise (e.g., linguistics, history of the language, rhetoric, genre studies, literacy studies). For students whose primary discipline is English, the examining committee for the general area examination must include at least two members of the graduate faculty in English. The reading lists, which are subject to the approval of the examining committee, should reflect interdisciplinarity. The general area examination consists of two parts, each receiving equal weight. The format of these examinations, designed in consultation with the student to reflect a sustained preparation (typically three to six months), will include a written component (e.g., a three-four hour sitting or a 72-hour "take-home" period for each area).

2. Co-Disciplinary Examinations

Students whose primary discipline is English will fulfill examination requirements of their co-discipline.

3. The oral interdisciplinary subject examination

The oral interdisciplinary subject examination will examine the student's command of methodology and current scholarship as well as primary sources and standard scholarly works in the field and assess the student's ability to integrate content, theory, and/or methods in the discipline of English and the student's co-discipline(s). At least two weeks before the oral interdisciplinary subject examination, the student will submit a dissertation prospectus detailing chapters, methodology, and bibliography subject to the approval of the supervisory committee. The exam is typically administered in a single two-hour sitting.

For students whose co-discipline is English, an examination covering one of the areas described above in "The General Area Examination" will be designed in consultation with the primary discipline.

Doctoral Dissertation Requirement

The dissertation defense will be a one and a half hour discussion of the dissertation that includes all members of the Supervisory Committee. The majority of the committee must vote for approval of the dissertation in order for the student to graduate. See the School of Graduate Studies guidelines for further procedures and deadlines.

Entrepreneurship

Discipline Coordinator

Brian Anderson (816) 235-2316, andersonbri@umkc.edu

Entrepreneurship and Innovation is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies. **This discipline is currently NOT accepting new students for the primary or the co-discipline.**

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Program Intent

The Department of Global Entrepreneurship and Innovation (GEI) participates in the Interdisciplinary Ph.D. program and meets the needs of students interested in supplementing his or her primary research interests with a course of study in entrepreneurship and innovation. Students interested in specifically focusing on entrepreneurship and innovation, with the intention of pursuing a career as a tenure-track faculty member in a business school, should consider the GEI full-time Ph.D. program offered through the Bloch School of Management.

Suggested Primary Disciplines

Computer Science (p. 1564), Economics (p. 719), Engineering (p. 1579), Mathematics (p. 1589), Physics (p. 1602)

Program Requirements

Students who select entrepreneurship as a co-discipline must complete four doctoral seminars (12 credits) offered by GEI doctoral faculty. The Ph.D. Program Director must approve the chosen courses, consistent with the student's research interests and background.

Comprehensive Examination

Students will complete an Entrepreneurship and Innovation Comprehensive Examination determined by the GEI faculty at the completion of the four required courses.

Dissertation

Students will work with the primary discipline on the extent to which the entrepreneurship and innovation literature informs the dissertation's central research question. At least one dissertation committee member should be a member of the GEI doctoral faculty, but may not chair the committee.

Geosciences

Discipline Coordinator

Fengpeng Sun, (816) 235-2973, sunf@umkc.edu

Geosciences faculty who are members of the doctoral faculty.

Geosciences is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Specific admission requirements defined by the faculty in Geosciences follow the guidelines established by the School of Graduate Studies. Typically, a student would be expected to hold an undergraduate or master's degree in environmental sciences, geology, geography or a closely-related field. Opportunities within the department range from the physical sciences to the humanities. Because of the wide range of faculty expertise, and in keeping with the general spirit of the entire interdisciplinary program, the faculty in Geosciences has deliberately chosen to establish broad guidelines for admission of Interdisciplinary Ph.D. students. All prospective graduate students must attain a GPA of 3.0 or above, on a 4.0 scale, in all university work prior to admission. Three letters of recommendation from professors as well as a proposal from the prospective student detailing goals and expectations are needed for an evaluation of the application. Students are expected to have an advisor at the time of admission.

Non-native English-speaking applicants seeking Geosciences as a primary discipline must demonstrate proficiency in English. This requirement can be satisfied by obtaining English proficiency certification from UMKC.

Suggested Compatible Co-disciplines

Faculty members in Geosciences conduct research in applied geophysics, atmospheric sciences, climate variability and climate change, engineering geology, environmental geology, geoarchaeology, geochemistry, geomorphology, GIS, mineral deposits, neotectonics, Quaternary environments, stratigraphy and volcanos and hazards planetary geology. Suitable co-disciplines for the Interdisciplinary Ph.D. program are practically unlimited. Consultation with the principal graduate advisors for geology and geography would be a good way for the student to explore the possibilities.

Previous and existing students have designated the following co-disciplines: Chemistry (p. 1223), Computer Science (p. 1564), Curriculum and Instruction (p. 1568), Economics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/economics/>), Engineering (p. 1579), History (<https://catalog.umkc.edu/colleges-schools/graduate-studies/history/>), Mathematics (<https://catalog.umkc.edu/colleges-schools/graduate-studies/mathematics/>), Physics (p. 1602), Social Science Consortium (p. 1607)

Other excellent possibilities would include: Educational Leadership, Policy and Foundations (<https://catalog.umkc.edu/colleges-schools/graduate-studies/educational-leadership-policy-foundations/>)

Core Program Requirements

Specific core program requirements follow the guidelines established by the School of Graduate Studies and are otherwise defined by the student's supervisory committee in consultation with each individual student.

Other Discipline-Specific Special Requirements

While there is no set minimum number of hours for all students, at least 50 percent of the course credit hours for students who select Geosciences as their primary discipline must be taken in Geosciences. Students who have selected Geosciences as a primary discipline or a co-discipline are expected to take no less than three courses from Geosciences as determined by their supervisory committee. Other special requirements are defined by the student's supervisory committee in individual consultation with each student.

Requirements for Comprehensive Examinations

Comprehensive examinations of all Ph.D. students who select Geosciences as the primary discipline will contain both written and oral components and may include questions from each of the co-disciplines and from related fields as determined by the student's examining committee. The

examining committee consists of the student's supervisory committee and others who may be appointed by the dean of the School of Graduate Studies.

Interdisciplinary Work

The faculty in Geosciences are committed to an interdisciplinary approach and expect that all Ph.D. students, whether enrolled in the primary or the co-disciplinary category, will complete courses and conduct research with this principle in mind.

History

Discipline Coordinator

Matthew Osborn, (816) 235-6118 x8, osbornmw@umkc.edu

History faculty who are members of the doctoral faculty.

History is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in [Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission](#) and [Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements](#). Please refer to the UMKC History Department website for up-to-date information on the Interdisciplinary Ph.D. program in History.

Discipline-Specific Admission Requirements

Except in unusual circumstances, students who select History as a discipline in the Interdisciplinary Ph.D. program must begin their work during the fall term. Applications must be received by the School of Graduate Studies no later than January 15. The doctoral faculty of the Department of History will review applications and make their recommendations for admission by the end of February. Applications that are incomplete as of January 15, and completed applications submitted after this deadline, may not be considered until the following year.

Applicants who choose History as their primary discipline, or applicants whose coursework in History will comprise at least 50 percent of the Ph.D. plan of study, must meet the criteria for admission specified by the School of Graduate Studies. In addition, they must:

1. Possess a master's degree in History or its equivalent.
2. Have earned a GPA of 3.5 on a 4.0 scale in graduate courses.

Students who choose History as a co-discipline and whose coursework in History will constitute less than 50 percent of the Ph.D. plan of study must meet the criteria for admission specified by the School of Graduate Studies. In addition, they must fulfill other entrance requirements specified by the doctoral faculty of the Department of History.

- 1) Co-discipline applicants who have a background in History will be considered as candidates for full admission.
- 2) Co-discipline applicants who have little or no background in History will normally be considered only as candidates for provisional admission. These applicants, if provisionally admitted, will be required to take a certain number of content courses at either the undergraduate or graduate level, to be determined by the student's prospective mentor, and maintain a B+ average before being considered for full admission.

All applicants for admission must submit in addition to the requirements specified by the School of Graduate Studies:

1. A sample of written work.
2. A brief statement of academic and professional goals.
3. A 1,000-word essay that specifies a research topic, demonstrates its interdisciplinary nature and shows how historical methods and approaches would be utilized.

Primary and Co-discipline applicants granted provisional admission will receive notification of deficiencies and of the conditions that must be met before full admission can be considered.

The doctoral faculty of the Department of History, in consultation with the History faculty as a whole, makes recommendations to the dean of the School of Graduate Studies on each application for admission. These recommendations reflect the majority vote of the doctoral faculty.

Applicants are advised that meeting the criteria of the School of Graduate Studies and the Department of History does not automatically result in admission to the Interdisciplinary Ph.D. program. When making recommendations to the School of Graduate Studies, the History faculty considers other factors as well, particularly the availability of faculty qualified to work in the applicant's area of interest and the availability of library resources and research materials.

Alternate Admission Criteria

In exceptional cases, candidates who do not meet either the School of Graduate Studies' or the History Department's minimum requirements for admission may be admitted under alternate criteria. The doctoral faculty of the department have adopted the following alternate criteria, one or more of which will be used to assess the applicant's ability: satisfactory performance in 5500- or above-level classes taken in the department's master's degree program; positive, written recommendations of our faculty willing to work with the applicant who have evaluated his or her previous work;

satisfactory completion of specified courses in the department before consideration or reconsideration of a candidate's application; publications or comparable professional achievements related to the study of History.

The Plan of Study

If full admission is granted, the student who chooses History as a discipline must satisfy the residency requirements of the School of Graduate Studies, and must fulfill the course requirements of the Ph.D. plan of study as prepared by the student and his or her advisor(s) and approved by the Interdisciplinary Ph.D. Program Director.

A student whose primary discipline is History will be required to list at least 18 hours of graduate-level history courses (exclusive of dissertation credits) on the plan of study. These will include: 3 hours of HISTORY 5581GR (How To History I) if this course or its equivalent has not been taken before; 1 hour of History 5582B (How to History II B); 3 graduate colloquia; and at least one graduate-level research seminar. The remainder of the program must be in courses numbered 5500 or above.

Students for whom History is a co-discipline will be required to take, at the minimum, 15 hours of graduate-level history courses. These will include: 3 hours of HISTORY 5581GR (How To History I); 1 hour of History 5582B (How To History II B); two graduate colloquia; and one graduate-level research seminar. In exceptional or unusual circumstances, some of these hours may be waived upon petition to the student's supervisory committee.

Any student who switches disciplines in the course of his or her graduate career, either adding history as the primary or co-discipline, or changing History from the co-discipline to the primary discipline, must fulfill all of the requisite doctoral requirements in History for that level (e.g., number of course hours, distribution requirements, exams).

Requirements for Comprehensive Examinations

The School of Graduate Studies guidelines for the Comprehensive Examination can be found [here](#).

The History Department requires that the Comprehensive Examination of a student listing History as a discipline include both a written and an oral component. The History members of the supervisory Committee will determine the structure and duration of the History component of the Comprehensive Exam.

For students with History as the Primary discipline, there is a list of Doctoral Fields appended below. The written comprehensives will consist of two examinations, the first from a Chronological/National field; the second from a Topical/Interdisciplinary field.

For Co-discipline students, the written comprehensives will consist of questions drawn from one of the Chronological/National fields or one of the Topical/Interdisciplinary fields appended below.

For both primary and co-discipline students, it is assumed that each examination will include a historiographical component.

In the oral examination conducted by the supervisory committee, both primary and co-discipline students will be expected to answer questions of an interdisciplinary nature.

A student with History as either a primary or co-discipline is considered to have passed the Comprehensive Examination if the History member/s of the examining committee vote that the candidate passes, and if no more than 20 percent of the examining committee vote to fail the student. If failure is reported, the examining committee will either recommend termination as a Ph.D. student or suggest additional work or other remedial measures. Furthermore, a student who has failed may not take a second examination for at least 12 weeks. Failure of a second Comprehensive Examination shall automatically preclude candidacy at this institution.

Dissertation Requirements

A student for whom History is a discipline must meet the requirements of the History Department for the discipline, as well as those of the School of Graduate Studies. On a Ph.D. plan of study, where History is the primary discipline, there must be a minimum of 12 credits in HISTORY 5699R (dissertation hours).

The final examination in defense of the dissertation is open to all members of the doctoral faculty, who may attend as interested observers. The supervisory committee and its chair will determine the format and procedures of the defense. The date, time and location must be announced and published at least two weeks before each final examination takes place.

For a student with History as a discipline, this examination may be conducted only after the dissertation has been approved by the History member/s of the supervisory committee.

The defense of the dissertation is approved when a majority of the supervisory committee, including the History member/s of the committee, recommends approval and signs the Report of Results of Final Doctoral Examination form. Within 48 hours of the defense, the supervisory committee chair will report the results of the final dissertation examination in writing to the candidate.

Language Requirements

Those students for whom History comprises their Primary discipline must complete a competency examination in at least one foreign language that will be relevant to their dissertation research and/or future career. The language exam format will be determined by the student's supervisory committee and will be assessed by a member of the department of foreign languages and literatures or another expert in the field. Students can also choose to complete two years of undergraduate language study in lieu of a challenge exam. Students with research interests that require competency in more than one language will be encouraged to be certified in relevant languages, but will be examined at the discretion of the supervisory committee. Students who do not require a foreign language competency to complete their dissertation research may be exempted from this requirement, but only at the discretion of the supervisory committee.

Those students with History as their co-discipline will ordinarily not be required to demonstrate language competency unless their research topic requires it. It is strongly recommended, however, that all Interdisciplinary Ph.D. students choosing History as either primary or co-discipline should pursue some kind of language study or equivalent research skill, such as in quantitative methods.

Retention in the Doctoral Program

A doctoral student must maintain a 3.0 grade-point average in each semester of coursework taken at UMKC. A person receiving a failing grade in a class will normally not be retained in the doctoral program. In exceptional cases, such a student may petition to be placed on probation for one semester.

A student who falls below a 3.0 grade-point average, or whose work is deemed unsatisfactory at any stage of doctoral work by the History member/s of the supervisory committee, with the concurrence of a majority of the resident doctoral faculty of the department, may be declared ineligible for further study.

History Department Policies Regarding Doctoral Faculty

No doctoral student shall be permitted to form a supervisory committee on which the only History faculty members are former faculty at UMKC or adjunct faculty members. Refer to the website of the School of Graduate Studies for a list of current doctoral faculty.

Ordinarily, emeritus professors of doctoral faculty status in History shall be allowed to serve on doctoral committees for no more than five years after retirement. Such service shall only be on committees that the required faculty member was already on at the time of retirement. Emeritus faculty members can have their doctoral status extended beyond five years only if at least two-thirds of the members of the History doctoral faculty vote to approve this.

Emeritus professors in History cannot chair dissertation committees. They can, however, co-chair with the approval of a majority of the regular resident doctoral faculty.

The History department adheres to the guidelines of the American Historical Association with regard to student ethics and the responsible conduct of research. The AHA Statement on Standards of Professional Conduct can be found at <http://www.historians.org/pubs/Free/ProfessionalStandards.cfm>.

Doctoral Fields

Areas	Chronological/National	Topical/Interdisciplinary
Europe	• Ancient Europe	• Area Focus: Ancient Greece & Rome; Medieval Britain, Early Modern Britain & Modern Britain; Modern Germany
	• Medieval Europe	• Global Interactions
	• Early Modern Europe	• Material Culture & Everyday Life
	• Modern Europe	• History of Science, Technology & Medicine (STEM)
—		• State Formation & National Identity
		• Women, Gender & Family
Latin America	• Encounter & Colonial	• Area Focus: Mexico; Central America; Cuba; Puerto Rico; the Southern Cone
	• Post-Independence	• Global Interactions
		• Identity & Culture
		• State Formation & National Identity
—		• Women, Gender & Family
East Asia	• Pre-1600	• Area Focus: Japan; China

	• Post-1600	• Comparative Religions
		• Global Interactions
		• History of Science, Technology & Medicine (STEM)
		• Material Culture & Everyday Life
		• State Formation & National Identity
		• Women, Gender & Family
–		
United States	• Early America	• African-American History
	• Modern America - 1800 to the Present	• Area Focus: South; West; Midwest
		• Borderlands
		• Children & Youth
		• Civil Rights
		• Environmental History
		• Global Interactions
		• History of Science, Technology & Medicine (STEM)
		• Identity & Culture
		• Latinx
		• Material Culture & Visual Culture
		• Public History
		• Sexuality
		• Urban
		• Women, Gender & Family

Humanities Consortium

Discipline Coordinator

Larson Powell, (816) 235-2729, powelllar@umkc.edu

Humanities Consortium is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

The Humanities Consortium is only available as a co-discipline option, not as a primary discipline.

Application dossiers for the Humanities Consortium must be complete by January 15 for fall admission or September 1 for spring admission. Dossiers should include:

- an application for graduate study
- a brief statement of academic and professional goals (1 page)
- three (3) letters of recommendation from individuals who are academically or professionally qualified to assess the applicant's ability to pursue doctoral work
- transcripts from all post-secondary schools attended
- a well-focused research proposal that demonstrates the applicant's rationale for application to the Humanities Consortium as a co-discipline and the interdisciplinary nature of the plan of study (1 pages)
- a sample of academic writing (20 pages or less)

Qualifying Requirements for Full Admission to the Humanities Consortium

Applicants to the Humanities Consortium as a co-discipline will be expected to hold a master's degree (MA, MFA, MM, or appropriate MS) or equivalent coursework in a Humanities-related field.

- TOEFL minimum composite score of 550 or IELTS score of 6.0 (international applicants). Applicant should be able to demonstrate facility in English appropriate for graduate work
- a GPA of 3.5 or better in previous graduate study

Applicants who do not meet the requirements above may be granted provisional admission for one year by the doctoral faculty in the Humanities Consortium. An applicant admitted provisionally receives notification of deficiencies and of the conditions which must be met within the first year before the doctoral faculty will consider an applicant for full admission. At the end of the first year, the provisional admission will be reviewed.

Applicants are advised that meeting the criteria of the School of Graduate Studies and the Humanities Consortium does not automatically result in admission to the Interdisciplinary Ph.D. program. When making admission decisions, the doctoral faculty of the Humanities Consortium considers other factors as well, particularly the availability of faculty qualified to work in the applicant's area of interest and the availability of library resources and research materials.

Recommendations for admission are made by a sub-committee of the Humanities Consortium doctoral faculty which reviews all applications. Applicants are strongly encouraged to contact and confirm **two** faculty advisors from two distinct disciplines when applying - the Humanities Consortium is an umbrella enterprise that incorporates several disciplines. For advice on finding a faculty advisor, applicants should contact the Coordinator, Dr. Larson Powell, at PowellLar@umkc.edu (powelllar@umkc.edu).

Foreign Language Study

Applicants must demonstrate competency in the foreign language or languages necessary to pursue the stated research plan (or describe a plan of study to achieve this facility). Students may be required, at the discretion of their dissertation committees, to demonstrate or acquire additional language skills to undertake or complete their dissertations.

Suggested Compatible Primary Disciplines

Curriculum and Instruction (p. 1568), English (p. 1580), History (p. 1584)

Core Program Requirements

As a means of introducing doctoral students to interdisciplinary work and to the various fields of inquiry in the Arts & Humanities, the Humanities Consortium requires 15 hours of dedicated coursework.

The following three courses (9 hours) are required:

Code	Title	Credits
HMNTY 5510	Methods in Critical Theory	3
Two additional courses (HMNTY 5500, Introduction to Interdisciplinary Humanities and HMNTY 5520, Research & Creative Methodologies in Humanities are also required)		6
Total Credits		9

Two graduate-level courses (3 credits each, numbered at the 400 level or above) are also required, totaling 6 hours. The two elective courses may be in any discipline except the student's primary discipline, but these courses are subject to approval by the student's primary advisor, the Humanities Consortium Director, and the instructors of the chosen courses. No more than one course that is classified as independent study may be used as an elective course in the Humanities Consortium.

No grade below B in any course will be accepted to apply toward the Ph.D. degree.

Transfer credit will be at the discretion of the dissertation committee in consultation with the Humanities Consortium Coordinator. No more than 6 hours of transfer credit will be allowed.

Retention in the Doctoral Program

Students are expected to maintain a 3.0 GPA during their program of study. A student who falls below a 3.0 GPA, with the concurrence of the doctoral faculty in the Humanities Consortium, may be declared ineligible for further study. A student receiving the grade of F in any graduate course during the program of study will not normally be retained in the program.

Comprehensive Examination Guidelines

The School of Graduate Studies guidelines for the Comprehensive Examination can be found here (p. 1551).

Before advancing to Ph.D. candidacy, students in the Humanities Consortium will take a Comprehensive Examination that includes both written and oral components. Each student's dissertation committee will be charged, in accordance with SGS guidelines, with setting the requirements for the Comprehensive Examination and for evaluating the results of this exam.

Interdisciplinarity

Students in the Humanities Consortium will be expected to devise a Plan of Study that demonstrates a commitment to interdisciplinary work and to develop a dissertation that illustrates interdisciplinary practices.

Mathematics

Discipline Coordinator

Noah Rhee, (816) 235-2854, rheen@umkc.edu

Mathematics is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

In order to complete the Interdisciplinary Ph.D. with Mathematics as the primary discipline, students are expected to complete the following requirements:

1. Qualifying Coursework

A student who is admitted to the Interdisciplinary Ph.D. program while having not completed all of the qualifying coursework as described below must complete the missing courses with a GPA of 3.0 or better in order to be deemed qualified to continue in the Interdisciplinary Ph.D. program in the Department of Mathematics and Statistics. A student who has a Bachelor's degree in Mathematics or Statistics must complete the qualifying courses for his or her emphasis with a GPA of 3.0 or better in order to be deemed qualified.

The qualifying courses for the Interdisciplinary Ph.D. are as follows:

Mathematics Emphasis

MATH 5509 General Algebra I

MATH 5513 Real Variables I

MATH 5532 Advanced Numerical Analysis I

MATH 5510 Complex Variables I

MATH 5521 Differential Equations

MATH 5545 Mathematical Methods In Science And Engineering

Statistics Emphasis

STAT 5501 Statistical Design Of Experiments

MATH 5513 Real Variables I

STAT 5537 Mathematical Statistics I

STAT 5547 Mathematical Statistics II

STAT 5551 Applied Statistical Analysis

STAT 5565 Regression Analysis

STAT 5572 Multivariate Analysis

2. Doctoral Course Work

Following the completion of Qualifying Coursework, the student needs to complete the Doctoral Coursework described below. This coursework must be completed with a B(3.0) average.

Mathematics Emphasis

MATH 5519 General Algebra II

MATH 5523 Real Variables II

MATH 5542 Advanced Numerical Analysis II

Any one of STAT 5576, STAT 5578, or STAT 5588

Statistics Emphasis

STAT 5576 Probability

STAT 5578 Advanced Mathematical Statistics

STAT 5588 Theory of Linear Model

Any one of MATH 5519, MATH 5523, or MATH 5542

Additional elective courses may be required at the discretion of the Interdisciplinary Ph.D. Supervisory Committee.

3. Qualifying Exams

Within a year of completing the doctoral Core Coursework, the student is required to complete the Interdisciplinary Ph.D. qualifying examinations. The written examinations under either emphasis are based on two of the three doctoral core courses.

- For the Mathematics emphasis, the written examinations are based on two of the following Doctoral Core Courses: MATH 5519, MATH 5523, and MATH 5542.
- For the Statistics emphasis, the written examinations are based on two of the following Doctoral Core Courses: STAT 5576, STAT 5578, and STAT 5588.
- The student may take one written examination from the opposite emphasis if his or her supervisory committee deems it in the best interest of the student's Plan of Study, provided the student has taken the course on which the examination is based.
- If a student fails either one or more qualifying exams on the first attempt, he or she may retake the failed parts from the first attempt after a period of 12 weeks. If the student fails the qualifying examination(s) a second time, he or she is terminated from the Interdisciplinary Ph.D. program in Mathematics.

4. The Interdisciplinary Ph.D. Comprehensive Examination

Following the completion of the qualifying examinations, the student is deemed fully qualified to carry out doctoral-level research. At this stage, the student begins his or her doctoral research. Within two years of successful completion of the qualifying examination, the student is required to complete the Interdisciplinary Ph.D. Comprehensive Examination. This examination consists of both a written and an oral portion. The written portion is developed by the student's Supervisory Committee, and it consists of questions related to the student's research and possible avenues for future work. The student is allotted two weeks to complete the written portion of the examination. Following the completion of the written portion, the student shall submit his or her answers to each member of the Supervisory Committee. The oral portion of the examination is a two-hour session with the student and the Supervisory Committee members in which the student describes his or her research and fields questions and comments about the responses provided in the written portion of the examination. Following the successful completion of the Comprehensive Examination, the student is admitted to Candidacy. Following admission to Candidacy, the student is required to complete twelve Research and Thesis credit hours. If a student fails either the written or the oral portion of the comprehensive exam one time, he or she may retake it after a period of 12 weeks, per School of Graduate Studies regulations. If the student fails either part of the examination a second time, he or she is automatically terminated from the Interdisciplinary Ph.D. program.

5. Dissertation and Final Oral Examination

Within two years of admission to Candidacy, the student is required to have completed the necessary research and writing to form the Dissertation. Once this is complete, the student must complete the Final Oral Examination. This is a two-hour discussion with the student and the supervisory committee. The student must prepare a presentation that outlines the content of the dissertation. The presentation is a public event, so anyone is free to attend. Following the completion of the presentation is a closed-door session with the student and the Supervisory Committee in which the Candidate fields questions and comments regarding the content of the Dissertation. Following successful completion of the Final Oral Examination, the committee will make recommendations for revisions to the dissertation, and the Candidate is required to address these recommendations in order to complete the Interdisciplinary Ph.D.

6. Other Requirements

- In addition to the requirements listed above, the student must satisfy the co-discipline coursework requirements.
- All Interdisciplinary Ph.D. students with mathematics as the primary discipline are required to attend the department graduate seminar at least five times per semester. Those who cannot fulfill this requirement must contact the graduate seminar coordinator.
- The student must satisfy all requirements set forth by the School of Graduate Studies.

Mathematics as a Co-discipline

To get full admission, an applicant should have a Bachelor's degree in mathematics/statistics from an accredited college or university, or a Bachelor's degree in another subject including evidence of a strong performance in at least three mathematics courses beyond Calculus I, II, and III. An applicant with Mathematics as co-discipline may get a provisional admission if the above conditions are not fully satisfied at the time of application.

The number of hours required in mathematics for a student who chooses Mathematics as a co-discipline will be at least 9 graduate credit hours. Up to three of these credit hours may be at the 400-level. The Mathematics hours counting toward the degree must have a B (3.0) average.

Suggested Compatible Co-disciplines

Cell Biology and Biophysics (p. 1557), Chemistry (p. 1223), Computer Networking and Communication Systems (p. 1561), Computer Science (p. 1564), Curriculum and Instruction (p. 1568), Electrical and Computer Engineering (p. 1573), Engineering (p. 1579), Geosciences (p. 1583), Molecular Biology and Biochemistry (p. 1591), Physics (p. 1602)

Molecular Biology and Biochemistry

Discipline Coordinator

Karen Bame, (816) 235-2243, bamek@umkc.edu

Molecular Biology and Biochemistry faculty who are members of the Doctoral Faculty (<http://sgs.umkc.edu/for-faculty-and-staff/doctoralgraduate-faculty-lists/>)

Molecular Biology and Biochemistry is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

A cumulative GPA of at least 3.0 (on a 4.0 scale) on all college work for bachelor's degree or post-baccalaureate work. Due to the sequencing of coursework, new students selecting molecular biology and biochemistry as their primary discipline will normally only be admitted in the fall term.

Qualifying Requirements for Full Admission

Minimum of 16 hours of approved graduate coursework at UMKC toward the Ph.D. program with a grade-point average of at least 3.0 on a 4.0 scale. International students must establish English proficiency.

Suggested Compatible Co-disciplines

Chemistry (p. 1223), Cell Biology and Biophysics (p. 1557), Oral and Craniofacial Sciences (p. 1594), Pharmaceutical Science (p. 1599), Pharmacology (p. 1600), Physics (p. 1602)

Core Program Requirements

Molecular Biology and Biochemistry as a Primary Discipline

Minimum core requirement is 33 course credit hours and 15 dissertation research credits in Molecular Biology and Biochemistry for a total of 48 post-baccalaureate credit hours, distributed as indicated below:

Code	Title	Credits
LS-MBB 5561	General Biochemistry I	4
LS-MBB 5562	General Biochemistry II	3
LS-MBB 5596 or LS-MBB 5597	Advanced Experimental Molecular Biology I Advanced Experimental Molecular Biology II	2
LS-MBB 5611	Seminar in Molecular Biology and Biochemistry (2 x 1 cr. hr.)	2
LS-MBB 5690 or LS-CBB 5690	Analytical Methods in Molecular Biology and Biochemistry Analytical Methods in Cell Biology and Biophysics	1-4
BIOLOGY 5501	Proposal Writing	1

7 cr. hr. in discipline or related discipline courses (LS-CBB, LS-MBB, BIOL, PHARM, etc.) 15 cr. hr. LS-MBB 5699 Dissertation Research.

Related Discipline Courses Required

Ten additional course credit hours in one related discipline or combination of disciplines. Related disciplines are defined as Cell Biology and Biophysics, Chemistry, Pharmaceutical Science, Pharmacology, Oral and Craniofacial Sciences or other. Seminar courses may be part of this

component of required courses, up to a maximum of three for the program, as are two additional credits of advanced experimental molecular or cell biology.

Electives

Each student's supervisory committee may require additional courses in any University-approved doctoral discipline as preparation for specific areas of research. These additional requirements may not exceed nine credit hours beyond the 33 credits required for the basic course core. These electives may be taken at any time during enrollment as a graduate student, up to the semester prior to that in which the dissertation defense will occur. No more than seven course credit hours of 5500-level courses, or their equivalent, can be taken at institutions outside UMKC. Remember that 5700-level courses may not be used to satisfy course requirements for the program.

Molecular Biology and Biochemistry as a Co-discipline

Code	Title	Credits
Required courses		
LS-MBB 5561	General Biochemistry I	4
LS-MBB 5562	General Biochemistry II	3
LS-MBB 5611	Seminar in Molecular Biology and Biochemistry	1
Additional SBC graduate courses (LS-CBB, LS-MBB or BIOL) for a minimum of 10 cr. hr.		

Other Discipline-Specific Special Requirements

Research

The School of Biological and Chemical Sciences offers research opportunities in many areas of modern life sciences that address problems of basic life processes at the cellular, subcellular and molecular levels. Graduate studies offered with primary participation of the faculty in the Division of Molecular Biology and Biochemistry are based on the belief that training for research can be best accomplished by having an appropriate breadth of background coursework, combined with a depth of specialization in a particular research area. The faculty have established guidelines that have a minimum of formal requirements so that students have the flexibility to advance at a pace consistent with development of the individual. Diligence, creativity and independent thinking are the qualities desired in the candidate's dissertation work.

Teaching

As part of their graduate training, all Ph.D. students with Molecular Biology and Biochemistry as the primary discipline participate in the teaching program of the School of Biological and Chemical Sciences. This is an important component of preparation for a career in academia or other institutions and aids in the development of effective communication skills.

Seminars

Students will participate in seminars in which current developments in various areas of life sciences will be discussed and explored. Students also will present seminars on their own work or on work in the current scientific literature. The latter is taken as part of the core of graduate-level courses in the primary or co-disciplines.

Course Restrictions

5700-level courses may not be used to satisfy molecular biology and biochemistry discipline-specific course requirements.

Dissertation

The dissertation abstract and proposal must be submitted to and approved by the supervisory committee prior to beginning the third academic year of study after enrollment in the Ph.D. program.

Retention in Program

For students with this discipline as their primary discipline, no more than one C grade in a core course, and no D or F grades, are permitted. A student who receives more than one C grade will be recommended for termination from the doctoral program. A student who receives a D or F grade will be dropped from the program.

The doctoral faculty in Molecular Biology and Biochemistry meets formally at the end of each academic year to discuss and evaluate the progress of all graduate students. Each student's committee also meets with the student at least once a year. After the annual doctoral faculty meeting, all students receive written evaluations of their status and a report is placed in each student's file.

Requirements for Comprehensive Examinations

To become a Ph.D. candidate, the student must pass a Comprehensive Exam that may be taken on completion of essentially all of the coursework specified in the student's study plan and on satisfactorily fulfilling the requirements for full admission. This must be done before the *beginning* of the third academic year after admission to UMKC with graduate student status, or (for part-time students) immediately after completion of 25 credit

hours approved by the discipline-doctoral program at UMKC. This exam will be administered by the student's supervisory committee and will test the student's knowledge of background material, as well as the student's ability to analyze and interpret information and solve problems.

Written Portion

The written examination for students who have Molecular Biology and Biochemistry as their primary discipline consists of an NIH-style grant proposal that the student will prepare. The topic of the research proposal will be determined by the student in consultation with the student's supervisory committee.

Oral Portion

The oral examination also has two aspects: (1) questions covering the grant proposal prepared by the student for the written examination and (2) other related material in the student's area of specialization, including fundamental knowledge of the primary and secondary disciplines.

Music Education

Discipline Coordinator

Joseph Parisi, (816) 235-2919, parisijo@umkc.edu

Music Education faculty who are members of the doctoral faculty.

Music Education is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

In addition to the general criteria, applicants selecting music education as a discipline must:

- Have an aggregate minimum undergraduate GPA of 3.0 and graduate GPA of 3.5 on a 4.0 scale.
- Submit a thesis or equivalent evidence of written scholarship.
- Have minimum scores of 143 on the verbal, 138 on the quantitative and 3.0 on the writing portion of the GRE.
- Have an acceptable on-campus interview with doctoral faculty members from this discipline.
- Demonstrate comprehensive musicianship through videotape, performance, classroom teaching, audition or jury.
- Music Education: Minimum 3 years K-12 teaching experience.
- Music Therapy: Minimum of 3 years full-time musical therapy clinical experience or the equivalent.
- Comprehensive musicianship and/or clinical effectiveness submitted by videotaped or live demonstrations in solo performance, ensemble performance/conducting, classroom teaching, or clinical applications.
- In most cases, students entering the Interdisciplinary Ph.D. program will have earned at least one degree in Music Education and/or Music Therapy.

Alternate Admission Criteria

Applicants may ask to be considered under the following alternate admission criteria:

- Have an undergraduate GPA of 3.0 or a graduate GPA of 3.5 on a 4.0 scale.
- Submit a thesis or equivalent evidence of written scholarship.
- Score 900 or above on the SAT with both the verbal and math scores above 400; or score 21 or above on the ACT.
- Have an acceptable off-campus interview with at least two UMKC music education/therapy doctoral faculty or have two written recommendations from UMKC doctoral faculty.
- Music Education: Minimum 3 years K-12 teaching experience.
- Music Therapy: Minimum of 3 years full-time musical therapy clinical experience or the equivalent.
- In most cases, students entering the Interdisciplinary Ph.D. program will have earned at least one degree in Music Education and/or Music Therapy.
- Comprehensive musicianship and/or clinical effectiveness submitted by videotaped or live demonstrations in solo performance, ensemble performance/conducting, classroom teaching, or clinical applications.

Suggested Compatible Co-disciplines

Curriculum and instruction is the leading co-discipline. Other potential co-disciplines can be considered by students in consultation with primary discipline coordinator and faculty.

Core Program Requirements

Music Education will function only as a primary discipline in the UMKC Interdisciplinary Ph.D. program. Because of this, the following minimum standards apply only to students with Music Education as their primary discipline.

Research

Two important goals for students with Music Education as their primary discipline and Curriculum and Instruction as a co-discipline will be to develop research skills and increase their awareness of important research literature. Through introductory courses, students will become acquainted with research techniques, problems and literature in music education/therapy. Additional research courses in the School of Education and other academic units will provide more tools for structuring research designs and analyzing data. Students in the program will assist their faculty mentors in research while developing a research agenda of their own. The number and nature of research classes placed on each student's program of study will be determined by the background, goals and interests of the student.

Teaching Techniques and Philosophies

While students may have widely divergent career goals, ranging from becoming a district music supervisor in a K-12 program, training undergraduate music therapists or being a college choral conductor, all will be actively involved in the education process in some form. To develop a comprehensive acquaintance with education at all levels, Ph.D. students will enroll in methods classes, will be assigned to observe and teach undergraduate classes at UMKC and will observe and help supervise student teachers in local K-12 schools. Courses in the Conservatory, the School of Education and other academic units will help students efficiently interpret the techniques and philosophies they observe in the classroom, determine their own goals and philosophies, and consequently, become better teachers.

Seminars and Core Courses

While research and teaching are areas of great importance, it is anticipated that most students will need theoretical information to structure their teaching and research endeavors. Courses in theories of learning in general and in music, as well as seminars on the latest teaching techniques and methodologies, will give students a knowledge base to better facilitate their own teaching and to prepare future students to teach. Particular attention will be given to cultivating critical thinking skills in students and nurturing multicultural values.

Program Requirements

It is anticipated that most students selecting Music Education and Curriculum and Instruction as their disciplines will have completed a master's degree in music education or a related field. Students with backgrounds in music therapy are also encouraged to apply.

While total degree-hour requirements for the Ph.D. will vary depending on each student's career goals, previous experience and training, it is anticipated that for most students, course requirements will include 35 to 45 pre-dissertation hours. If a student has completed a bachelor's or master's degree in some area other than music education/therapy, additional work beyond this approximate range will probably be required. No specific course requirements are designated. Depending on the previous work of the individual and the career direction sought, each program of study, including foreign language requirements, will be considered on an individual basis.

Co-discipline Requirements

Curriculum and Instruction is the most common co-discipline for Music Education in the Interdisciplinary Ph.D. program. It is anticipated there will be many permutations which are a product of this combination. Within the spirit of flexibility, which is the essence of the Interdisciplinary Ph.D. program, students are allowed to enroll in other fields of study such as history, philosophy, psychology, art and non-music education/therapy Conservatory classes. The primary area of study outside Music Education will constitute from 15 to 50 percent of pre-dissertation hours in the planned program of study.

Comprehensive Examination Guidelines

Interdisciplinary Ph.D. students will complete three research projects previously approved by the Supervisory Committee. In addition, an oral exam pertaining to the research projects will take place with the Supervisory Committee. Two weeks prior to the oral presentation, students will prepare a single document that serves as an overview of the three projects (in consultation with the Committee Chair or primary discipline Coordinator). This overview should include: (1) an introduction that explains the three projects and where/when they took place (part of a class, independent study, etc.); (2) the title of each project; (3) completion date; (4) any pertinent presentations where the project has been presented; (5) publication if applicable; (6) benefits to self; and (7) benefits to the profession.

Oral and Craniofacial Sciences

Discipline Coordinator

Mary P. Walker, Director of Graduate Programs (816) 235-2825, walkemp@umkc.edu

Oral and Craniofacial Sciences faculty who are members of the doctoral faculty (<http://sgs.umkc.edu/for-faculty-and-staff/doctoralgraduate-faculty-lists/>)

Oral and Craniofacial Sciences is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Overview

In concert with the School of Graduate studies, the Department of Oral and Craniofacial Sciences offers a doctoral program that must include the in-depth study of at least two disciplines. Students in the Oral and Craniofacial Sciences program can choose to participate in any of the department's three areas of research focus:

- ***Biomaterials/Bioengineering of Biological Tissues and Replacements***

The overall goal of this program is to apply an integrated approach involving innovative computer modeling and organic synthesis, novel biocompatibility evaluation, comprehensive materials characterization, and mechanistic development of improved dental biomaterials. One component of this program is an engineering component that emphasizes micro- and nano-structure/property characterization of natural biomaterials such as bone, dentin, and enamel as a tissue engineering approach to the development of replacement materials.

- ***Mineralized Tissue Biology***

This program is aimed at determining basic biological mechanisms and the cause and treatment of disease of bone and teeth during development and in the adult. Approaches include the use of basic in vitro methods combined with genomics, proteomics, bioinformatics, and transgenic technology.

- ***Translational and Clinical Research***

Translational and clinical research involves results from clinical observations translating into basic research and incorporates basic research findings into clinical assessment and practice. The identification, characterization and synthesis of materials for clinical use requires the combined efforts and expertise of clinical scientists, materials scientists, biostatisticians, bioengineers, geneticists, chemists, physicists, and computer scientists.

Program

The Interdisciplinary Ph.D. program is composed of a significant supervised research effort along with courses in areas such as biomaterials, research design and methodology, statistics, grantsmanship, biochemistry, proteomics, genomics, histology, and pathology. The primary didactic effort will be in oral and craniofacial sciences (biomaterials/bioengineering of biological tissues and replacements, mineralized tissue biology, or translational/clinical research) and the student will select a secondary area of concentration from other Interdisciplinary Ph.D. disciplines.

Duration

The length of the program is dependent on the academic background and abilities of the applicant and may vary from three to five years. The program culminates with an Interdisciplinary Ph.D. in Oral and Craniofacial sciences degree and the designated co-discipline(s).

Student Learning Outcomes

The developed program of study will meet the student's individual needs and research interests, satisfy discipline-specific requirements, and assure upon graduation that students are able to:

1. Demonstrate a deeper understanding of the link between scientific research and clinical health care practice
2. Conduct thorough literature reviews based on an understanding of periodical databases and scholarly journals in the health sciences; have the aptitude to assess the validity of literature and determine how it may be applied in both research and clinical settings
3. Demonstrate the ability to conduct original research projects, drawing on an understanding of the current literature, appropriate study design, methodologies, and data analysis
4. Develop the capability to produce written materials that are clear, well-organized, insightful, and drawn from evidence-based research
5. Employ the communications skills needed to successfully convey important scientific and clinical concepts in oral presentations and communications
6. Apply professional ethics with the highest standards of integrity in all facets of research

Eligibility

An applicant must meet the minimum general requirements for admission to Interdisciplinary Ph.D. study at UMKC and must satisfy grade point average requirements as stated in the admission requirements section of the Academic Regulations and Information of Doctor of Philosophy Studies at the University of Missouri-Kansas City

. To advance to candidate status, the student must successfully complete written and oral Comprehensive Examinations relevant to their primary and co-discipline(s).

Discipline-Specific Admission Requirements

In addition to the general minimum requirements for admission to interdisciplinary Ph.D. study, an applicant must hold either (1) a baccalaureate degree, (2) an M.S degree, or (3) a D.D.S. or equivalent degree. In general, an applicant will be expected to have a minimum cumulative GPA of 3.0 based on a 4.0 scale for previous education programs, including dental school (if applicable).

Applicants must also meet the following minimum GRE requirements:

GRE	Score Scale
Quantitative	150
Verbal	155
Analytical Writing	4.0

The TOEFL is required for all international applicants, who must have a score of at least 80. An IELTS score of 6.0 or above may be accepted in place of the TOEFL.

All application materials should be submitted prior to March 1 for students wishing to begin their study in the fall semester; however, applications will be accepted throughout the year. Evaluation criteria include the following:

- Transcripts. Analysis of transcripts from all prior institutions is required.
- Letters of recommendation. Three letters of recommendation are required from current or former teachers who are familiar with the applicant's past achievements and research ability.
- Personal statement from applicant. The applicant must submit a letter describing why he or she is interested in pursuing an Interdisciplinary Ph.D. study in oral and craniofacial sciences, how the experience of the program may be used by the candidate in the future, and a list of potential research interests.
- Interviews. Interviews are not required; however, interviews are preferred and will be arranged upon the candidate's request. Successful interviews may enhance the candidate's chance of acceptance.

Suggested Compatible Co-disciplines

Biomedical and Health Informatics (p. 1555), Cell Biology and Biophysics (p. 1557), Chemistry (p. 1223), Computer Networking and Communication Systems (p. 1561), Computer Science (p. 1564), Electrical and Computer Engineering (p. 1573), Engineering (p. 1579), Molecular Biology and Biochemistry (p. 1591), Pharmacology (p. 1600), Physics (p. 1602)

Core Program Requirements

The required minimum core curriculum for students with Oral and Craniofacial Sciences as a discipline will consist of a minimum of nine credit hours in Oral and Craniofacial Sciences. See minimum course requirements below. The student's supervisory committee may require additional courses for an Interdisciplinary Ph.D. program which includes the department of Oral and Craniofacial Sciences as the primary discipline or as a co-discipline. Ph.D. students with Oral and Craniofacial Sciences as their primary unit must either complete these courses at UMKC or must have completed equivalent coursework at approved institutions at the time of their admission to the Interdisciplinary Ph.D. program. Students are referred to other sections of the current UMKC general catalog for listings of appropriate graduate-level courses. The curriculum requirements also include a minimum of 3 credit hours of ethics training.

Minimum Coursework Requirements

The Discipline Coordinator/OCS Program Director will serve as the student's academic advisor for Oral and Craniofacial Sciences Interdisciplinary Ph.D. students. In accordance with the general requirements for the Interdisciplinary Ph.D. program, a Ph.D. student must prepare a coursework plan of study in conjunction with the discipline coordinator/program director and co-discipline coordinator. A student's plan of study must include coursework in Oral and Craniofacial Sciences as well as in at least one other discipline.

Coursework must satisfy all discipline-specific requirements and may include additional courses as appropriate to the student's research focus. Course selection will be made in conjunction with the Department of Oral and Craniofacial Sciences Director of Graduate Research Programs and the General requirements are listed below:

- The Plan must include coursework from all of the student's disciplines
- No more than 60 percent of the total coursework taken at UMKC and included on the Ph.D. Plan of Study, exclusive of dissertation hours, may be from any one discipline
- Coursework from disciplines other than the ones to which the student has been admitted may be included on the Coursework Plan of Study and counted in the total percentage
- No more than 25 percent of the total coursework may be from disciplines not formally participating in the Interdisciplinary Ph.D. Program
- The Plan must include at least 30 didactic hours beyond the baccalaureate degree, exclusive of dissertation research hours, in courses taken at UMKC or in courses taken at another institution which are approved for transfer by the Discipline Coordinator/Program Director
- The Plan must include a minimum of 9 credit hours, exclusive of dissertation research hours, in a co-discipline area to which the student has been admitted
- The Plan must include at least 12 hours of dissertation credits

Code	Title	Credits
Required Core Curriculum		
BIO-SCI 5751	Elements of the Scientific Method	1-2
BIO-SCI 5752	Research Methods in Oral and Craniofacial Sciences	1-5
RES-ME 5700	Introduction To Research Methodology	2-3
RES-ME 5704	Introduction to Biostatistics	2-3
RES-ME 5706		
Dissertation		
No less than 12 credits of the following are required:		12
OR-BIO 5699	Dissertation Research	
Applicable Courses		
Examples of additional courses applicable to the program:		
BIO-SCI 5700	Biomaterials Teaching	
BIO-SCI 5706	Growth and Development I	
BIO-SCI 5707	Growth and Development II	
BIO-SCI 5710	Genetics and Biochemistry of Cranial Facial Biology	
BIO-SCI 5739	Biomaterials for the Dental Specialist	
BIO-SCI 5740	Oral Pathology I	
BIO-SCI 5742	Biomaterials for the Restorative and General Dentist	
BIO-SCI 5743	Advanced Seminar in Dental Biomaterials	
BIO-SCI 5747	Research Instrumentation Used in Dental Biomaterials	
BIO-SCI 5750	Special Problems in Dental Biomaterials	
BIO-SCI 5759	Special Problems in Pharmacology	
BIO-SCI 5760	Physiology of Oral Mineralized Tissues	
BIO-SCI 5790	Directed Research In Oral and Craniofacial Sciences	
BIO-SCI 5801	Readings in Immunology	
BIO-SCI 5802	Immunopathology	
BIO-SCI 5805	Molecular Biology of Oral Microflora	
BIO-SCI 5830	Structural Characterization of Dental Biomaterials	
MEDB 5561	Responsible Conduct of Research	

Departmental Research Orientation

Enrollment in BIO-SCI 5751 required

- Interdisciplinary Ph.D. students will select and rotate through a minimum of four laboratories in the Department of Oral and Craniofacial Sciences conducting a short research project in each. At the end of the semester, a report is required reviewing the research project and instrumentation in each laboratory. Students are also required to attend the weekly Department of Oral and Craniofacial Sciences Seminar Series and the monthly Professional Development Seminar Series. Research presentations cover a variety of biological, engineering and behavioral science disciplines relevant to oral science education and the oral health care profession. Presentations will be by faculty, students, and invited guest lecturers.

Enrollment in BIO-SCI 5752 required

- As the student identifies a research focus for the dissertation project, they will begin reviewing the literature and relevant instrumentation in conjunction with a selected research advisor.

Seminar Series

- Graduate students are expected to attend the weekly Department of Oral and Craniofacial Sciences Seminar Series and the monthly Professional Development Seminar Series
Information available from Department of Oral and Craniofacial Sciences website at <http://dentistry.umkc.edu/oralbio/oralbiologyseminar.shtml> (<http://dentistry.umkc.edu/oralbio/oralbiologyseminar.shtml/>)

Thesis and Dissertation Defense Exams

- Graduate students are expected to attend all thesis and dissertation defense exams

Other Discipline-Specific Special Requirements

Dissertation Research

In accordance with general Interdisciplinary Ph.D. program requirements, each student with Oral and Craniofacial Sciences as the primary discipline must submit a dissertation proposal, prepared in consultation with the student's dissertation chair, which describes an interdisciplinary program of original research on a significant problem in Oral and Craniofacial Sciences. The proposal will be reviewed by the student's Ph.D. supervisory committee. The student may be required to revise and resubmit the proposal to the supervisory committee. A copy of the accepted proposal will then be forwarded to the School of Graduate Studies.

The student must provide evidence that a substantial portion of the dissertation will be submitted for publication to refereed journals. Such proof may be in the form of a manuscript in preparation for submission or a submitted manuscript. The student must submit the complete dissertation, in electronic form, to his or her faculty advisor for review and preliminary approval at least eight weeks before the expected date of graduation.

Appeals

In the event of disputes or special requests concerning a student's Ph.D. program, written appeals or documentation must first be submitted to the student's supervisory committee. If a resolution of the problem cannot be affected at that level, the written appeals process takes effect.

Academic Retention

A 3.0 or better grade-point average is required of all work applicable to the Interdisciplinary Ph.D. program. A Ph.D. student with oral and craniofacial sciences as a discipline is subject to termination from the Interdisciplinary Ph.D. program if: (1) his or her grade-point average falls below 3.0; (2) more than four hours of C (2.0) grades are received; or (3) any grade of D or F is received.

A recommendation for termination from the program will be made by the student's dissertation chair to the program director. The next level of review would be the department chair, associate dean for research and graduate programs, and then the Interdisciplinary Ph.D. executive committee and the Dean of the School of Graduate Studies.

Comprehensive Examination Guidelines

A Comprehensive Examination will be administered to all students enrolled in the Interdisciplinary Ph.D. program whose subject emphasis area is Oral and Craniofacial Sciences. The examination includes both written and oral components. Content of the Comprehensive Examination will be tailored to the student's field of research interest and prepared with input from all members of the student's supervisory committee.

Oral and Craniofacial Sciences as a Co-discipline

- The Plan of Study must include a minimum of 9 approved credit hours, exclusive of dissertation research hours, in the Oral and Craniofacial Sciences co-discipline area
- At least one member of the Department of Oral and Craniofacial Sciences doctoral faculty must serve on the dissertation committee
- The Department of Oral and Craniofacial Sciences Graduate Program Director will serve as the interim advisor to co-discipline Interdisciplinary Ph.D. students.

Students will select courses applicable to their program from the following list with guidance from the Department of Oral and Craniofacial Sciences Director of Graduate Research Programs.

Code	Title	Credits
BIO-SCI 5751	Elements of the Scientific Method	1-2
BIO-SCI 5752	Research Methods in Oral and Craniofacial Sciences	1-5
RES-ME 5700	Introduction To Research Methodology	2-3
RES-ME 5704	Introduction to Biostatistics	2-3
BIO-SCI 5710	Genetics and Biochemistry of Cranial Facial Biology	2
BIO-SCI 5739	Biomaterials for the Dental Specialist	1
BIO-SCI 5742	Biomaterials for the Restorative and General Dentist	2
BIO-SCI 5743	Advanced Seminar in Dental Biomaterials	1-2
BIO-SCI 5760	Physiology of Oral Mineralized Tissues	2
MEDB 5561	Responsible Conduct of Research	3

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Pharmaceutical Sciences

Discipline Coordinator

Kun Cheng, (816) 235-2425, chengkun@umkc.edu

Pharmaceutical Science faculty who are members of the doctoral faculty.

Pharmaceutical Science is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Applicants must hold a professional degree in pharmacy (Pharm.D. or B.S.) or a baccalaureate degree in a related field such as chemistry, biology or mathematics with an undergraduate GPA of at least 3.0 on a 4.0 scale. Students who hold a master's degree in an appropriate discipline may be admitted on satisfaction of the general requirements of the School of Graduate Studies. Application deadlines are October 1st for the spring semester and February 1st for the fall semester.

Qualifying Requirements for Full Admission

Admission depends on agreement of a member of the doctoral faculty in the discipline to serve as research advisor. Students seeking admission to the Pharmaceutical Science discipline of the Interdisciplinary Ph.D. program should have completed coursework in calculus, organic chemistry, physical chemistry, biochemistry, microbiology, human anatomy and physiology where appropriate to their interests. Course equivalency is determined by the Pharmaceutical Science discipline faculty on a case-by-case basis. Students are required to pass the discipline placement exams before appearing for the Comprehensive Exams administered by the supervisory committee.

On admission, all students are assigned interim faculty advisors as stated in the letter of admission. Graduate students must adhere to the guidelines as stated in the School of Pharmacy Graduate Programs section of this catalog pertaining to selection and changes of faculty advisors.

Suggested Compatible Co-disciplines

Biomedical and Health Informatics (p. 1555), Chemistry (p. 1223), Cell Biology and Biophysics (p. 1557), Mathematics (p. 1589), Molecular Biology and Biochemistry (p. 1591), Oral and Craniofacial Sciences (p. 1594), Pharmacology (p. 1600)

Core Program Requirements

Pharmaceutical Sciences as the Primary Discipline

Code	Title	Credits
Pharmaceutical Sciences Courses		12
Co-Discipline Courses		9
Other Coursework		6
Statistics		3
PHARM 5580A or PHARM 5580C	Seminar in Pharmaceutical Sciences Seminar in Pharmacology/Toxicology	1
PHARM 5699	Research and Dissertation	1-16
Total Credits		45

Pharmaceutical Science as Co-discipline

The Pharmaceutical Science doctoral faculty member(s) of the supervisory committee will confer regarding the student's program of study and recommend appropriate courses offered by the co-discipline. Generally, courses in the co-discipline will constitute successful completion of at least 20 percent of the approved course of study. All students choosing Pharmaceutical Science as a co-discipline must complete at least three graduate-level courses in Pharmaceutical Science compatible with research objectives recommended by the supervisory committee.

Provisionally-admitted co-discipline students in Pharmaceutical Science in fulfillment of their full-admission requirements must take at least 9 credits of the regular recommended courses:

Code	Title	Credits
Select three of the following:		9
PHARM 5521	Advanced Organic Medicinal Chemistry	
PHARM 5527	Analytical Methods	
PHARM 5533	Advanced Pharmacokinetics and Biopharmaceutics	

PHARM 5588	Biotechnology	
PHARM 5605	Fundamentals of Pharmaceutical Sciences	3
PHARM 5631	Pharmaceutical Formulations I	
PHARM 5632	Novel Drug Delivery Systems	3
PHARM 5634	Protein and Nucleic Acid Drug Delivery	
Total Credits		15

and pass with a "B" or better.

Other Discipline-Specific Special Requirements

Requirements for Retention

Students who receive two C grades or one D grade in didactic courses are subject to dismissal from the program. A student who receives one F grade will not be retained. Students will not be allowed to attain more than one C grade in a co-discipline course.

Appeals

Appeals by graduate students on matters pertaining to research or studies in the discipline will be routed initially to the supervisory committee and managed according to the appropriate procedures established within the School of Pharmacy.

Comprehensive Examination Guidelines

Ph.D. students who choose Pharmaceutical Science as the primary discipline must successfully pass comprehensive oral and written examinations given by the Supervisory Committee by the end of the third year. The Comprehensive Examinations will be given after the student has completed the majority of didactic coursework requirements but not later than the end of the third year. The Comprehensive Examinations (written and oral) must be passed before a doctoral student can be admitted to candidacy.

Pharmacology

Discipline Coordinator

Dr. Hari Bhat, (816) 235-5903, bhath@umkc.edu

Pharmacology faculty who are members of the Doctoral Faculty.

Pharmacology is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Due to course sequencing, new students will ordinarily be accepted only in the fall term. Applicants must hold a professional degree in pharmacy (Pharm.D. or B.S.) or a baccalaureate degree in biological, chemical science or health science. In special situations, baccalaureate degrees in other disciplines will be evaluated for possible admission. For graduates of foreign schools, the applicant must have completed a course of study at least the equivalent of a U.S. baccalaureate degree.

Prospective students must have an aggregate minimum grade-point average of 3.0 on a 4.0 scale for all college work taken prior to the bachelor's degree, or an aggregate GPA of at least 3.5 on all post-baccalaureate work to date (minimum of nine hours). For graduates of foreign schools, the applicant must have above-average grades in previous college study.

Prospective students must have a minimum aggregate GRE score of 295 for verbal and quantitative and 3.5 out of 6.0 for analytical writing.

For graduates of foreign schools, the applicant must have a minimum score of 550 on written or 213 computer-based or 80 on Internet-based TOEFL exam or alternatively, a minimum score of 6 on the IELTS.

Qualifying Requirements for Full Admission

Students seeking admission to the Pharmacology discipline of the Interdisciplinary Ph.D. program should have completed coursework in organic chemistry I and II, biochemistry I and II, calculus, anatomy, microbiology, physiology I and II and a biostatistics course. Deficiencies existing on admission must be satisfied during the first two semesters of graduate work. In addition, during the first year of graduate study, provisional Ph.D. students with Pharmacology as a discipline must complete the following courses with a grade of B or better.

Code	Title	Credits
PHARM 5509	Toxicology	3
PHARM 5519	Pharmacology I	2
PHARM 5520	Pharmacology II	4
PHARM 5530	Pharmacology III	4
PHARM 5615	Methods In Pharmacology And Toxicology	3
Total Credits		16

Suggested Compatible Co-disciplines

Cell Biology and Biophysics (p. 1557), Chemistry (p. 1223), Molecular Biology and Biochemistry (p. 1591), Pharmaceutical Science (p. 1599)

Core Program Requirements

Pharmacology as Primary Discipline

Specific course requirements will be determined by the student in consultation with the research advisor and the supervisory committee. Generally, 65 post-baccalaureate credit hours, including 20 hours of research and dissertation and 45 hours of coursework, are required for the Ph.D. degree.

No more than 27 credit hours (60 percent) can be obtained from a single discipline (preferably in Pharmacology). The remaining 18 credit hours (40 percent) can be obtained from one or more participating disciplines. No more than 25 percent of the coursework (~11 credits) from non-participating disciplines will be counted toward the Ph.D. degree. More co-disciplines will be required. As many as 15 credits may be allowed for courses taken in a master's degree program at another institution with the concurrence of the student's supervisory committee.

Code	Title	Credits
Pharmacology Requirements		
PHARM 5519	Pharmacology I	2
PHARM 5520	Pharmacology II	4
PHARM 5530	Pharmacology III	4
PHARM 5509	Toxicology	3
PHARM 5615	Methods In Pharmacology And Toxicology	3
PHARM 5580C	Seminar in Pharmacology/Toxicology	1
Additional Requirements		
EDUC-R&P 5505	Statistical Methods I	3
Co-Discipline courses ¹		7-11
Advanced courses (5500-level or above) ²		3-7
Total		35

¹ 7-11 credit hours in one or a combination co-disciplines, which may include Cell Biology and Biophysics, Chemistry, Molecular Biology and Biochemistry, Oral and Craniofacial Sciences, Pharmaceutical Science or other pertinent areas as approved by the supervisory committee.

² 2-6 credit hours of advanced courses (5500 level or above) Pharmacology or related areas as approved by the supervisory committee.

Other Electives

A supervisory committee may require that additional coursework be taken to prepare the student in a specific research area. This additional requirement may not exceed six credit hours, may be taken in any approved doctoral discipline and must be completed prior to the semester in which the dissertation defense occurs.

Pharmacology as Co-discipline

Students who apply for Pharmacology as a co-discipline should have completed coursework equivalent to LS-PHYS 399 and LS-PHYS 400, which are offered at UMKC. Deficiencies existing on admission must be satisfied during the first two semesters of graduate work. When Pharmacology is chosen as the co-discipline, the minimum course requirements are completion of PHARM 5519, PHARM 5520 and one credit hour of PHARM 5580C, plus sufficient courses constituting the required percentage of their program of study, as approved by the supervisory committee. No C grade in any core course will be permitted. Students who receive more than one C grade on elective courses will be dropped from Pharmacology as a co-discipline. Students must take and successfully pass a written and oral Comprehensive Examination administered by the supervisory committee members from the Division of Pharmacology. Co-discipline students should take the Pharmacology Comprehensive Examination no later than one semester after completing their required co-discipline coursework.

Other Discipline-Specific Special Requirements

Additional Coursework

Students will be expected to complete at least three credit hours of statistics. Students are expected to take sufficient computer courses or training as to be proficient in word processing and the use of spread sheets and data bases.

Retention in Program

Graduate students are required to maintain a cumulative grade-point average of B (3.0 on a 4.0 scale). In any semester when the cumulative GPA falls below 3.0, the graduate student will automatically be placed on probation. The student is allowed one semester to return to good academic standing (cumulative GPA of 3.0). A graduate student should not let the cumulative GPA fall below 3.0 in two semesters throughout the entire program. Students who receive a grade of C in six credit hours or more, or who receive a grade lower than C, or one no-credit grade will be dismissed from the graduate school. Any C grade in courses offered by the Pharmacology division should be repeated no more than once.

Appeals

For special requests or disputes concerning a student's Ph.D. program, written appeals with documentation must first be submitted to the student's supervisory committee. If a resolution of the problem cannot be obtained at the supervisory committee level, the written appeals process must then progress through the following levels:

1. Division Chair, Pharmacology.
2. Graduate Programs Committee, School of Pharmacy.
3. Interdisciplinary Ph.D. Program Director.
4. Dean, School of Graduate Studies.

Comprehensive Examination Guidelines

The graduate school requires that a student demonstrate adequate intellectual mastery of the field of specialization and of appropriate co-discipline fields by passing a Comprehensive Examination before being admitted into candidacy for the Ph.D. degree. To satisfy this requirement the student must pass two parts of the Comprehensive Examination given by the supervisory committee.

The Comprehensive Examination must be taken before the beginning of the student's third year after admission to full-time graduate study at UMKC. The Comprehensive Examination consists of both written and oral components. The format of the Comprehensive Examination consists of the writing and oral defense of a research proposal in the style of an NIH grant. This topic of the proposal is in an area distinct from the student's intended dissertation project and approved by the committee in advance of the examination.

Written Examination

The written examination will consist of a National Institutes of Health (NIH) grant proposal including Specific Aims, Methods, and Research Design sections; budget pages are unnecessary. The content will integrate fundamental knowledge from both the primary discipline and co-disciplines. The written proposal must be submitted to the supervisory committee at least two weeks in advance of the oral portion of the examination.

Oral Examination

The oral examination shall consist of the student's presentation of their grant to the supervisory committee in order that the committee can evaluate the student's critical thought process and the student's ability to develop and defend an original research proposal. The oral examination includes (1) questions covering the grant proposal prepared by the student for the written examination and (2) other related material in the student's area of specialization, including fundamental knowledge of the primary discipline and co-discipline(s).

On satisfactory completion of the written and oral portions of the Comprehensive Examination, the student becomes a candidate for the Ph.D. In the event a student does not pass the examination, one additional attempt may be made at a date no sooner than 12 weeks, and within one year, of the original attempt. A student who fails either the written or the oral examination a second time will be automatically dropped from the program.

A student must pass the doctoral Comprehensive Examination and advance to Ph.D. candidacy within four years from the beginning of doctoral coursework (within three years if entering with a master's degree in the same or closely related field). After the establishment of degree candidacy, a maximum of four years will be allowed for completion of degree requirements (three years for students with a master's degree). Failure to complete the work within the periods specified will necessitate re-evaluation of the entire program and may result in a notice of termination.

Physics

Discipline Coordinators

Paul Rulis, (816) 235-5945, rulisp@umkc.edu

Mark Brodwin, (816) 235-2508, brodwinm@umkc.edu

Physics faculty who are members of the doctoral faculty.

Physics is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

For admission to the program, an applicant must meet the requirements of the School of Graduate Studies (<https://catalog.umkc.edu/general-graduate-academic-regulations-information/graduate-admission-policies-procedures/>), the Interdisciplinary Ph.D. (<https://catalog.umkc.edu/colleges-schools/graduate-studies/interdisciplinary-phd-application-procedure-minimum-criteria-for-admission/>) program, and specific Department of Physics and Astronomy admission requirements described below. The graduate studies committee of the Department of Physics and Astronomy will review applications and make admission recommendations to the School of Graduate Studies. The basic criterion for admission is the likelihood that an applicant will be successful in the Interdisciplinary Ph.D. program, particularly in the research component of the program. All applicants must satisfy the graduate studies committee that they meet this criterion through evidence such as transcripts, letters of recommendation, statements of purpose, GRE scores (general and optionally the subject), performance on the department written examination, etc. Furthermore, a member of the doctoral faculty must be willing to accept the applicant as a research student. International students are required to have a TOEFL score of at least 550 (213 CBT) for admission and 575 (230 CBT) to be eligible for a teaching assistantship.

Qualifying Requirements for Full Admission

In addition to the above requirements, applicants must meet the following minimum requirements for the appropriate category listed below to be considered for full admission with physics as a discipline. The doctoral studies committee may recommend provisional admission for those applicants who fail to meet these requirements.

Applicants for admission to the Interdisciplinary Ph.D. program electing physics as their primary discipline must have a bachelor's or master's degree in physics or the equivalent. Those applicants holding only a bachelor's degree will be expected to provide exceptionally strong evidence of their academic ability and research capability in physics.

Applicants for admission to the Interdisciplinary Ph.D. program electing physics as their co-discipline must hold at least a bachelor's degree in a compatible field. These applicants must have successfully completed coursework in physics beyond a first (general or engineering physics) introductory course and must have mathematical background sufficient for advanced coursework in physics.

Suggested Compatible Co-disciplines

Chemistry (p. 1223), Computer Networking and Communication Systems (p. 1561), Computer Science (p. 1564), Curriculum and Instruction (p. 1568), Electrical and Computer Engineering (p. 1573), Engineering (p. 1579), Geosciences (p. 1583), Mathematics (p. 1589)

Core Program Requirements

The credit hour requirement for Ph.D. students with physics as the primary discipline will depend on the student's entering status and individual program. A minimum of thirty (30) credit hours of didactic course work is required. A minimum of twelve (12) credit hours of 5699 Research and Dissertation is required. Any credit hours earned in 5696 Dissertation Research will be counted toward the 12 credit-hour total of 5699 credit hours once the student has successfully presented and defended a Dissertation Research Proposal. Further, if a student in the Physics MS program took 5599 Research and Thesis credit hours but *was not* awarded a degree then those hours may be converted into 5699 Research and Dissertation credit hours.

Physics as a Primary Discipline

Code	Title	Credits
PHYSICS 5500	Methods Of Mathematical Physics I	3
PHYSICS 5510	Theoretical Mechanics I	3
PHYSICS 5520 & PHYSICS 5521	Electromagnetic Theory And Applications I and Electromagnetic Theory And Applications II	6
PHYSICS 5530 & PHYSICS 5531	Quantum Mechanics I and Quantum Mechanics II	6
PHYSICS 5540	Statistical Physics I	3

Students with physics as their primary discipline must either complete these courses at UMKC or must have already completed equivalent coursework at approved institutions at the time of their admission to the Interdisciplinary Ph.D. program at UMKC.

Physics as a Co-discipline

Students are required to complete a minimum of three courses (9 credit hours) at the 300-level or above, from classes offered by the Department of Physics and Astronomy. At least three of these credit hours must be at the '5500+ level'. Labs, special topics, and research courses do not satisfy any

of the above requirements. Students who receive a grade of B- or less in two or more courses used to satisfy these requirements will be disqualified from using Physics as their co-discipline.

Retention in Program

Ph.D. students with Physics as their primary discipline must maintain a 3.25 grade-point average. Students with Physics as a co-discipline must maintain a 3.0 GPA in Physics courses. A student's failure to maintain the minimum GPA will result in a probationary status for the following semester. A failure to remove the GPA deficiency during the probationary semester will then result in the student's dismissal from the Interdisciplinary Ph.D. program.

Appeals

Exceptions to any of the discipline-specific regulations must be approved by the student's supervisory committee and by the physics doctoral studies committee. In the event of disputes or special requests concerning a student's Ph.D. program, written appeals and/or documentation must first be submitted to the student's supervisory committee. If a resolution of the problem cannot be affected at that level, the written appeals process must then progress through the following levels: (1) Doctoral studies committee of the Physics Department; (2) Interdisciplinary Ph.D. Program Director; (3) Dean of the School of Graduate Studies.

Interdisciplinary Ph.D. Examination Guidelines

Physics as Primary Discipline

Departmental Written Examination (a.k.a. Ph.D. Qualifying Exam)

During January of each year, the Department of Physics and Astronomy will administer a written, Ph.D. Qualifying examination of all Interdisciplinary Ph.D. students with Physics as their primary discipline that have not yet passed the exam. The two-part exam will be given during two sessions (morning and afternoon) of four hours each on the first Saturday after the start of the Spring Semester. Each part of the exam will contain approximately eight questions at varying levels of difficulty (advanced undergraduate to introductory graduate). The following subject areas will be addressed in the given order by the two examination sessions:

1. Mechanics and Electromagnetism.
2. Quantum Mechanics and Thermodynamics.

Students must pass the written examination at the Ph.D. Qualifying level before being invited to take the comprehensive examination in fulfillment of the Interdisciplinary Ph.D. program requirements.

Students need only pass the written examination once. However, all graduate students in the Interdisciplinary PhD program or who intend to enroll in the Interdisciplinary PhD program must attempt the exam every year until they pass it. Under a limited set of extenuating circumstances (serious personal or family health issues, visa issues, etc.) a student may be granted an exception to not take the exam in a given year via a petition to the Department of Physics and Astronomy faculty.

A maximum of two attempts will be permitted, and any student who does not attempt the exam when required to do so will be deemed to have failed the exam on that attempt, unless they have been given prior permission to delay taking the exam. Students who are required to take this exam are encouraged to consult with the Department of Physics and Astronomy Graduate Advisors (Profs. Paul Rulis (rulis@umkc.edu; 816-235-5945) and Mark Brodwin (brodwin@umkc.edu; 816-235-2508)) for detailed information concerning procedures and regulations for the exam.

Ph.D. Comprehensive Exam

Ph.D. seeking students who have passed the Departmental Written Exam must pass a Ph.D. Comprehensive Exam to advance to Ph.D. Candidacy. The Ph.D. Comprehensive Exam consists of a proposal of the Ph.D. research topic written in the format of a National Science Foundation proposal narrative with an oral presentation to the student's full Ph.D. committee. This exam must be completed within 12 months of completing the coursework and the qualifying exam degree requirements. The exact timing and topic of this written and oral comprehensive exam will be determined by the student and their supervisory committee.

Defense of Ph.D. Dissertation

The dissertation defense administered by the student's supervisory committee can be taken only after the student has passed their Ph.D. comprehensive exam. The defense may be oral, written, or both and it may include the student's thesis or dissertation proposal and associated background material.

Physics as an Interdisciplinary Ph.D. Co-discipline

There are no formal qualifying or Comprehensive Examination requirements for students whose co-discipline is Physics.

Political Science

Political Science faculty who are members of the doctoral faculty. (<http://sgs.umkc.edu/for-faculty-and-staff/doctoralgraduate-faculty-lists/>)

This discipline is currently NOT accepting new students for the primary or the co-discipline. Questions should be directed to the graduate advisor of the department, Dr. Rebecca Best, at (816) 235-2691 or BestRH@umkc.edu.

Political Science is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Suggested Compatible Co-disciplines

Economics (p. 719), Educational Leadership Policy and Foundations (<https://catalog.umkc.edu/colleges-schools/graduate-studies/educational-leadership-policy-foundations/>), English (<https://catalog.umkc.edu/colleges-schools/graduate-studies/english/>), History (p. 1584)

Core Program Requirements

In general, students must take whatever specific courses are deemed necessary by their committees.

The amount of work required for the Ph.D. depends on the student's level of preparation. A student entering the Ph.D. program without an M.A. in political science may expect to do significantly more work than that required of a student with such a degree in hand.

Students with Political Science as their co-discipline must take at least 12 hours in political science as designated by their committees, but must include POL-SCI 5501 Seminar in American Government, POL-SCI 5530 Seminar in International Relations, and POL-SCI 5513 Seminar in Comparative Politics.

Requirements for Comprehensive Examinations

These examinations are given twice a year. Further information is available from the department.

Public Affairs and Administration

Discipline Coordinator

Arif Ahmed, (816) 235-2319, ahmedar@umkc.edu

This discipline is currently NOT accepting new students for the primary or the co-discipline.

Public Affairs and Administration is a discipline in the Interdisciplinary Ph.D. Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Overview

The Public Affairs and Administration (PAA) discipline in the Interdisciplinary Ph.D. program is designed to prepare students for research careers in universities, public and nonprofit agencies, healthcare institutions, or for other roles in which research training is needed. Successful applicants must show evidence of a strong interest and the ability to successfully engage in research and exhibit promise as skillful teachers. The PAA doctoral faculty supports the development of strong research capacities and requires all Ph.D. students to complete a significant supervised empirical research study for the dissertation.

Program

The Interdisciplinary Ph.D. program is comprised of coursework and research in at least two disciplines. The primary didactic effort will be in PAA and the student will select at least one secondary area of concentration (co-discipline) from other Interdisciplinary Ph.D. disciplines.

Duration

Both primary discipline and co-discipline students in PAA must complete all requirements for their degree within six years from the date of admission to the Ph.D. program. PAA primary discipline students must complete all coursework and pass disciplinary area and Comprehensive Examinations within the first three years of the aforementioned six year period. Under compelling circumstances and on the written recommendation of a majority of the supervisory committee, a single extension for up to one year may be requested for approval by the Interdisciplinary Ph.D. Program Director.

PAA primary discipline students may receive financial support (in the form of fellowships or graduate assistantships) from the Department of Public Affairs contingent upon satisfactory progress towards degree completion. Specific conditions of funding, if provided, will be enumerated in the offer letter; however, in most instances, such funding will be available only for the first three years in the program.

Discipline-Specific Admission Requirements

The PAA doctoral faculty will consider applications for admission to the primary discipline from only the applicants willing to pursue doctoral studies with full-time academic load (as defined in the current UMKC catalog).

All applicants (primary and co-discipline) are required to submit official scores for all three sections of the GRE General Test. Applicants must also submit official transcripts of coursework from all colleges and universities attended. Additionally, a narrative statement of interest, a writing sample, three letters of reference, and a résumé are required. Admission is based on an applicant's overall record of academic achievement and the doctoral faculty's judgment of the applicant's likelihood of successfully completing the Ph.D. We expect that those admitted will have scored well on the GRE and have high GPAs.

Applicants should pay particular attention to the narrative statement that accompanies their application. The PAA doctoral faculty gives substantial weight to this statement. It should provide a clear description of the applicant's intellectual interests, how those interests evolved and the research direction(s) the applicant intends to pursue. A good statement also discusses the fit between the applicant's interests and the resources available at UMKC (for example, it might identify faculty with whom the applicant hopes to work). Narrative statements need not be limited to one page. Applicants should provide a sample of academic writing (such as an undergraduate or master's thesis or a paper from a graduate seminar) that illustrates writing skills and the potential for scholarly work. Applicants are also encouraged to seek letters of recommendation from people who can address their potential for engaging in scholarly research.

The PAA doctoral faculty seeks to admit only students whose research interests fit the interests and capabilities of the doctoral faculty. We admit only students for whom a member of the doctoral faculty agrees to serve as interim advisor, and after the student's plan of study is completed, that faculty member should also be willing to chair (for primary discipline students) or serve on the student's supervisory committee. This requirement of commitment from a member of the PAA doctoral faculty applies to all applicants seeking admission to PAA as a primary or co-discipline. We strongly recommend that applicants communicate with PAA doctoral faculty about their interests and attempt to secure commitments from faculty to serve as PAA advisor and supervisory committee chair/member. Since applications are reviewed immediately following the respective application deadline, applicants should contact faculty by e-mail, telephone or in person before that time.

The primary discipline applicants should be available to appear (in person or via video conferencing) in front of the PAA PhD admissions panel for interview.

Suggested Compatible Co-disciplines

Biomedical and Health Informatics (p. 1555), Curriculum and Instruction (p. 1568), Economics (p. 719), Educational Leadership Policy and Foundations (p. 1572), History (p. 1584), Social Science Consortium (p. 1607)

Core Program Requirements

The exact amount of coursework will be determined by the student's level of preparation and as deemed necessary by the supervisory committee. The following are minimum requirements, exclusive of dissertation research credits.

PAA as Primary Discipline

The Interdisciplinary Ph.D. in PAA consists of a minimum of 34 credit hours coursework.

Code	Title	Credits
Required Courses		
Mandatory enrollment in Doctoral Seminar in the first semester		1
PUB-ADM 5610	Inquiry In Public Administration And Affairs	3
PUB-ADM 5620A	Literature Of Public Affairs And Administration: Political Science	3
PUB-ADM 5620B	Literature Of Public Affairs And Administration:Organizational Theory & Behavior	3
Two additional graduate courses (approved by the supervisory committee) in statistics and research methods in relation to the student's likely dissertation topic		6
One or more of the following requirements may be waived or replaced, with the approval of the supervisory committee, by other PUB-ADM or HLTH-ADM courses if a student has previous course work that is substantially equivalent to any of the following courses.		
PUB-ADM 5525	Financial Accountability And Policy Development	3
PUB-ADM 5526	The Politics of Administration	3
PUB-ADM 5530	Capstone Seminar in Public Administration	3
PUB-ADM 5541	Public Policy Development and Analysis	3
PUB-ADM 5544	Program Evaluation	3

PUB-ADM 5548	Leadership, Change and Social Impact	3
Total Credits		34

PAA as Co-discipline

The PAA co-discipline consists of a minimum of 15 credit hours coursework.

Code	Title	Credits
Required Courses		
PUB-ADM 5610	Inquiry In Public Administration And Affairs	3
PUB-ADM 5620A	Literature Of Public Affairs And Administration: Political Science	3
PUB-ADM 5620B	Literature Of Public Affairs And Administration:Organizational Theory & Behavior	3
Two additional graduate courses (approved by the supervisory committee) in PUB-ADM or HLTH-ADM		6
Total Credits		15

Transfer Credit

Transfer of graduate credit earned before entering the PhD program, including courses taken toward the Master of Public Administration degree at UMKC, will be evaluated on a case-by-case basis and will be approved at the discretion of the supervisory committee.

Requirements for Comprehensive Examinations

Disciplinary Area and Comprehensive Examinations

Before taking the Comprehensive Examination, students with PAA as their primary discipline must pass three “disciplinary area exams”. The exams are developed, administered and evaluated by committees of PAA doctoral faculty in each of the following areas: (1) public administration and policy analysis, (2) organizational studies, and (3) inquiry, research methods and statistics. The Comprehensive Examination for each PAA primary discipline student is developed, administered and evaluated by the student’s supervisory committee and is customized for the student. Co-discipline Comprehensive Examinations may be required as well and are determined by the requirements of the particular student’s co-discipline(s).

The Comprehensive Examination for students with PAA as their co-discipline consists of two areas: (1) public administration and policy analysis and (2) organization studies. The PAA examination is customized for each student and developed, administered and evaluated by the PAA faculty member(s) on the student’s supervisory committee.

Dissertation

To successfully complete the Ph.D. program each student must write a dissertation based on empirical research that constitutes a contribution to knowledge in their field of interest. Students with PAA as their primary discipline are expected to write dissertations that include some consideration of public management or public policy issues. The minimum number of hours for a doctoral dissertation with PAA as the primary discipline is 12, though some committees may require more.

Students with PAA as their primary discipline may, at the direction of their dissertation committee, complete a “traditional” dissertation or a “manuscript-based” dissertation. The general guidelines for each dissertation type are provided in the Public Affairs and Administration Doctoral Student Handbook.

Social Science Consortium

Discipline Coordinator

Doug Bowles, (816) 235-1394, bowlesdh@umkc.edu

Social Science Consortium is a discipline in the Interdisciplinary Ph.D. (p. 1543) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

The Social Science Consortium (SSC) is only available as a co-discipline option, not as a primary discipline, and has no discipline-specific admission requirements. It is the general policy of the SSC to admit all students who are admitted by their primary discipline. Newly admitted students are assigned to the SSC Coordinator as their faculty advisor, pending formation of their supervisory committee.

Suggested Compatible Primary Disciplines

Curriculum and Instruction (p. 1568), Economics (p. 719), Educational Leadership Policy and Foundations (p. 1572), Geosciences (p. 1583), History (p. 1584)

Core Program Requirements

The Social Science Consortium Program of Study requires 12 hours of dedicated coursework.

Code	Title	Credits
Required Courses		
SOC-SCI 5610	Philosophy Of Social Science	3
SOC-SCI 5630	Seminar in Research Methodology	3
Select two 3-hour electives, to be approved by SSC advisor.		6
Total Credits		12

Disciplinary graduate-level courses are, in general, eligible as electives. The following courses are pre-approved, though others may be approved by the student's SSC advisor: SOCIOL 5501, SOCIOL 5502, ECON 5511, ECON 5588, POL-SCI 5501, POL-SCI 5513, POL-SCI 5530, POL-SCI 5541, SOC-SCI 5621, SOC-SCI 5622, SOC-SCI 5690A

Sequencing is a very important consideration in the program of study listed above, complicated by the constraint that most courses fulfilling the program are offered only in either fall or spring semesters. It is highly recommended that students with the SSC as their co-discipline take SOC-SCI 5610 (offered fall semesters only) as early as possible, preferably in the fall semester of the first year.

SOC-SCI 5630 is designed to assist students with preparation of a defensible dissertation proposal, providing interdisciplinary integration of the SSC program of study with the student's primary discipline. It is intended to be taken as the conclusion of both primary discipline and SSC program coursework.

Requirements for Comprehensive Examinations

In accordance with the School of Graduate Studies guidelines, Comprehensive Exams are administered on an individual basis by the members of each student's dissertation committee. Committees are required to have at least one member drawn from the co-discipline. SSC faculty representatives on each student's committee participate in administration of the Comprehensive Exam.

School of Law

School of Law

Mailing Address and Physical Address

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Dean:

Barbara Glesner Fines

Associate Deans:

Nancy Levit, Associate Dean for Faculty and Academics

Jasmine Abdel-khalik, Associate Dean of Students

Jeffrey Thomas, Associate Dean for International Programs

This catalog covers the academic programs of the School of Law. Prospective students should be aware that the School reserves the right to make changes in admission requirements and other specifications in the catalog. All statements in this publication are announcements of present policies only and are subject to change at any time without prior notice. They are not to be regarded as offers to contract.

Faculty

Jasmine Abdel-khalik; Associate Dean for Students and Associate Professor of Law; B.A. (Cornell University); J.D. (University of Michigan).

David Achtenberg; Emeritus Professor of Law; B.A. (Cornell University); J.D. (University of Michigan).

Ayyoub Ajmi; Associate Director, Leon E. Bloch Law Library; B.A. (University of Texas at Arlington), M.S. in Library & Information Science (University of North Texas).

Mark Berger; Emeritus Professor of Law; B.A. (Columbia University); J.D. (Yale University).

Jeffrey B. Berman; Emeritus Associate Dean and Professor of Law; B.S. (City University of New York); J.D. (Brooklyn Law School); M.S. (University of Denver).

William K. Black; Associate Professor of Economics and Law; A.B., J.D. (University of Michigan); Ph.D. (University of California at Irvine).

Bruce Bubacz; Curators' Professor of Philosophy and Professor of Law; B.A. (Ripon College); M.S., Ph.D. (University of Washington-Seattle).

Paul D. Callister; Professor of Law and Director, Leon E. Bloch Law Library; B.A. (Brigham Young University); J.D. (Cornell University); M.S. in Library & Information Science (University of Illinois at Urbana-Champaign).

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Robert C. Downs; Emeritus Professor of Law; B.A. (Kansas State University); J.D. (University of Nebraska); LL.M. (University of Missouri-Kansas City).

William G. Eckhardt; Emeritus Teaching Professor of Law; B.A. (University of Mississippi); LL.B. (University of Virginia).

Kenneth D. Ferguson; Professor of Law; B.A. (Drake University); J.D. (Oral Roberts University).

Jessica Foxx; Faculty Fellow in Law; B.A. (University of Central Missouri), J.D. (University of Missouri-Kansas City).

Judith Frame; Teaching Professor of Law and Director of LL.M. Tax Program; B.B.A. (University of Wisconsin); J.D. (University of Tulsa); LL.M. (New York University).

Robert H. Freilich; Emeritus Professor of Law; B.A. (University of Chicago); M.I.A. (Columbia University); J.D. (Yale University); LL.M., J.S.D. (Columbia University).

Barbara A. Glesner Fines; Dean and Rubey M. Hulen Professor of Law; B.Ph. (Thomas Jefferson College); J.D. (University of Wisconsin); LL.M. (Yale University).

Francis M. Hanna; Emeritus Professor of Law; B.Ed. (Chicago State University); J.D. (Northwestern University).

Christopher Holman; Professor of Law; B.A. (California State University, East Bay); Ph.D. (University of California, Davis); J.D. (University of California-Berkeley).

Edwin T. Hood; Emeritus Professor of Law; B.B.A., J.D. (University of Iowa); LL.M. (New York University).

Christopher R. Hoyt; Professor of Law; B.A. (Northwestern University); M.S., J.D. (University of Wisconsin); C.P.A.

Jamila Jefferson-Jones; Professor of Law; A.B. (Harvard and Radcliffe Colleges, Harvard University), J.D. (Harvard University).

Sarah N. Johnson; Faculty Fellow in Advocacy; B.S. (University of Nebraska-Lincoln), J.D. (Creighton University, University of Nebraska).

Mary Kay Kisthardt; Emerita Professor of Law; B.A. (King's College), J.D. (Pennsylvania State), LL.M. (Yale University),

John Q. LaFond; Emeritus Edward A. Smith/Missouri Chair in Law, the Constitution and Society; B.A., J.D. (Yale University).

Steve Leben; Visiting Professor of Law; B.S., J.D. (University of Kansas).

Rana R. Lehr-Lehnardt; Associate Teaching Professor of Law; B.A., J.D. (Brigham Young); LL.M. (Columbia).

Nancy Levit; Associate Dean for Faculty and Curators' Distinguished Professor and Edward D. Ellison Professor of Law; B.A. (Bates College); J.D. (University of Kansas).

Douglas O. Linder; Emeritus Professor of Law; B.A. (Gustavus Adolphus College); J.D. (Stanford University).

Yvette Lindgren; Associate Professor of Law; B.A. (University of California, Los Angeles), J.D. (University of California, Hastings), LL.M., J.S.D. (University of California, Berkeley).

Anthony J. Luppino; Rubey M. Hulen Professor of Law and Director of Entrepreneurship Program; A.B. (Dartmouth College); J.D. (Stanford University); LL.M. (Boston University).

Timothy E. Lynch; Associate Professor of Law; B.A. (University of Chicago); M.B.A. (Indiana University); J.D. (Harvard).

Ann Marie Marciarille; Professor of Law; B.A. (Amherst), M.T.S., J.D. (Harvard University).

Danielle Merrick; Associate Clinical Professor of Law and Director of the Entrepreneurial Legal Services and Intellectual Property Clinic; B.S.W. (University of Kansas); J.D., LL.M. (University of Missouri-Kansas City).

Rodney K. Miller; Assistant Clinical Professor of Law; B.A. (University of Michigan); J.D. (University of Pittsburgh).

Andre Moenssens; Emeritus Douglas Stripp/Missouri Professor of Law; J.D. (Chicago-Kent College of Law); LL.M. (Northwestern University).

Thomas E. Nanney; Visiting Associate Professor of Law; B.A. (Dartmouth College); M.A. (Harvard University); J.D. (University of California, Los Angeles).

Sean D. O'Brien; Professor of Law; B.A. (Northwest Missouri State University); D.H.L. (Benedictine College); J.D. (University of Missouri-Kansas City).

Mary Kay O'Malley; Clinical Professor and Director of Child and Family Services Clinic; B.A. (St. Mary-of-the-Woods College); J.D. (Washburn University); M.A. (University of Missouri-Kansas City).

Joshua Pluta; Director of Research and Instructional Services, Leon E. Bloch Law Library; B.A. (University of Nebraska-Lincoln); M.A. (University of Missouri-Columbia); J.D. (University of Nebraska-Lincoln).

Judith Popper; Clinical Professor of Law; B.A. (Agnes Scott College); J.D. (University of Missouri-Kansas City).

Staci Pratt; Director of Public Services, Leon E. Bloch Law Library; B.A. (Dartmouth College), J.D. (Boston College), M.S.W. (University of Kansas), M.S.L.I.S. (University of Missouri).

John W. Ragsdale Jr.; William P. Borland Distinguished Faculty Scholar and Professor of Law; B.A. (Middlebury College); J.D. (University of Colorado); LL.M. (University of Missouri-Kansas City); S.J.D. (Northwestern University).

Margaret Reuter; Clinical Professor of Law and Director of Field Placement Programs; B.A. (Douglass College, Rutgers University); J.D. (New York University).

Allen K. Rostron; William R. Jacques Constitutional Law Scholar and Professor of Law; B.A. (University of Virginia); J.D. (Yale University).

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Ellen Y. Suni; Emerita Dean and Professor; B.A. (City College of New York); J.D. (Boston University).

Wanda M. Temm; Eleanore C. Blue Lawyering Skills Professor and Director of Bar Services; B.A. (Ottawa University); M.S. (Purdue University); J.D. (University of Kansas).

Jeffrey E. Thomas; Associate Dean for International Programs and Daniel L. Brenner Faculty Scholar and Professor of Law; B.A. (Loyola Marymount University); J.D. (University of California-Berkeley).

Mikah Thompson; Associate Professor of Law; B.S. (Missouri State University); J.D. (Washington University).

L. Michaelle Tobin; Clinical Professor of Law; B.A., J.D. (University of Missouri-Columbia).

Daniel Weddle; Clinical Professor and Director of Academic Support; B.S. (University of Kansas); J.D. (University of Kansas).

Barbara E. Wilson; Emerita Clinical Professor of Law; B.A. (University of Missouri - Columbia); M.A. (University of Nebraska); J.D. (University of Missouri-Columbia).

Del Wright Jr.; Associate Professor of Law; B.S. (University of Maryland); J.D. (University of Chicago); M.P.P. (Harvard Kennedy School of Government).

Courses

LAW 834 Doing Business in Brazil: A Legal Overview Credit: 1

Exploration of basic principles of Brazilian law and key legal institutions and doctrines that would be useful for a person seeking to do business in Brazil.

LAW 8501 Contracts I Credits: 3

Formation and performance of simple contracts; consideration; express and constructive conditions, excuse of conditions; remedies for breach; contracts for benefit of third parties; assignment; impossibility of performance and discharge.

LAW 8502 Contracts II Credits: 3

Prerequisites: LAW 8501.

LAW 8511 Torts Credits: 3

Wrongs to the person and to property; legal remedies through which compensation or other relief may be obtained.

LAW 8521 Civil Procedure – Pleadings, Motions, and Related Matters Credits: 3

Pleading; joinder of parties and claims; pre-trial motions; discovery; summary judgment; pre-trial and trial procedure; post trial motions.

LAW 8522 Civil Procedure - Jurisdiction Credits: 2

Court systems; personal jurisdiction and venue; federal jurisdiction; choice of law; preclusion; appellate procedure.

LAW 8522D Discovery Practice in Civil Litigation Credits: 1-3

This course focuses on the various discovery techniques which are commonly used in federal civil practice, and also compares state procedures. General topics include the uses of discovery, informal discovery, building the discovery plan, ethical issues, privileges and protections, the discovery tools, electronic discovery, experts, motions to compel discovery, and sanctions.

LAW 8522E Electronic Discovery Credits: 1-2

Discovery practice and laws related to electronically stored information in litigation.

Prerequisites: LAW 8521 LAW 8522.

LAW 8522L Civil Procedure Skills Lab Credits: 1-3

Students are trained in practical skills necessary for pre-trial litigation, including client interviewing and drafting pre-trial documents such as pleadings.

Prerequisites: LAW 8521 (or co-requisite).

LAW 8522W Civil Procedure: War or Justice Credit: 1

Philosophical problem in civil dispute resolution: identifying relevant criteria for evaluating a civil dispute resolution system, and assessing the extent to which the current system and alternatives satisfy those criteria.

Prerequisites: LAW 8521 Civil Procedure – Pleadings OR LAW 8522 Civil Procedure – Jurisdiction

LAW 8531 Lawyering Skills I Credits: 3

Introduction to legal reasoning; case analysis and synthesis; case research; structure and style in legal writing with emphasis on expository writing, including office memoranda.

LAW 8531I Common Law, Legal Analysis & Writing Credits: 3

Introduction to legal reasoning; case analysis and synthesis; case research; structure and style in legal writing with emphasis on expository writing, including office memoranda.

LAW 8532 Lawyering Skills II Credits: 2

Introduction to advocacy; introduction to interviewing, counseling and negotiation; statutory and computerized research; writing to and on behalf of a client, including a trial or appellate brief; oral advocacy.

LAW 8532I Introduction to American Legal Skills Credits: 2-3

Introduction to oral and written advocacy; interviewing, counseling and negotiation; and alternative dispute resolution.

Prerequisites: LL.M. students.

LAW 8532R American Legal Research Credit: 1

Introduction to research resources in the U.S. and techniques to systematically process and solve basic research problems found in law practice.

LAW 8541 Property I Credits: 3

Introduction to the nature of property; basic personal property law; adverse possession; possessory estates; basic future interests; marital and concurrent interests; landlord-tenant relationships.

LAW 8542 Property II Credits: 3

Licenses, easements, real covenants, equitable servitudes; nuisances; basic water law; brokerage; financing, mortgages, deeds of trust; contract of sale, deeds, closing; title insurance, warranties; recording; eminent domain; zoning.

LAW 8543 Adverse Possession Credit: 1

Explores the ancient yet evolving subject of adverse possession as it applies to real property in the United States and around the world. Topics explored include: the ancient doctrine as developed under the common law, the variety of statutory refinements to adverse possession doctrine in the United States and modern attempts to statutorily limit the doctrine, and comparative perspectives on adverse possession including the abrogation of the doctrine in Canada, and the effects of that abrogation on resolution of property disputes there.

Prerequisite: Property I

LAW 8552 Federal Taxation Credits: 3

Theory, history, and principles of federal income taxation; basic concepts of income, classification of income and deductions.

LAW 8590 Special Topics Credits: 1-6

The study of a contemporary topic of interest. This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

LAW 8601 Business Organizations Credits: 3

Partnership, limited liability company and corporation law; choice of business forms, formation of partnerships, limited liability companies and corporations; rights, duties, and powers of partners, members, shareholders, directors, and officers; closely held corporations; proxy regulation; derivative suits; dividends and stock redemptions; introduction to the Securities Act of 1933 and Securities Exchange Act of 1934.

LAW 8601C International Criminal Tribunals Credit: 1

This course will examine the types of international criminal tribunals available for the prosecution of individuals accused of war crimes, the crime of aggression, crimes against humanity, and genocide. The course will begin with an introduction to the history of international criminal law and a comparative examination of various international criminal tribunals, including the Nuremberg trials, ad hoc criminal tribunals (ICTY and ICTR), the permanent International Criminal Court in The Hague, and hybrid criminal tribunals (Cambodia, Lebanon, and Sierra Leone). The course will then focus more specifically on the International Criminal Court (ICC), including the ICC's formation and jurisdiction and examples of individuals and situations investigated and prosecuted thus far by the court.

Prerequisites: Part of the Ireland Law Program.

LAW 8601L Transactional Lawyering Skills Lab Credit: 1

Students are trained in counseling clients and negotiating business formation, dissolution, and liability issues as well as drafting appropriate documents.

Co-requisites: LAW 8601.

LAW 8601R Doing Business In Ireland, Part I Credit: 1

A survey of International Trade Law and European and American Competition Law that impact on American multinational companies operating in the Republic of Ireland.

LAW 8601S Doing Business in Ireland, Part II Credits: 0.5

A survey of the Ireland Company Law and comparative United States Corporate Law and a survey of United States corporate taxation of multinational companies operating in Ireland.

LAW 8602 International Field Experience Credits: 1-2

In connection with relevant coursework, this limited international field experience will permit students to visit a foreign country to see the application of their coursework in a comparative perspective, including tours of legal facilities, visits with experts from the host country, and service learning opportunities.

Prerequisites: Permission of instructor and designated accompanying coursework.

LAW 8603 Taxation Of Business Organization Credits: 2-3

Survey course of the taxation of business enterprises, particularly partnerships, corporations and subchapter S corporations.

Prerequisites: LAW 8552, LAW 8601.

LAW 8605 Antitrust And Fair Competition Law Credits: 2-3

This course examines fair competition law as a body of law designed to protect consumers. Understanding fair competition law requires looking at Supreme Court case law but also lower court decisions, economic analysis, and government enforcement guidelines and policy statements.

LAW 8609 Ethical Issues In Family Law Representation Credits: 1-2

Advanced study of the ethical obligations of public and private attorneys in estate, family, and juvenile law representation. Topics may include identification of the client, ethical and legal obligations of confidentiality and disclosure, competence and client communication, respect for third persons (particularly obligations toward children of clients) and other related subjects. Paper and presentation required. When offered for 2 credit hours, the course fulfills the Schools Professional Responsibility graduation requirement.

Prerequisites: (or concurrent) LAW 8611, LAW 8751.

LAW 8610 Introduction to Trusts Credit: 1

This course explores the law of trusts, including the elements of a valid trust; its creation, administration and termination; the nature of a beneficiary's interest; and the fiduciary duties of trustees.

Prerequisites: Property I and Property II, Estates and Trusts

LAW 8611 Estates And Trusts Credits: 3

Intestate succession; testamentary dispositions; execution, modification, and revocation of wills; will contests; advancements, ademption, and exoneration; family allowances; rights of estate creditors; express, implied, resulting, and constructive trusts; basic tax aspects of estates and trusts; rule against perpetuities; will substitutes.

LAW 8611L Estates and Trusts Lab Credits: 1-3

This experiential course applies the knowledge acquired in the basic Estates and Trusts course to the process of gathering, evaluating, planning, drafting, and executing an estate plan in a non-tax environment.

Prerequisites: LAW 8611; LAW 8541; LAW 8542.

LAW 8613I Estate Planning and Drafting Lab Credits: 2

Students are assigned to attorneys at law firms or trust departments and will work on estate planning projects assigned by the supervising attorney. Exams may include drafting will and trust instruments, researching legal issues, and drafting memos.

Prerequisites: LAW 8611.

LAW 8614 Estate Planning and Drafting Credits: 1-4

Continuation of Estates Trusts I using problems and cases as a basis for class discussion. Working in teams, students engage in the planning of estates for actual clients, proceeding through the entire process and culminating in the execution of wills, trusts or other appropriate instruments. Course is not open to students who have taken Estate Planning.

Prerequisites: LAW 8611.

LAW 8614R Estate Planning For Retirement Plan Benefits Credit: 1

The income, gift, estate and generation-skipping transfer tax consequences and rules related to the ownership, distribution and withdrawal of retirement plan benefits, including minimum required distributions, designating beneficiaries, spousal rights and rollover options

LAW 8615 Estate Planning and Practice Credits: 3-4

Tax-oriented examination of contemporary estate planning problems for the larger estates, with emphasis on issues of direct concern to practitioners. This course is designed for LL.M. students.

LAW 8615R Estate Planning For Charitable Giving Credit: 1

Survey of federal income tax and transfer tax laws governing gifts to charitable organizations, charitable remainder trusts and charitable lead trusts; procedural requirements to assure deductibility; and planning and drafting considerations.

LAW 8617R Elder Law For Estate Planners Credit: 1

An examination of the legal tools available for the elderly client for decision-making, both health care and financial, in the event of incapacity, and asset preservation, including Medicare and Medicaid qualification. The course will cover the use of trust; durable powers of attorney, and advance directives for health care and living wills and the relationship to court guardianship.

LAW 8621 Evidence Credits: 3

General principles relating to proof of facts in civil and criminal trials; presumptions; order of proof; relevancy; judicial notice; real and demonstrative evidence; authentication; best evidence rule; hearsay; competency; impeachment; rehabilitation.

LAW 8631 Constitutional Law Credits: 4

Core issues relating to the U.S. Constitution, including the doctrine of judicial review, the powers of Congress and the President, limitations on state power, and judicial protection of individual rights.

LAW 8633 First Amendment Law Credits: 2-3

Basic themes and advanced problems relating to the law of the First Amendment to the United States Constitution, including exploration of the values behind the protection, subversive advocacy, regulation of speech in the public forum, access to the media, regulation of the press, symbolic expression, libel, obscenity, commercial speech, picketing, right of association, loyalty oaths, legislative investigations and government demands for information, separation of church and state, free exercise of religion, state aid to the religious schools, regulation of religion-based conduct.

LAW 8633R Law and Religion Credits: 1-2

Explores the interaction of the legal system with religious beliefs and institutions. The course examines issues such as the establishment and free exercise clauses of the United States Constitution, the influence of religion in law making, and religion issues presented in famous trials.

LAW 8634 Criminal Law Credits: 3

Introduction to substantive criminal law, its role and purpose in our society; principles of liability, common law and statutory offenses; defenses; punishment.

LAW 8634I International Criminal Law Credits: 1-2

An introductory course in International Criminal Law focusing on the criminal prosecution of individuals under international law, primarily by international tribunals (or "hybrid" international/national tribunals) and secondarily by national tribunals applying international law. The course will include a consideration of aspects of criminal law that are common to most criminal legal systems, with a particular focus on those crimes that are "international;" will revisit the concept of criminal jurisdiction, how it is acquired, and its limitations, such as immunity for heads of state and diplomats; and will examine the elements of war crimes, crimes against humanity, and genocide, as well as a few other crimes of international concern; and excuses or justifications under international law, such as self-defense and insanity.

LAW 8635 Criminal Procedure I Credits: 3

Introduction to the administration of criminal justice; constitutional rights of the accused; due process; privilege against self-incrimination; right to counsel; arrest, search, and seizure; wire-tapping; police interrogation and confessions; pre-trial identification procedures.

LAW 8635S Wrongful Convictions Credits: 2-3

An examination of the causes of wrongful convictions, a consideration of systemic reforms that might minimize convicting the innocent and a focus on recurring ethical issues that confront prosecutors and criminal defense lawyers. Students also will work with The Midwestern Innocence Project on cases of possible actual innocence. This course provides an insider's look into the operation of the criminal justice system and is designed to help students gain insight into features of the criminal justice system that have a tendency to produce wrongful convictions. It should be of particular interest to any student interested in working in a prosecutor's office, public defender's office or for a firm doing defense work. It is a prerequisite for any student wishing to enroll in the Innocence Project clinic. Limited enrollment (normally, up to 16 students)

LAW 8635T Wrongful Convictions II Credits: 2-3

A follow-up class to Wrongful Convictions I, open only to students who have completed Wrongful Convictions I. The course will involve "hands on" work with cases that have passed through the first level of screening in Wrongful Convictions I with students receiving the transcripts and case documents in addition to the briefs and opinion in the case. Students will receive these documents and report on the likelihood that an inmate is innocent and the strategies available for pursuing the claim of innocence.

LAW 8636 Criminal Procedure II Credits: 3

Continuation of the study of the administration of criminal justice; exclusionary rules; bail; prosecutor's discretion; grand jury; preliminary hearing; jurisdiction, venue; joinder and severance of offenses and defendants; right to speedy trial; pleas of guilty; discovery; trial by jury; publicity; double jeopardy.

LAW 8636A Federal Trial Practice Credits: 2-3

A practical skills course involving consideration and application of the rules of procedure and evidence to civil and criminal cases brought in federal court, including, but not limited to the legal requirements of federal jury instructions, motions in limine, pretrial preparation, pretrial conferences, notice requirements, voir dire, opening statements, direct and cross, evidentiary foundations for exhibits, computerized and computer-related evidence, character and related evidence, witnesses (lay, lay opinion, summary, character, experts), and closing arguments.

LAW 8637R U.S. Attorney's Office Law Internship Credits: 3-6

US Attorney's Office Legal Interns work in the United States Attorney's Office directly with Assistant US Attorneys (AUSA's) in one of the Criminal Division units. Activities include legal research and drafting memoranda, motions and briefs; observations and participation in trials, pre-trial hearings, and motions, as appropriate; and general assistance with litigation.

Co-requisites: LAW 8749.

LAW 8638R Entrepreneurial Lawyering: Solo And Small Firm Practice Credits: 3

Course will focus on law practice management for solo and small firms. Topics include organizational structure, firm management, fee setting and allocation, and effective and ethical marketing. Course includes attendance at the Missouri Bar Solo and Small Firm Conference.

LAW 8639 Legal Practice Technology Skills Credits: 1-3

This course will facilitate technology competencies for students for use in practice settings, regardless of the size or setting of the law firm, business, or agency. The course will familiarize students with the basic legal technologies necessary for the twenty-first century lawyer, but will also include word-processing, spreadsheet and database skills appropriate for the legal setting. More advanced portions of the course include computer-assisted drafting, file architecture design, security protocols, and client communications.

LAW 8639B Legal Tech-Competency Training Credit: 1

This course provides students with the opportunity to gain advanced knowledge in the software skills needed by legal practitioners, including: word processing, visual communication, cloud computing, document automation, data analytics, and project management.

LAW 8639D Legal Document Assembly Credits: 1-3

Document automation and assembly can help attorneys more efficiently and accurately deliver legal services to the public and their employer—thus helping attorneys be more competitive in the legal services market place. This two-credit hour course will teach students the skills necessary for document automation and familiarize them with HotDocs, the predominant provider of document assembly applications. Students will produce programmed documents, interviews, and systems for estate planning, businesses planning, or such other projects as are suitable for document assembly. The course may be taught over an eight week period or a summer term. No computer programming experience is required.

LAW 8639L Practice Management Technology Lab Credits: 2-3

Building on theory of the role technology in law practices, students will learn how to use document assembly software and learn to be proficient with other software with hands on exercises and work.

LAW 8641R Legislation Credits: 2-3

This course explores a variety of topics under the broad heading of "Legislation." Included among them are: electoral and representational structures, legislative drafting, canons of statutory interpretation, identifying and utilizing legislative history, the role of referendums and initiatives as a supplement to representative institutions, public choice theory, and other theories of legislation. The course also includes an opportunity for students to participate in the drafting of legislation for the Kansas or Missouri State legislatures. Paper optional.

LAW 8643C Competitive Business Intelligence Credit: 1

Develops the skills necessary to search publicly available information to find vital facts about individuals, businesses, organizations, markets, and industries, and conduct so-called "due diligence" investigations. The first focus is on using public records, commercial services, and company information to gather information about parties. The second focus is on data and statistics, including finding, processing, and interpreting that information.

Prerequisites: Lawyering Skills 1

LAW 8643D European Union Data Protection & Privacy Credit: 1

This course will examine the history of global data protection and privacy, with a particular focus on the General Data Protection Regulation, essentials of a data privacy policy, enforcement, key privacy laws in the U.S., and an evaluation of the future of privacy law.

LAW 8643F Advanced Legal Research: Foreign, Comparative and International Law Credit: 1

The course is designed to familiarize students with the basic resources of international law by taking an in-depth look at foreign and comparative law resources, teaching students how to utilize and think systematically about those resources and instructing students in the strategies and processes necessary to conduct scholarly research and practice international law. Students taking the course will improve their research competency in authorizing scholarly papers with a comparative or international perspective.

LAW 8643L Advanced Legal Research-Litigation Credit: 1

Prepares students who wish to focus on advocacy and litigation (including students in litigation with respect to Family Law and Urban, Land Use and Environmental law). The course is also intended to facilitate research for the student's legal research and writing requirement. The course will refresh and refine research skills, help students to think systemically about legal research, and familiarize students with applicable resources. As the final project, students will have the opportunity to develop an in-depth research "path finder" or guide for an approved topic of their own choosing.

LAW 8643T Advanced Legal Research: Transactional Law Credits: 1-2

Prepares students who wish to focus on transactional law. The course is also intended to facilitate research for the student's legal research and writing requirement, although it does not satisfy the writing requirement. The course will refresh and refine research skills, help students to think systemically about legal research, and familiarize students with applicable resources relevant to transactional law including business organizations, tax, pension, labor and employment, competitive business intelligence, real estate, securities, sale of businesses, etc. As the final project, students will have the opportunity to develop an in-depth research "path finder" or guide for an approved topic of their own choosing.

LAW 8650 Race and the Law Seminar Credits: 1-3

In-depth examination of the role that race plays in American society as a whole and in judicial decision-making in particular. Course will examine the effect of race on various areas of the law, including torts, contracts, property, criminal law, and criminal procedure. Course will also examine the effect of race on jury decisions and explore the concept of implicit bias. Research paper.

LAW 8656 Public Defender Trials Internship Credits: 3-6

Public Defender Law Interns assist in the defense of indigent criminal defendants. Each intern is assigned to a single public defender to allow the intern to observe the life and practice of a public defender, including direct engagement with client (fact development and defense strategy), case file analysis, research, drafting, and exposure to all stages of court proceedings. This is a two-semester internship providing a progression of skill building. Students eligible for Rule 13 student practice authorization may present directly in court.

Co-requisites: LAW 8749.

LAW 8656A Missouri Attorney General's Office Internship Credits: 3-6

Law Interns work side by side with Assistant Attorneys General in the Kansas City regional office representing the State of Missouri in civil or criminal proceedings. Law Interns may be placed in one or more of the divisions of the AG's office: financial services, litigation, labor, consumer protection, public safety, or governmental affairs. Students eligible for Rule 13 student practice authorization may present directly in court. Students may appear in Jackson, Clay, Platte, and/or Cass Counties.

Co-requisites: LAW 8749.

LAW 8656C Jackson County Prosecutor Internship-Family Law Prosecution Credits: 1-3

Family Law Prosecution Interns assist Jackson County Prosecutor's Office, Child Support Division, in prosecuting cases involving paternity establishment and child support. The internship provides formalized instruction, and individual mentoring and supervision from assistant prosecutors.

Co-requisites: LAW 8749.

LAW 8656F Federal Public Defender Internship Credits: 3-6

Federal Defender Interns work in the Federal Public Defender's Office, under attorney supervision to engage with clients; undertake legal research; draft memoranda, motions and briefs; observe and participate in trials, pre-trial hearings and motion hearings; and assist, in general, with litigation.

Co-requisites: LAW 8749.

LAW 8656P Jackson County Prosecutor Internship Credits: 3-6

Law Interns work with attorneys of the Jackson County Prosecuting Attorney's Office in downtown Kansas City and Independence offices. Interns are assigned to specific units: General Crimes, Violent Crimes, Sexual Violence, Warrant Desk, or Independence Office. The internship provides practical experience, courtroom exposure, and an introduction to prosecution hearings and trials. The internship is a two-semester progression of fieldwork allowing students opportunity to build skills and confidence. Students eligible for Rule 13 student practice authorization may present directly in court.

Co-requisites: LAW 8749.

LAW 8662 Federal Court Internship Credits: 2-6

Federal Court Interns serve in a clerkship with a judge or magistrate in a federal court, principally in the Western District of Missouri. Students may also intern with federal judges in different states, with approval of the faculty director of the field placement program. Students generally undertake research, draft memoranda and other documents, observe court, and debrief with judges and clerks regarding the legal issues and lawyering styles in the matters before the court.

Prerequisites: LAW 8522.

Co-requisites: LAW 8749.

LAW 8662F Family Court Internship Credits: 2-6

Family Court Interns serve in the chambers of Family Law judges and commissioners and observe mediation, conciliation, adult abuse docket, and cross-court visits. The internship offers students an opportunity to gain practical legal skills, learn about the programs ordered by the judges to assist families in crisis, and develop a working knowledge of the Family Court Division. Family Court judges hear a wide range of matter concerning families, marriage, and children, including marriage (dissolution, annulments, maintenance), child custody, paternity, child support, adult abuse, juvenile delinquency, adoptions, and guardianships.

Prerequisites: LAW 8521, LAW 8522; LAW 8751 (completed or currently enrolled).

LAW 8662M Missouri Court of Appeals Internship Credits: 2-6

Appellate Court Interns work in the chambers of a Missouri Court of Appeals Judge. Students generally undertake research, draft memoranda, and produce substantial written work under the supervision of the judge or the judge's clerks. They also observe various proceedings (both in chambers and in the courtroom) and interact with the judges, their clerks, and court staff. Students debrief with judges and clerks regarding the legal issues and lawyering styles of the matters and advocates before the court.

Co-requisites: LAW 8749.

LAW 8665A Animal Law Credits: 2

This course will begin with a brief overview of the philosophical and cultural issues underlying human/animal relationships, including basic theories of the legal systems's responses to social change. Legal issues relating to food animals, companion animals, laboratory animals, wild animals, and performing animals will be examined with reference to: (1) federal statutes (Animal Welfare Act, Endangered Species Act, Marine Mammal Protection Act, Wild Horses and Burros Act, Animal Damage Control Act, National Wildlife Refuge System Administration Act, Refuge Recreation Act, National Environment Police Act, and Humane Slaughter Act); (2) state statutes (anti-cruelty, wills and trusts, hunting, racing and fighting statutes); (3) local animal control regulations; and (4) extensive common law (standing, rights, free exercise of religion, property, landlord-tenant disputes, torts, marital dissolution and custody, and bailment).

LAW 8700 Trial Advocacy I Credits: 2

A practical skills course in advocacy which introduces students to the fundamental components of a typical civil and criminal trial and requires students to perform exercises involving each component and try a mock civil or criminal case from provided problem materials.

Co-requisites: LAW 8621.

LAW 8700C Drafting Civil Jury Instructions Credits: 1-2

Covering the essential skills in drafting appropriate civil jury instructions and preserving objections for appeal in civil cases. This is a "skills course" in which students learn the fundamentals of drafting and arguing civil jury instructions.

LAW 8700D Taking and Defending Depositions Credits: 1-2

introduces the fundamentals of depositions, concluding with a mock deposition. Topical coverage includes: what is a deposition and what is the purpose of depositions; who may be deposed and when; deposition questioning; using exhibits; objections; preparing for the deposition; and producing a witness for deposition. Each student will take and/or defend a mock deposition.

LAW 8701 International Study Exchange Credits: 1-15

Semester study at foreign law school.

Prerequisites: by permission.

LAW 8702 Conflict of Laws Credits: 1-3

Domicile; jurisdiction and limitations on the exercise of jurisdiction; judgments; full faith and credit; choice of law; conflicts problems in federal and international settings; conflicts problems in selected areas.

Prerequisites: LAW 8521.

LAW 8703 Trial Advocacy II Credits: 2-3

A practical skills course in the art of trial advocacy with an emphasis on technique, style, and methods of persuasion. During class sessions, students perform exercises involving the various stages of a law suit, and are critiqued on their performances. Following performance of the exercises, students are divided into teams and try a mock case in a trial competition, from which the Law School's National Trial Competition Teams are selected. The trials are evaluated by trial lawyers and federal or state judges. Limited enrollment.

Prerequisites: LAW 8700.

LAW 8704A Lawyering Skills Competition-Appellate Credits: 1-4

This course is limited to students who represent the law school in faculty supervised regional, national or international lawyering skills competitions. These competitions require application of lawyering skills in a range of substantive law areas and intensive practice of lawyering skills, judged by faculty and practitioners in the field. Students enrolled in this course will be representing the school in various moot court appellate advocacy competitions. Students will research and draft briefs or equivalent advocacy documents, develop oral arguments, conduct practice oral arguments before a range of student, faculty, and practitioner judges, and represent the law school in regional national or international competitions.

LAW 8704C Lawyering Skills Competition-Client Counseling Team Credits: 1-2

The course is limited to students who represent the law school in faculty supervised regional, national or international lawyering skills competitions. Students enrolled in this course will be representing the school in the client counseling competitions. Students will research a problem from a range of areas of law and develop problem solving and client counseling strategies and documents and conduct mock client interviews.

LAW 8704I Lawyering Skills Competition Credits: 1-2

This course provides an overview of international commercial arbitration and focuses with more specifically on international investment protection law and bilateral investment treaty provisions. The course will provide preparation for the International LL.M. Commercial Arbitration Competition, but it is open to J.D. students.

LAW 8704N Lawyer Skills Competition-Negotiation Team Credits: 1-2

The course is limited to students who represent the law school in faculty supervised regional, national and international lawyering skills competitions. Students enrolled in this course will be representing the school in various negotiation competitions. Students will research a problem from a range of law and develop negotiation strategies and documents and conduct mock negotiations.

LAW 8704T Lawyer Skills Competition-Transactional Practice Teams Credits: 1-2

The course is limited to students who represent the law school in faculty supervised regional, national or international lawyering skills competition. Students enrolled in this course will be representing the school in various negotiation competitions and meets. Students will research a problem involving business transactions or tax and prepare analysis and problem solving strategies.

LAW 8705 Trial Advocacy III Credits: 2

Students, under the supervision of trial advocacy faculty, participate in trial competitions. Enrollment by invitation only.

Prerequisites: LAW 8700, LAW 8703.

LAW 8705I Comparative Advocacy in Ireland Credit: 1

This course will look into the comparative role of Advocacy both in the courtroom and the boardroom for European and U.S. systems. The course will introduce students to a comparative look at the basic structure and legal systems in Ireland and the US. The field of Advocacy is rapidly expanding as evidenced by the adoption of affirmative advocacy programs in Ireland as well as the U.S. An example of the topics covered include: A comparative overview of the Barrister/Solicitor and U.S. systems of justice. The students will be introduced to "access to justice" which is a comparative look at European and US approaches. The course will also focus on the prosecutions under both the European and US systems as well as a discussion of the influence of crimes on international trade, business and a comparative look at the role of advocacy in those systems. Students will be exposed to advocacy for persons with disabilities that include a comparative look at the Ireland and US systems with resulting effects on business and trade. Finally the course will involve review and discussion of the global considerations for Advocacy.

Prerequisites: Part of the Ireland Law Program.

LAW 8706 Class Actions and Multidistrict Litigation Credits: 2-3

As related to litigation of complex cases, study of special issues of party joinder and intervention, class action requirements and limitations, discovery, case management, and estoppel by verdict or judgment.

Prerequisites: LAW 8521, LAW 8522.

LAW 8707A Advanced Legal Writing: Practical Skills Development Credits: 2-3

Preparation of students for writing problems commonly encountered in the first two years of law practice: jury instructions, general correspondence, opinion letters, simple contracts, litigation motions and pleadings including a complaint, answer and some discovery documents. Individual feedback provided.

LAW 8707B Advanced Legal Writing: Business Contract Drafting Credits: 3

Preparation of transactional documents including, for example, confidentiality agreements, consulting agreements, employment agreements, technology licensing agreements.

Prerequisites: LAW 8501, LAW 8502, LAW 8601.

LAW 8707C Advanced Legal Writing: Litigation Drafting Credits: 2-3

Preparation of litigation documents and pleadings, including complaint or petition; cross-claim, counterclaim or third-party petition; answer; discovery documents such as a set of interrogatories or requests to admit; dispositive motions; and settlement agreements.

Prerequisites: LAW 8521, LAW 8522.

LAW 8707E Advanced Legal Writing: Scholarly Writing Credit: 1

Preparation of students for scholarly writing including independent study, law review, and seminar papers. Focus will be on topic identification and refinement; developing a thesis; research strategies including reiterative and mediated searching, systemic evaluation of resources, problem typing and solving, and resources for specific topics in the law; proper attribution and use of authority; developing a working draft; and creating a balanced, thorough, and carefully reasoned and supported analysis.

LAW 8707F Advanced Legal Writing: Appellate Brief Writing Credit: 1

Preparation of federal and state court appellate briefs, including the jurisdictional statement; statement of the case; statement of facts; points relied on; statement of the issues presented; summary of the argument; argument; and responses and replies to arguments. Prepares students to outline and organize arguments; edit and revise written work; and finalize an appellate brief.

LAW 8707G Advanced Legal Writing: Compliance Drafting Credits: 1-2

This course provides students the opportunity to prepare compliance-related documents to support businesses in highly-regulated industries like health care, higher education, and business and financial institutions. The course will include an overview of the current compliance landscape both domestically and internationally. Classes will include discussions of applicable laws and regulations governing corporate behavior. Students will draft a portfolio of documents—e.g., policies and procedures; codes of conduct—common to corporate compliance programs. Recommended preparation: LAW 8764, LAW 8731.

Prerequisites: LAW 8531, LAW 8532.

LAW 8707J Advanced Legal Writing: Compliance Drafting Credits: 3

Preparation of compliance-related documents to support businesses in highly-regulated industries like health care, higher education, and business and financial institutions. Drafting a portfolio of documents—e.g., policies and procedures; codes of conduct—common to corporate compliance programs.

Prerequisites: LAW 8531 Lawyering Skills 1; LAW 8532 Lawyering Skills 2

LAW 8707R Advanced Legal Research Administrative Regulations/Legislative History Credit: 1**LAW 8708 Master Clinical Advocacy Course Credits: 3-4**

This semester-long intensive course will introduce students to the law, advocacy and execution of trial strategy in active litigation. The course will function as a unique clinical course, with a law school professor and local counsel serving as the supervising attorneys. The professor will select an active case in local litigation, preferably in its early stages. The students will be responsible, with supervision, for all areas of the litigation process from drafting pleadings, motions, discovery and taking and attending depositions and trial.

LAW 8710 Lawyering Skills Teaching Assistant Methods Credits: 1-3

Legal analysis, research and writing; instruction and discussion of the research and writing process and related topics in legal method and legal education; supervised production of an expository writing, advocacy writing and scholarly writing; development of research and writing exercises for use in the first-year Legal Writing Program and service as Teaching Assistants in the Program; limited enrollment.

LAW 8710B Legal Analysis & Methods Credits: 2

Preparation of students for the bar review and exam process with a focus on improving analytical skills to approach and do well on practice bar exam questions, including essay, multiple-choice, and performance questions. The course will cover specific topics tested on the bar exam with additional emphasis on refining memorization skills and learning how to self-assess understanding of concepts.

LAW 8711 Remedies Credits: 2-3

Remedies for violation of legally protected interests; history and development of equity jurisdiction and modern equity practice; injunctions; declaratory judgments; rescission; reformation; restitution; contempt; damages.

Prerequisites: LAW 8521.

LAW 8712 Problems And Issues In The Death Penalty Credits: 1-2

Issues and problems in the administration of the death penalty; the Missouri capital sentencing scheme; constitutional limitations, statutory schemes, state review systems, procedural matters and collateral review of death sentences.

LAW 8713 Death Penalty Clinic Credits: 1-2

The post-conviction process of collateral review in death penalty cases; training in legal representation of the postconviction petitioner.

Co-requisites: LAW 8712.

LAW 8713C Capital Punishment in the Modern World: Constitutional & Human Rights Perspectives Credit: 1

A consideration of problems and issues in the death penalty, including the following topics: the historical and constitutional perspectives on the death penalty; the practical application of the death penalty in the United States; capital punishment and human dignity; and the future of capital punishment

LAW 8713P Wrongful Convictions Clinic Credits: 1-6

Students, under supervision, provide investigate and legal assistance to prisoners with persuasive actual innocence claims. Students meet weekly with the director of the program for training and evaluation. Assigned tasks depend on the needs of the Innocence Project, and may include interviewing potential clients, gathering records, investigating actual innocence claims, consulting with experts, drafting post-conviction and/or clemency pleadings, and appearing at court hearings. Clinical students work in conjunction with law and journalism students enrolled at the University of Missouri-Columbia. Limited enrollment (normally, 8 students).

Prerequisites: LAW 8634, LAW 8635, LAW 8635S.

LAW 8714 Gender and Justice Credits: 2-3

Students will examine and discuss legal issues of special importance to women. Topics will include (among others) sexual discrimination, sexual harassment, domestic violence, reproductive autonomy, and pornography. The course seeks to present each topic in its social context by supplementing legal readings with materials drawn from the social sciences, literature, and film. Paper required. Enrollment limited to fifteen students.

LAW 8715 Harry Potter and the Law Credit: 1

This course uses the narratives (stories) from the Harry Potter series to explore themes about the role of law and justice in society. The course is designed to help students become more familiar with narrative criticism and the use of narrative for persuasion.

LAW 8716 Cyberlaw Credits: 3

Survey of the areas of the law with existing or potential application to the internet and computers and how changes in the information environment affect law and its application. Areas of law include jurisdiction, contract law, intellectual property law, criminal law, and constitutional law.

LAW 8716C Cybercrime Credits: 1-4

Cyber threats are a global problem challenging all areas of business, and attorneys must be able to advise and defend clients from these threats. Criminal lawyers must be fluent in how new technologies work and how they impact investigations. In this course, students will learn how these new cyber threats and emerging technologies are challenging attorneys across the country. The course will prepare students to think as lawyers when confronting these threats. Course topics will include computer hacking, spamming, spear phishing, Internet fraud and social engineering, cyberstalking, and the rising use of computers and social media in violent crimes.

LAW 8720 Secured Transactions Credits: 3

Secured Transactions in personal property under Article 9 of the Uniform Commercial Code, function and form of a security agreement, process of perfecting a security interest, priority among unsecured parties; secured sales of goods under Article 2 of the Uniform Commercial Code.

LAW 8721 Commercial Transactions Credits: 3

This course offers a study of the Uniform Commercial Code provisions that deal with negotiable instruments (commercial paper)(Article 3), bank collections and deposits (Article 4), funds transfers (Article 4A), and letters of credit (Article 5), as well as the study of alternate payment systems (including electronic fund transfers, credit and debit card payments, and related federal law).

LAW 8723 Banking Law Seminar Credits: 2

Federal and state law governing banking activities; regulation of bank holding companies; formation of banks; the FDIC and FSLIC; interstate banking; deregulation of banking transactions; banking activities by non-banks; regulation of securities activities of banks. Paper required.

Prerequisites: LAW 8721.

LAW 8725 Water Law Credits: 2-3

Private acquisition of water rights through riparian ownership and prior appropriation; public rights to water existent in bed ownership easements and trusts; ground water management; water distribution organizations; federal allocation and control of water resources; interstate allocation.

LAW 8725E Energy Law Credits: 3

The course will deal with the legal, economic and environmental issues of energy production on federal lands and/or under federal jurisdiction. It will focus on a number of energy sources including: oil, coal, natural gas, oil shale, coal bed methane, geothermal, water, wind, and solar. It will also cover the special problems of hydraulic fracturing, air and water pollution, climate change spills, collapses, meltdowns and other disasters as well as liability for cleanup and reclamation.

LAW 8728 Law And The American Indian Credits: 2-3

An anthropological, historical and legal study of the American Indian, including a focus on American Indian traditional law and values, federal policy and current legal issues.

LAW 8729 Preservation Law Credits: 2-3

An exploration of the legal and economic issues impacting preservation of land, wilderness, buildings and archeological and historical sites, including a study of various federal and state preservation legislation, and private land use preservation measures.

LAW 8729C Cultural Preservation Law Credits: 3

This course will focus on Federal, State, and Local Law, directed at the preservation of Prehistoric, Historic, and Modern Culture. It will include sections on: The Values and Philosophy of Preservation, Archaeological Protection Law, the Native American Grave Protection and Reparation Law, Sacred Site Protection, Historic Protection in State and Local Government, the Takings Clause, Land trusts and Conservation Easements, Public-Private Partnerships and Modern Ethnic and Socio-economic Communities.

LAW 8730I Introduction to American Law & Culture Credits: 2-3

Introduction to the American legal system, including government structure, sources of law, common law development, and core substantive areas. Available to LL.M. International students only.

LAW 8731 Professional Responsibility Credits: 2

This course covers the Model Rules of Professional Conduct; role of the lawyer as a professional; confidentiality; conflict of interest; zeal within the bounds of the law; competency; providing legal services. The course explores the meaning of professional judgment and client-centered lawyering.

LAW 8731E Professional Responsibility in Context: Environmental and Resource Law Credits: 2

Covering the law governing lawyers and professional responsibility, setting the perspective and context in the practice of environmental law and resource law. The central focus relates to understanding the role of the lawyer and professional responsibility. The experiential focus is to achieve this goal in a practice context of environment and natural resource law.

LAW 8732C Cross-Cultural Dispute Resolution Credits: 2-3

This course examines the impact of culture on the dispute resolution process. Cultural differences are most pronounced in the international arena, but are also seen in the domestic setting, especially in the US jurisdiction. Students will begin to develop a "cultural fluency" in their law and dispute resolution practice. The subject is timely, and discussion thereof will benefit especially international LLM students, and J.D. students with interests in alternative dispute resolution or international practice. Cross-cultural Dispute Resolution is a blend of both a "course" and a "seminar," as it includes lecture, skills discussion, small-group exercises, independent research and intensive writing. Successful completion of the required research paper will satisfy the research and writing requirement.

LAW 8732I Cross-cultural Business Negotiation Credits: 1-3

This course will introduce students to the foundations of negotiation with several opportunities to participate in negotiation simulations. Negotiation exercises will focus on international business transactions. To create opportunities for cross-cultural interaction and work experience, negotiation teams will, to the extent possible, pair American J.D. students with an international LL.M. students.

LAW 8732R Intro to the Resolution of International Commercial Disputes Credit: 1

This course will introduce students to international commercial dispute resolution. While all forms of dispute resolution will be considered, the course will focus on introducing the fundamentals of arbitration, the use of arbitration between European Union members to resolve commercial disputes, and the use of arbitration between EU members and non-member states to resolve commercial disputes.

LAW 8733 Children In The Law Credits: 2-3

The ways in which the legal system treats children differently from adults and the justifications for such treatment, who should make decisions for the child, decisional authority that should be granted to parents, children and the state in various contexts (e.g., abuse and neglect, health care for the child, foster care, adoption and education).

LAW 8733E Elder Law Credits: 2-3

A course providing a basic foundation for legal practice with older persons, including the following substantive topics: The Older Americans Act, the delivery of legal services to the elderly, ethical considerations, consumer protection, discrimination, Social Security and Supplementary Security Income, Medicare, Medicaid, capacity issues, guardianship and alternatives to guardianship, elder abuse and neglect, adult protective services, nursing homes, long term care, housing, healthcare decisions, end-of-life decisions, estate planning and grandparents' rights.

LAW 8733R Juvenile Offenders & The Law Credits: 2-3

An examination of our justice systems's historical treatment of juvenile delinquent and status offenders, and how the goals and objectives of the past have evolved into today's juvenile offender laws; the rights of juvenile offenders in contrast to those of adult criminals; pre-trial and trial procedural issues under the juvenile code; certification of the juvenile offender as an adult; dispositional/treatment alternatives for juvenile offenders; schools and the juvenile offender.

LAW 8734 Mediation Credits: 2

The process in which a neutral third party assists others in resolving a dispute or planning a transaction; introduction to the nature of the process, its possibilities and limitations, its current and future uses, and how lawyers can and should be involved in it; public policy and political issues surrounding the mediation movement; professional responsibility and malpractice.

LAW 8735 Seminar In Famous Trials Credits: 2-3

Historical and jurisprudential issues involved in a number of "political trials.

LAW 8735R Law Of The European Union (Part I) Credit: 1

An in-depth study of the legal and political framework and institutions of the European Union; the Commission, Council of Ministers, Court of Justice, Court of Auditors, and the European Parliament. Course will examine the interlocking web of European treaties, the expansion of the European Union, the European Union as a trade block and Ireland as a gateway to the European Union for non-bloc nations.

LAW 8736 Debtor-Creditor Rights Credits: 2-3

Creditors' remedies and debtors' rights; provisional remedies; secured transactions (Article 9 of the Uniform Commercial Code); liens and exemptions; overview of bankruptcy law.

LAW 8736M Introduction to Bankruptcy Concepts Credits: 1-2

The course will introduce basic bankruptcy concepts and processes, with a focus on issues that arise in Chapter 7 bankruptcy cases.

LAW 8737R Law Of The European Union (Part II) Credits: 2

An examination of the substantive and procedural law governing the member states of the European Community including such topics as the nature and application of European Union Law, the relationship between European Union and national laws, remedies in national courts, enforcement actions, damages and money claims, free movement of goods and workers competition laws, intellectual property, equal treatment of women and men, and non-discrimination.

LAW 8738 Immigration Law And Process Credits: 2-3

Admission, exclusion, deportation, and naturalization of aliens; structure and powers of relevant federal agencies; categories of immigrant and non-immigrant visas and visa application procedures; asylum, extradition, and refugee status; rights of aliens; public policy issues and proposals for reform; practical problems in immigration.

LAW 8738C Employer Immigration Compliance Plans, Policies & Procedures Credits: 1-2

A practical lawyering skills course in which students learn how to help employers comply with employer immigration compliance requirements in order to avoid possible non-compliance fines, forfeiture of business and personal assets, and jail terms. This course includes an overview of the applicable immigration law and instructs in such matters as corporate client interviewing; Form I-9 Employment Eligibility Form; E-Verify and FAR E-Verify for federal contractors; ICE Best Employment Practices, drafting employer immigration compliance plan, policies and procedures; I-9 Self-Audits, and defending a corporate client in I-9 inspections/investigations by ICE/DHS.

LAW 8738P Immigration Law and Policy Credits: 2-3

A focus on the historical development of immigration law in the United States and fundamental questions of immigration policy. Immigration bills in Congress have been the subject of heated debate, particularly in recent years. This course provides a historical, statutory, and theoretical background for evaluating such proposals. Students will evaluate proposed federal and state legislation across the country and immigration reforms in foreign countries. Particular emphasis will be placed on post-9/11 reforms and the relationship between immigration law and the war on terrorism. The subject matter is useful for the student who intends to practice immigration law, as well as for the non-specialist interested in Immigration law as a policy matter.

LAW 8738R Chinese Law Credits: 4.5

A summer abroad program in Chinese law taught at the University of Peking, Peoples Republic of China by Chinese Professors. Subjects include such topics as: Cultural History and Political Systems of China, Organization of the Chinese Legal System, Chinese Contract Law, Civil Law, Trial Practice Rules of Evidence, Criminal Law Procedure, Family Law, Human Rights Issues, Business Organizations, Taxation, Intellectual Property Law, Banking and Finance, Real Estate Law, Investment Law Practice in China, and Alternative Dispute Resolution.

LAW 8738V Immigration Law & The Violence Against Women Act Credit: 1

A practical lawyering skills course in which students learn how to help abused immigrant women and children to apply for permanent residence in the United States, and how to help victims of violent crimes to apply for legal status. The course includes a short overview of the applicable immigration law and instructs in such matters as client interviewing; analysis of cases; working with victim advocates and experts; drafting affidavits, evidence indexes, petitions, motions and supporting documents; preparation of checklists for clients, case flowcharts, and case timelines; the review and development of evidence; and the drafting of letters to clients and the government.

LAW 8740A Missouri Appellate Procedure Credits: 1-2

Practical application of Missouri appellate procedure rules: appellate jurisdiction, what is appealable and when, appellate case process and the interplay between statutes, Missouri Court Rules and Missouri case law with regard to appellate issues.

Prerequisites: Law 8522 Civil Procedure II.

LAW 8740M Missouri Civil Procedure Credits: 2-3

Selected problems in Missouri civil procedure under Missouri statute and rules. Topics may include venue and personal jurisdiction, pleading and motion practice rules on joinder of parties and claims, statutes of limitation, trial procedure, post-trial motions appellate procedure, discovery, and preclusion.

LAW 8743 Global Legal Systems Credits: 1-3

A study of different legal traditions and systems, mainly within the Civil and the Common Law traditions, focusing on each tradition's history, legal structures, legal actors, procedures, and sources of law. Non-Western Legal traditions such as Islamic, Jewish, Hindu and Indigenous Law may also be considered, time permitting.

LAW 8743C Comparative Criminal Law Credit: 1

A comparative analysis of criminal law jurisprudence in the United States and Europe (especially Ireland and the United Kingdom) with respect to the exclusionary rule, the death penalty, the jury system and the reintegration of ex-offenders into society.

LAW 8743I Ireland Program: Selected Topics in Comparative Law Credits: 1-2

This course addresses a focused area of law from a comparative perspectives of United States, Ireland, and/or EU legal systems.

Prerequisites: part of Ireland Study Abroad Program

LAW 8743L Comparative Health Law Credit: 1

An examination of how the legal systems of several other nations address particular aspects of health law. Specifically, the focus of this course is on patent rights with respect to the health care they receive. This will include, for example, consideration of patient rights when the care received has caused injury due to professional negligence. If time permits, it will also look at how other legal systems address the controversial issues surrounding the "right to die" as well as assisted suicide and euthanasia.

LAW 8745 Law Review Credits: 1-4

Editorial work in connection with the "UMKC Law Review." Open to students selected on basis of scholarship. Ungraded.

LAW 8745R Law Review Board Credits: 1-5

The members of the Law Review Editorial Board edit articles and student notes and comments for publication in the University of Missouri Kansas City Law Review; and shepherd the articles and student pieces through the production process.

LAW 8746 Research & Writing Requirement Credits: 2

Completion of a paper of publishable quality, demonstrating intensive research and analysis under faculty supervision.

LAW 8746C Court Internship Credits: 3-6

Judicial Interns serve in a clerkship with a judge, magistrate, commissioner, or other judicial officer in a state court. Students generally undertake research, draft memoranda, observe hearings and other judicial proceedings, and debrief with judges and clerks regarding the legal issues and lawyering styles in the matters before the court.

Co-requisites: LAW 8749.

LAW 8746I Internship-Estate Planning Credits: 2-6

Estate Planning Interns are mentored by an attorney with an estates law practice, in a private firm or trust company. Law Interns undertake assignments such as review and analysis of estate planning documents, draft provisions for such documents or probate court filings, and/or conduct legal research. The objective of this internship is to expose student to the estate planning law practice.

Prerequisites: LAW 8611 AND LAW 8552.

Co-requisites: LAW 8749.

LAW 8746R Independent Study Credits: 1-3

Independent study, including research and writing projects, under faculty supervision.

LAW 8746W Introduction to Workers' Compensation Law and Practice Credits: 1-2

An introduction to the general history and purpose of the workers' compensation laws with a particular emphasis on Missouri law. Students will be presented with and guided through actual workers' compensation problems which will introduce them to the practical aspects of the practice in this specialized area. With permission from Jefferson City and the Department of Labor and Industrial Relations, the students will be exposed to actual workers' compensation hearings, mediations and other courtroom practices held at the law school and presided over by an Administrative Law Judge.

LAW 8747 Introduction to Appellate Advocacy Credit: 1

Preparation of memorandum (points relied on and summary of argument); presentation of two arguments before practicing attorneys.

LAW 8748 Appellate Advocacy - Ellison Moot Court Competition Credits: 2

Ellison Moot Court Competition; preparation of an appellate brief and presentation of two oral arguments before federal and state judges. Open to the 16 finalists from Appellate Advocacy II. Ungraded.

Prerequisites: 8747 Intro to Appellate Advocacy.

LAW 8749 Field Placement Seminar: Learning from Practice Credits: 1-2

Learning from Practice (LFP) is a seminar (tied to a field placement). The seminar will explore dimensions of professional development of an effective lawyer, including the capacity for reflection, deliberate skill acquisition, and ability to form meaningful professional relationships. Each LFP section has a different focus, but all are designed to complement and provide deeper context to the law interns' fieldwork. One LFP seminar, focused on attorney ethics and values, is catalogued under Professional Responsibility (LAW 8731). It covers the Model Rules of Professional Conduct and explores the dimensions of client-centered lawyering.

Prerequisites: Completion of 30 credit hours toward JD.

Co-requisites: Any field placement course.

LAW 8750C City of Kansas City Municipal Internship Credits: 1-6

City Law Interns work in the Law Department of the City of Kansas City, in municipal court litigation, legal advising, and legal aspects of policy development. Intern assignments include litigation and non-litigation based research and drafting. In litigation context, law interns draft briefs, conduct discovery and case file analysis, and prepare witnesses, and other aspects of trial preparation.

Co-requisites: LAW 8749.

LAW 8751 Family Law Credits: 3

Pre-marital contracts; marriage; annulment; paternity; parent and child; divorce; alimony; division of property; separation agreements; adoption.

LAW 8751F Family Law & Film Credit: 1

An exploration of the function of family law and lawyers in society by examining legal decisions, statutes and legal commentaries in the context of films, including classic, contemporary mainstream, foreign, documentary and independent films. The seminar entails participants viewing a film followed by discussion. During the discussion session students will critique the film in light of assigned reading materials. Using films as analytical tools, the seminar examines the ways in which pop culture products (such as film and television) both reflect and change the social views about family law and lawyers. A pass/fail course.

LAW 8751S Family Violence Credits: 2-3

An in-depth examination of family violence from a legal perspective. Course topics will include interdisciplinary study of the dynamics and psychology of family violence, of historical and social policies, specialized problems of family violence (including intimate partner violence, child abuse and neglect, gay and lesbian battering, and elder abuse) and legal responses. Students will receive practical training in safety planning, intake, review of community resources, case logistics, and advocacy for temporary orders.

LAW 8752G Guardian Ad Litem Workshop Credits: 2

Advanced study of guardian ad litem practice. (GAL). Topics may include adult and child orders of protection, requirements for guardian ad litem appointments, role of the GAL, ethical considerations, working with social workers and other professionals, and best practices in investigation, recommendation, and representation. Students will partner with volunteer attorneys to act as guardians ad litem in order of protection cases.

Prerequisites: Rule 13 certification.

LAW 8752R Family Law Practice Credits: 2

A practical skills course in family law in which students participate in all phases of family law practice, including the initial client interview; the drafting of questionnaires, pleadings, motions custody and discovery plans, support and maintenance proposals, orders and other documents; negotiation, and preparation for litigation. Students work in teams and perform exercises which simulate "real world" situations.

Prerequisites: LAW 8751.

LAW 8752S Child & Family Services Clinic Credits: 1-6

Students represent the clients in obtaining legal rights to custody of children who are currently in foster care or otherwise under the authority of the Department. Students work under the supervision and direction of clinic faculty and faculty directors, receiving classroom instruction in the substantive law and procedure governing juvenile court actions.

Prerequisites: Rule 13 certification.

LAW 8753 International Law Credits: 2-3

Survey of international legal studies; nature and role of international law, its effectiveness in dealing with international problems and its application in domestic jurisdictions.

LAW 8754 International Business Transactions Credits: 2-3

Legal problems encountered in international business; jurisdiction and choice of law; enforcement of judgments; methods of protecting foreign investments; extra-territorial application of United States regulations, e.g. anti-trust law.

LAW 8757 Business Planning Credits: 2-3

Problem-method study of choice of entity and various other legal issues and planning challenges in forming a closely held business entity and in private and public financing of an existing enterprise. The course includes practical training from drafting organizational documents to conducting simulated client interviews and providing written advice concerning hypothetical transaction. Limited enrollment.

LAW 8757L Special Topics In Entrepreneurial Lawyering Credits: 2

Examination of issues related to ethical and effective management and marketing of law practice, emphasizing solo and small firm practice. Topics will vary from year to year, but will generally address issues such as forms of practice, dissolution of practice, practice management systems (including technology assistance), human resources management, advertisement and solicitation, insurance and malpractice.

LAW 8757N Entrepreneurship & New Venture Creation Credits: 3

Jointly-taught by Law School and Bloch (Business) School faculty, this interdisciplinary course provides education in entrepreneurship to a combined class of students from law, business, engineering and perhaps other graduate-level disciplines. Using a combination of readings lectures, electronic blackboard discussions, team business planning projects and presentations, and individual presentations on selected topics, the Course is designed, from a law student's perspective, to both (1) familiarize the student with substantive knowledge of issues from multiple disciplines involved in creating a new venture to commercialize technology and (2) train law students in techniques designed to effectively communicate and resolve legal issues inherent in such projects in a collaborative manner with clients and their advisors from other disciplines.

LAW 8757R Entrepreneurial Law & Practice Clinic Credits: 2

Under faculty supervision, students will counsel start-up companies and their owners and implement business planning advice by drafting articles of incorporation and organization, by-laws, partnership agreements and other business contracts. Other business-related matters ranging from regulatory, consumer, licensing, and taxation requirements; copyrights, trademark, and patent creation; and 501(C)(3) applications for non-profits may also be covered in this course. Clinic students will also receive classroom instruction in the areas of client counseling and business planning and drafting of business documents.

Prerequisites: LAW 8601 and LAW 8552.

LAW 8757V Social Entrepreneurship Ventures Credit: 1**LAW 8758S Securities Regulation Credits: 2-3**

Problem and policy method study of the Securities Act of 1933 and selected aspects of the Securities Exchange Act of 1934; financing of an enterprise; reorganizations; tender offers; proxy regulation; and securities fraud claims.

LAW 8760 Insurance Credits: 2

Life, fire, accident, and liability insurance; nature of insurance; nature of insurance contract; special rules of construction; standard policy provisions; regulation of insurance industry.

LAW 8761M Law, Medicine & Bioethics Credits: 2-3

A study of bioethics and selected legal and ethical issues in medicine with focus on decision-making at the beginning and end of life; reproductive rights and assisted reproductive technologies; the patient-provider relationship (fiduciary, treatment, confidentiality, and disclosure obligations); physician obligations of informed consent and patient care issues; potential hospital and physician liability for medical malpractice; and end of life decision-making (withdrawal and refusal of life sustaining treatment by individuals and their surrogates) and physician-assisted suicide.

LAW 8762 Personal Injury Tort Practice And Procedure Credits: 1-3

Advanced treatment of law of negligence; right of recovery and defenses; practice and procedure in negligence cases, including case intake, pre-discovery investigation, settlement demand packages and other communications with opposing counsel, injury petitions, initial discovery, depositions, retention of experts, pre-trial motions, and mediation.

Prerequisites: LAW 8521, LAW 8522, LAW 8511, LAW 8531 LAW 8532.

LAW 8763 Labor Law Credits: 2-3

Regulation of labor relations pursuant to the national Labor Relations Act, focusing on the establishment of collective bargaining relationships, unfair labor practices, collective bargaining, strikes, picketing and pre-emption.

LAW 8764 Administrative Law Credits: 1-3

Introduction to the administrative process; role, function, and processes of administrative agencies; policy issues of administrative government; judicial review.

LAW 8765 Federal Jurisdiction Credits: 2-3

Federal court system and jurisdiction of the federal courts; diversity of citizenship; removal of cases from state to federal courts; conflicts between state and federal judicial systems; original and appellate jurisdiction of the Supreme Court.

Prerequisites: LAW 8521.

LAW 8766 Land Use Law Credits: 2-3

Legal and administrative aspects of land use and the problems and techniques of urban planning; statutory anti-nuisance devices; controlling land use by private methods (restrictive covenants, easements, and servitudes); zoning; subdivision controls; public acquisition of land; building and housing; urban renewal and redevelopment; environmental quality control (air, water, and conservation); relationship of lawyers, planners, private builders, and owners to governmental policies.

LAW 8767 Land Title Clinic Credits: 1-6

Under supervision, students provide legal assistance to The Land Bank to bring quiet title actions and pursue other legal strategies necessary to return vacant and abandoned properties to productive use.

Prerequisites: Rule 13 eligibility.

LAW 8768R Department of Labor Internship Credits: 3-6

Department of Labor Law Interns assist agency attorneys in the Regional Solicitor's Office of the United States Department of Labor enforcing federal labor statutes, including the Fair Labor Standards Act, Occupational Safety and Health Act, and Office of Federal Contract Compliance Programs, among others. Students undertake legal research, draft discovery requests, review and analyze evidence, participate in client and staff conferences related to enforcement strategy, and assisting enforcement personnel in investigations.

Co-requisites: LAW 8749.

LAW 8769 Law & Poverty Credits: 1-3

Selected problems arising out of the relation of the law to the poor and its effect upon the individual and the family structure; income maintenance (e.g., welfare, social security); discrimination in employment and housing; delivery of professional services (legal, health); administrative and judicial remedies.

LAW 8770 State And Local Government Law Credits: 2-3

Structure, powers, and divisions of local governments in metropolitan areas; role and powers of cities, counties, towns, school and special districts; decentralized and neighborhood governmental units and other local governmental units; legislative, home-rule, and constitutional sources of power; sovereign immunity; boundary adjustments; public employee relations; citizen participation; reapportionment; licensing and permits; ethics and public access to records; regional governance; intergovernmental cooperation; interstate compacts and authorities; function of local government with reference to solution of problems created by urban growth; role of judicial, administrative, and political processes.

LAW 8771 Public Finance Credits: 2-3

Fiscal, economic, and taxation problems and powers of local government in metropolitan areas; constitutional limitations; spending and public finance; property taxes; special assessments and exactions; interstate tax acts; local income taxes; debt financing; debt adjustment; public expenditures and contracts; financing education.

LAW 8773 Environmental Law Credits: 2-3

This course covers law developed to control pollution and to protect our country's physical environment. The course provides introductions to ecological theories and to early common law efforts to protect the environment. But the course mainly focuses on current environmental statutes (for instance, the Superfund Act, the Resource Conservation and Recovery Act, the Clean Air Act, and the Clean Water Act) and on current federal constitutional issues involving the environment. (Priorities in this mix may vary from year to year, depending on current events and related course offerings). Enforcement policies, citizen activism the needs of private industry, and the administrative process are also considered.

LAW 8773C Environmental Compliance Auditing and Permitting Credits: 3

This course provides students with an overview of the key federal environmental statutes and their inter-relationships, including consideration of the Clean Water Act, the Clean Air Act, the Emergency Planning and Community Right to Know Act and the Resource Conservation and Recovery Act. Students will learn about inspections, enforcement and liability; environmental management systems and auditing; and generally, how Congress and the EPA formulate environmental laws and regulations and about the roles in the process of the legislature, the regulators, the regulated communities, citizens and public interest groups.

LAW 8773N Negotiating SuperFund Settlements Credits: 1-2

This course will engage students in the simulated resolution of one or more Superfund cases, with a particular focus on the skills required for negotiated resolution of these matters.

LAW 8773R Environmental Law Internship Credits: 3-6

Environmental Law Interns work with attorneys in government agencies, such as the U.S. Environmental Protection Agency or non-profit organizations focused on environmental protection, resource conservation, public health and related issues. The nature of the lawyering assignments will vary with the host office.

Co-requisites: LAW 8749.

LAW 8774 Citizen Suits under the Endangered Species Act Credit: 1

This course will cover the citizen suit provision of the federal Endangered Species Act, walk-through an example case from initiation to settlement, and consider possible reform to meet the goals of the statute.

Prerequisites: LAW 8521 LAW 8522.

LAW 8775 Appellate Advocacy National Moot Court Competition Credits: 1-2

Participation on National Moot Court competition team. Ungraded.

Prerequisites: LAW 8748, Ellison Moot Court Competition.

LAW 8778 American Academy Matrimonial Lawyers Board Credits: 2

Under direction of professor, students provide editorial assistance in publishing Journal of the American Academy of Matrimonial Lawyers, write a paper on selected topics and prepare summaries and bibliography of current works. Limited enrollment.

LAW 8783 Federal Public Land & Resource Law Credits: 2-3

Exploitation and conservation of natural resources; management of federal lands; water law; energy law; federal wildlife preservation; resolution of disputes involving use of natural resources.

LAW 8783B Buffalo National River: Issues in National Park Law & Management Credit: 1

Specialized study of topics in natural resources law as it relates to the Buffalo National River in northern Arkansas. Students will explore the history of the Buffalo River; the state and federal laws in operation governing the park (e.g., the wild and scenic rivers act, the endangered species act, national historic preservation, etc.); and planning and management issues presented by the multiple uses of the area and its surroundings.

LAW 8783P Preservation of Land & Natural Resources Credits: 2-3

This course will provide a survey of the law and policy of land and natural resource management, with an emphasis on preservation, conservation and sustainability.

LAW 8790 Legal Aid Internship Credits: 3-6

Legal Aid Interns are assigned to one of the practice groups in Legal Aid, focused on legal issues of people with limited means (housing (public and private), consumer protection, community development, government benefits, family law, municipal criminal defense). Principally, students work in one of the Kansas City offices, but may also intern in other offices in Missouri or another state, with approval of the faculty director of the field placement program. Students eligible for Rule 13 student practice authorization may present directly in court.

Co-requisites: LAW 8749.

LAW 8791 Civil Rights Credits: 2-3

Elements of a Section 1983 case, enforceable rights and available defenses; procedural aspects of civil rights cases; suits against federal and state governments.

Prerequisites: LAW 8631.

LAW 8793A Health Law I: Liability and Quality Issues in Health Care Credits: 2-3

Health Law I: Liability and Quality Issues in Health Care

LAW 8793B Health Law II: Regulation, Organization and Finance Credits: 2-3

Health Law II: Regulation, Organization and Finance

LAW 8796 Economics And The Law Credits: 2-3

Tools of economic analysis which have particular application in the law; equity and efficiency are weighed in regulation, pollution, discrimination, monopoly, financial markets, human resources and government expenditure and taxation policy. Principles will be introduced and expanded upon using both lecture and case study techniques.

LAW 8797 Business Torts and Unfair Competition Credits: 2-3

The common law applicable to relations between businesses that compete against each other or that cooperate with each other in the production and distribution of the same product. Tort, contract and property law principles as remedies not available in parallel statutory schemes, such as the antitrust or patent laws. Statutes that codify the common law or create statutory procedures or remedies for common law rights.

LAW 8798 Copyright Law Credits: 2-3

Surveys when copyright protections are extended, the exclusive rights included in copyright, and the limitations of those rights. Additional consideration is given to third-party liability, the challenges of digital technologies, and protections afforded by the Digital Millennium Copyright Act.

LAW 8798A Art Law Credits: 2-3

This course examines several key topics related to the protection of visual arts, including copyright and moral rights and their intersection with First Amendment protection.

LAW 8800 Legal Research Thesis Credits: 1-8

Research for LL.M. thesis.

LAW 8808 Intellectual Property Law Credits: 2-3

Substantive and procedural law of intellectual property. Coverage includes copyrights and patents and other areas at the option of the instructor.

LAW 8808I International Intellectual Property Credit: 1

This course focuses on the main principles of protection and obligations of the signatories to the World Trade Organization Trade Related Intellectual Property Agreement (GATT/TRIP's) - in particular focusing on the main intellectual property and Industrial property rights, including (1) Copyright, (2) Performers Rights, (3) Patents, (4) Trade Marks, and (5) Related rights such as unfair competition and the protection of geographical indications; and addresses what the obligations are that are imposed on signatories in respect of protection and enforcement of these rights.

LAW 8808L Intellectual Property Licensing Credits: 2-3

This course provides for advanced engagement with intellectual property concepts while also providing training in practical skills. The course will first entail reminding students of the differences among the three essential areas of intellectual property law (copyright, patent, and trademark) and indentifying how these differences translate into different standard license agreements. Additionally, students will consider the challenges in drafting a consolidated license agreement that transfers interests in multiple types of intellectual property. Second, the course will include considerable practice for students in drafting contract language.

LAW 8808S Intellectual Property Remedies Credits: 2-3

This course will explore the remedies available to intellectual property owners and the protections available to those accused of infringing copyrights, trademarks, trade secrets and patents. The course will delve into issues of how rapidly advancing technology has made it more difficult to apply the current remedies and explore whether they go too far or not far enough in protecting owners of intellectual property. It will also help students recognize that case evaluation does not end after analyzing whether liability exists.

LAW 8809 Missouri Cannabis Law Credit: 1

This miniterm course will survey the essential features of medical marijuana law in Missouri. It will cover the regulations regarding application for a medical marijuana license (cultivation, dispensary, and infusion/extraction).

Prerequisites: Administrative Law is recommended, but not required.

LAW 8813 Employment Discrimination Law Credits: 2

Substantive and procedural aspects of Equal Employment Opportunity Act and related matters.

LAW 8814R Employment Law Credits: 2-3

Survey of legal doctrines regulating the employment relationship, including the regulation of wages, hours and benefits; privacy in the workplace; workers' compensation; suits for wrongful termination; non-competition agreements; and unemployment compensation. May be offered as a seminar.

LAW 8814U Unemployment Compensation Clinic - Hearings Practice Credits: 1-3

Students represent claimants in administrative hearings appealing denials of their unemployment compensation claims. Students interview and counsel clients, investigate their cases, prepare evidence, and advocate for the clients in these hearings.

LAW 8815 Products Liability Credits: 2-3

Theory and practice in products liability cases; negligence; misrepresentation; strict liability; theories of product defect; applicability of the Uniform Commercial Code including warranties and disclaimers; actions among members of the distribution chain.

LAW 8815R Disabilities And The Law Credits: 2-3

An interdisciplinary study of the law relating to disabled persons in the areas of employment, education, and access to transportation, health, welfare and social services to provide an understanding of how the law affects individuals with disabilities and public and private entities. Legislation considered include the American with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, the individuals with Disabilities Education Act, the Family and Medical leave Act, the Fair Housing Act, the Voting Accessibility for the Elderly and Handicapped Act, and the Title VII of the Civil Rights Act of 1964. The enrollment of graduate students from other disciplines, such as education, business, and health sciences is encouraged to allow for interdisciplinary discussion of the topics involved.

LAW 8815S Leadership In Disability Studies: A Multidisciplinary Approach Credits: 3-4

An overview of the history of disability issues, some individualized perspectives of persons with disabilities, the rationale for interdisciplinary approaches regarding disability studies, and opportunities for leadership development with regard to disability issues. The students will participate in a forum that encourages reflection, exchange of ideas, interaction with persons with disabilities and persons from various fields of study, and case analysis. After an orientation to the study of disabilities, various aspects of community membership for persons with disabilities will be addressed, particularly with regard to the workplace, the neighborhood, and the home. Emphasis with placed on vital leadership roles that facilitate community membership and contribution of persons with disabilities to society.

LAW 8820 Criminal Trial Techniques Credits: 2

Strategy and tactics in handling a criminal case; effective representation of the accused at various stages of the criminal process; securing pre-trial release; plea bargaining; motion practice; discovery; voir dire; opening and closing statements; examination of witnesses; use of the expert; sentencing; appeal; collateral attack.

LAW 8821 Sentencing Mitigation Clinic Credits: 1-6

Students will work in conjunction with practicing attorneys, paralegals, social workers, and investigators serving clients of the Federal Public Defender Offices in the District of Kansas and the Western District of Missouri. The focus of the client representation will be geared towards investigation, development and presentation of mitigating evidence to impact sentencing outcomes.

Prerequisites: LAW 8913.

LAW 8822 Post Conviction Remedies Credits: 2-3

Federal and state remedies for collateral attacks on criminal convictions; vacation of sentences and convictions; federal habeas corpus and similar devices. Paper required when course is offered as a seminar.

Prerequisites: LAW 8635.

LAW 8831R International Human Rights Law Credits: 1-3

Study of the law protecting individuals and groups against governmental violations of internationally guaranteed rights; historical antecedents and theoretical underpinnings; human rights in national law (the United States); post World War II developments; principal international human rights instruments; regional human rights arrangements; human rights of women, refugees, ethnic minorities; implementation of rights; international obligations of the United States; selected civil, political, economic and social rights.

LAW 8832 Law Of International Trade And Finance Credits: 3

Study of the World Trading System, focusing on policy and application, including the WTO, the NAFTA, U.S. trade remedies, foreign direct investments controls, and export controls.

LAW 8832I Introduction to International Trade Credits: 1-3

An examination of the structure and workings of the major global trade regimes, including the World Trade Organization ("WTO") and the North American Free Trade Agreement (the "NAFTA"). The role of international trade in such areas as the environment, labor rights, national security, the developing world, and non-market economies will also be considered. The course will also focus in depth on United States domestic trade remedies, including antidumping, countervailing duties, section 301 and 337 actions as well as on other international trade restricting practices.

LAW 8834 Tax Procedure Credits: 2

Problem-method study of procedures and taxpayers' rights when deficiencies are assessed by the Internal Revenue Service; tax liens; commencement of litigation in Tax Court, Federal District Court, and Court of Claims.

LAW 8834R Tax Clinic Credits: 1-4

Students in the Kansas City Tax Clinic represent low-income clients before the IRS and in United States Tax Court under the supervision of the Clinic Directors. Cases may include delinquent filers, examinations, administrative appeals, Tax Court litigation, innocent spouse, and collection cases including due process, installment agreements, and offers-in-compromise. Students also receive classroom instruction in tax procedure subjects and in client counseling. There is a ten hour orientation prior to the beginning of classes. There is also an additional five hour lecture held during the course of the semester.

LAW 8835 Blockchain, Cryptoassets and the Law Credits: 1-2

Covering blockchains, cryptoassets and related topics in the FinTech area. Blockchains are incorruptible decentralized digital ledgers maintained by a distributed network of computers. All transactions on a blockchain are recorded chronologically and publicly. Cryptoassets are digital assets that use blockchains and cryptography to regulate the creation of new units, verify transactions, and secure the transactions without the intervention of any middleman. Will address whether governments have the power to regulate blockchains and what is the right balance of regulation to protect the public but encourage innovation.

LAW 8837 Negotiating Mergers And Acquisitions Credits: 2-3

Problem-method study of corporate, tax, securities, and business problems entailed in buying and selling a corporation; fundamental corporate changes: recapitalizations, mergers, sale of assets, sale of stock, and tender offers; corporate finance and rehabilitation of financially distressed corporations.

LAW 8837R Mergers & Acquisitions Deals and Corporate Governance Issues Credit: 1

An introduction to the tactical and strategic complexities of litigation and client counseling arising from contested mergers and acquisitions and corporate tactics involving activist shareholders.

Prerequisites: Business Organizations

LAW 8838L Legal Accounting Credit: 1

Accounting as it relates to the work of a lawyer. Understanding financial statements (balance sheet, income statement, cash flow, shareholder's equity), analysis of financial statements; deferral concepts (inventory, depreciation, prepaid expenses), understanding accounting principles, valuation (present value, future value.).

LAW 8838R Tax Practicum I Credits: 1-3

Practical skills training in the sources and methods of tax research (including electronic database sources) using problem method approaches; analytical and planning skills are developed through in-depth case study research.

LAW 8843 Federal Income Taxation Of Estates And Trusts Credits: 2

Income tax problems of the fiduciary; grantor's trusts; income, estate, and gift tax problems relating to optional or discretionary acts of the fiduciary in retention and/or distribution of income or corpus.

LAW 8845 Deferred Compensation Credits: 2-3

Problem-method study of deferred compensation arrangements; qualified pension and profit sharing plans; individual retirement accounts; qualified stock option plans; other methods of deferred compensation.

LAW 8847 Personal Injury Tort Litigation Credits: 1-2

Introduction to the fundamentals of personal injury litigation, including case intake, pre-discovery investigation, settlement demand packages and other communications with opposing counsel, injury petitions, initial discovery, depositions, retention of experts, pre-trial motions, and mediation.

LAW 8848R State And Local Taxation Credits: 2-3

State and local taxation of income, sales and property, including the apportionment of tax obligations to multiple states. Restrictions imposed by constitutional doctrines such as the uniformity and equality requirement and the prohibition on interfering with interstate commerce.

LAW 8850 Applied Evidence Credits: 1-3

Problems and simulations in evidence; application of the rules of evidence in many of the following topic areas: objections to the form of the question; hearsay; lay and expert opinion; authentication, the introduction of real and demonstrative evidence, rules of relevance, cross-examination and impeachment.

LAW 8853 Seminar in Law Science & Technology Credits: 2-3

This class surveys a variety of current topics lying at the intersection of law, science, and technology. During the course of the semester each student will develop their own thesis relating to some specific issue arising out of the interaction of law, science, and technology.

LAW 8858 Consumer Protection Credits: 2-3

Protection of consumers from false advertising, unfair sales practices, and consumer credit and debt collection abuse. Topics which may be covered are Truth-in-Lending Act, Uniform Consumer Credit Code, Fair Debt Collection Practices Act; Interstate Land Sales Disclosure Act, Federal Trade Commission and Missouri Attorney General activity, Missouri consumer credit legislation, consumer warranties, consumer class actions, abusive collection practices.

LAW 8858L Consumer Protection Lab Credit: 1

This course provides students with skills needed for reviewing and investigating consumer complaints; developing problem solving strategies and drafting Attorney General letters, pleadings, and other documents necessary for the enforcement of the complaint. Students work with the Missouri Attorney General's office to screen consumer complaints and recommend actions.

Prerequisites: LAW 8858.

LAW 8861 Real Estate Finance Credits: 2-4

Real estate investment and development; basic financing instruments (e.g., mortgages, deeds of trusts, contracts for deed); foreclosure remedies; home finance, national housing market; financing of commercial and industrial properties; construction financing; mechanic's liens; priority disputes; bankruptcy issues affecting real estate security interests.

LAW 8863 Fair and Affordable Housing Seminar Credits: 1-3

This seminar course will explore issues of fair and affordable domestic housing law through a real property lens. It will be unique in its approach to housing law from an advanced property perspective. Through a mixture of classroom lectures and discussions, experiential exercises and scholarly writing, housing issues will be examined from many perspectives including that of residential and commercial owners, developers, homeowner associations, landlords, tenants, and government regulators.

Prerequisites: LAW 8541; LAW 8542.

LAW 8868 Trusts: Planning, Drafting, Administering & Litigating Credits: 2-3

Focus on advanced planning and drafting of inter vivos private express trusts for individuals, including proper use of readily available forms (tax-related drafting limited to marital and charitable deduction forms), consideration of trustee's duties, powers and liabilities pursuant to the Missouri Trust Code and related cases, and special emphasis on the recently-adopted Uniform Investor Act and the significant changes it has introduced to Missouri trust investment law.

Prerequisites: LAW 8611.

LAW 8870 Seminar in Educational Equality and the Law Credits: 1-3

This seminar will explore the legal aspects of providing educational equality in a nation of diverse ethnicities, cultures, religions, sexual identities, and socio-economic conditions. Through the lenses of legal scholarship and primary legal authorities, students will examine past and current attempts to address the inequities that have long plagued U.S. public education in the K-12 setting. In addition, the course will include extensive instruction in scholarly research, writing, and publication skills.

LAW 8870R Education Law: Government & Legal Aspects Of Education Credits: 2-3

This course is designed to give students an introduction to the major legal doctrines that affect K-12 schools, as well as the policies that underlie or are changing those doctrines. Students should gain a working understanding of the impact of federal and state law on the operation of schools, the rights and responsibilities of teachers and administrators, and the rights of the students who attend those schools.

LAW 8874 Tax-Exempt Organizations Credits: 2

An in-depth examination of the state and federal laws that govern the formation and operation of tax-exempt organizations, with emphasis on Sec. 501 (c) (3) charities; criteria for tax-exempt status; IRS application and reporting procedures; unreported business income tax issues.

LAW 8875 Real Estate Transactions Credits: 2-3

Practice-oriented course, including the development of drafting skills, in which questions involving basic residential and commercial real estate sales and civil and leasing transactions are considered, such as title, title insurance, contract conditions, contract remedies, commercial leasing (office and shopping center issues) and issues concerning and confronting brokers; special emphasis on Missouri and Kansas law.

LAW 8875L Legal Context of Real Estate Decision Making Credits: 1-3

A study of fundamental matters involved in real estate decision making, including an understanding of basic real estate terms of art; the unique attributes of commercial real estate the distinction between office, retail and industrial property leases; the significant business and legal issues that arise in lease negotiations; financing issues, including the negotiation of construction and permanent loan documents; loan application/brokerage agreements; the impact of bankruptcy on real estate transactions; an explanation of different types of insurance coverage applicable to commercial real estate; and construction issues, including how buildings are constructed and the "green" movement impact on current construction practices.

LAW 8876 Sales and Leasing Credits: 1-3

This course is a survey course on the law of sales leasing. The course will examine the sale of goods under Article 2 of the Uniform Commercial Code (UCC), studying the rights, duties, and liabilities of parties to modern sales transactions. The course will also analyze Article 2A (leasing) of the UCC and explore the rights, duties, and liabilities of parties to modern lease transactions. The course will also consider the United Nations Convention on Contracts for the International Sale of Goods (CISG). Topics encompassed will include sale and lease contract formation, establishment of express and implied contract terms,

LAW 8877 Bankruptcy Court Internship Credits: 2-6

Bankruptcy Court Interns serve in the chambers of US Bankruptcy Judge, principally in the Western District of Missouri. Students may also intern with bankruptcy judges in different federal districts, with approval of the field placement faculty director. Legal issues arise under the Bankruptcy Code, as well as secured transactions, contract law, labor law, and tax law. Students undertake research, draft memoranda, observe hearings and other judicial proceedings, and debrief with judges regarding legal issues and lawyering styles.

Co-requisites: LAW 8749.

LAW 8881 Seminar on the Supreme Court Credits: 2-3

Students simulate the work of the Supreme Court on nine cases presently pending before that court. The student justices study the briefs and related material filed in each case, discuss and vote on the cases, and write majority and dissenting opinions. Enrollment in the seminar is limited, fittingly, to nine justices.

LAW 8881P Seminar in Presidential Power Credits: 2

In this course students will examine unsettled and often controversial questions regarding the extent of presidential power in sensitive contexts. Emphasis is placed on how these issues are implicated in current national life. Students will examine and will be expected to actively discuss during class sessions issues such as the president's authority to decline enforcing federal law, the extent of the president's authority to engage in overseas military action without congressional approval (and, assuming approval is required, what form that "approval" must constitutionally take), presidential authority to indefinitely detain "enemy combatants" at Guantanamo Bay, Cuba (or similar locations), the legal effect of presidential signing statements, the extent of presidential oversight authority over administrative agencies, and the propriety of the Court's invocation of the "political question doctrine" when confronted with sensitive questions regarding presidential power.

LAW 8882 Patent Law Credits: 2-3

This course will focus primarily on substantive U.S. patent law, including the laws governing the patentability of particular inventions, the patent procurement process, the rights granted by a patent, and patent enforcement and litigation. As time permits, the course will explore policy issues raised by the current patent system, discuss proposals for reform and international harmonization, and consider alternatives to patent protection such as trade secret and regulatory exclusivity.

LAW 8882R Patent Prosecution Credits: 2-3

This course will focus primarily on the practical application of substantive U.S. patent law, including the laws governing the patentability of particular inventions, the patent procurement process, the rights granted by a patent, and patent enforcement and litigation. In particular, this class will focus on teaching students how to draft a patent application and how to prosecute the application in the U.S. Patent and Trademark office. This class will be designed to mirror the substantive patent law being taught in the Patent Law course. For example, the Patent Law course will present the law and theory of obviousness or novelty; the Patent Prosecution course will instruct in how to deal with and respond to an obviousness or novelty rejection from the U.S. Patent and Trademark Office.

Co-requisites: LAW 8882.

LAW 8884 White Collar Crime Credits: 2-3

Examines substantive federal law in the areas of fraud, public corruption, financial crimes and conspiracy; it also includes examination of procedural and policy issues related to business and white-collar investigations.

Prerequisites: LAW 8634.

LAW 8885 Seminar In Philosophy And Law Credits: 2

An examination from a philosophical perspective of the historical and conceptual relationships present in the evolution, development and analysis of law, including natural law theory, legal positivism and legal realism, and focusing on a specific area of controversy in the law.

LAW 8885H The Quest for a Satisfying Career in Law Credits: 1-2

An examination of what research suggests about the likelihood that a career in law will prove satisfying, including an exploration of the specific types of firms and work environments that are most likely to produce happy lawyers; a consideration of what studies from the fields of neuroscience and psychology suggest about steps that lawyers, law firms, and law schools can take to improve prospects for career satisfaction; and a consideration of how high happiness should rank among life's goals.

LAW 8886 Corporate Taxation I Credits: 2-3

Tax treatment of corporations and shareholders with respect to formation, non-liquidating distributions, stock dividends, redemptions and liquidations. The course may also cover the personal holding company tax, the accumulated earnings tax, collapsible corporations, multiple corporations and tax consequences of corporate reorganizations; survival of tax attributes; acquisition of loss corporations; and a survey of consolidated return reporting.

LAW 8887 Corporate Taxation II Credits: 3

Tax consequences of corporate reorganizations; survival of tax attributes; acquisition of loss corporations; and a survey of consolidated return reporting.

Prerequisites: LAW 8886.

LAW 8888A Partnership Taxation II Credits: 1-3

A study of selected topics in tax planning and in negotiating and drafting organizational documents (e.g. partnership agreements and operating agreements) for entities that will be classified as partnerships for tax purposes, including advanced exploration of issues relating to special allocations and book/tax disparities, optional adjustments to basis, payment to retiring and deceased partners, the impact of I.R.C. Section 751 on partnership distributions and on sales and exchanges of partnership interests, partnership mergers and divisions, partnerships with tax-exempt partners, and tiered partnerships.

Prerequisites: LAW 8888R.

LAW 8888R Partnership Taxation I Credits: 2-3

An in depth examination of the tax principles governing partnerships limited liability companies and other unincorporated organizations classified as partnerships for tax purposes, including questions involving the tax consequences of the formation of such organizations, operating distributions, basis computations, liquidating distributions, and sales of ownership interests.

LAW 8889R Subchapter S Taxation Credits: 1-2

An examination of the tax principles governing Subchapter S Corporations, including the tax consequences of their formation; the taxation of their income and the deductibility of their losses; operating distributions; basis computations; liquidations; distributions; and sales of S Corporation shares of stock.

Prerequisites: LAW 8886.

LAW 8890A Sports Law I, Amateur Sports Law Credits: 2

Coverage of various amateur sports law issues with a focus on the regulation of interscholastic, intercollegiate sports, Olympic and international sports, and sports broadcasting; including such topics as constitutional law, tort law, contract law, and Title IX gender discrimination; and a consideration of federal disability discrimination laws, the status of collegiate athletes who participate in big time sports programs, the regulatory authority of the National Collegiate Athletics Association, The National High School Athletic Association, international and Olympic sports organizations.

LAW 8890B Sports Law II, Professional Sports Law Credits: 2

A focus upon the multitude of legal issues and unique relationships in the sports industry, including, among other issues, professional team sports, other professional sports, facilities management in professional sports, legal implications and the practical realities of the unique labor-management relationships in professional sports. The most significant areas to be studied in the context are antitrust, labor, communications, taxation, contracts law, and intellectual property law.

LAW 8890C The Emergence and Transformation of Concussion Litigation Credits: 1-2

This course will examine the emergence, transformation and development of concussion litigation. Concussion litigation spans multiple areas of the legal landscape – from torts, civil procedure, sports law, labor and employment law and, inter alia, medical-legal aspects. We will begin with the theoretical underpinnings of the emergence of concussion litigation. We will then look at how society, the legislature and the courts have responded to sports concussions. This will require us to analyze what the concussion litigation landscape looks like currently and how it will be shaped in the future.

LAW 8890I Selected Topics in International and Comparative Sports Law Credit: 1

The course introduces students to the basic structure and techniques of dispute resolution utilized in international sports law. The field of international sports law is an ever-expanding area of the law and the term "international sports law" refers to an emerging and distinctive body of rules that govern transnational sports and sporting activities. Distinct bodies of international sports law have developed under the aegis of the Olympic Charter that applies to international sports competition well beyond Olympic competition itself, and encompasses both traditional Olympic sports and non-Olympic sports. Many international sports law disputes are now resolved in the Court of Arbitration For Sport (CAS), a body that may rightly be referred to as a Supreme Court for a very wide array of international sports disputes involving such matters as doping, eligibility, cheating, violence, discrimination, commercialization and intellectual property.

LAW 8890R Entertainment Law Credits: 2-3

An examination of the legal issues affecting the print and broadcast media. Topics covered may include copyright, antitrust, spectrum allocation, right of privacy, first amendment issues (prior restraint, obscenity, commercial speech, defamation and access to both information and judicial proceedings), licensing and new technologies including and beyond cable television.

LAW 8890X Sports Law Internship Credits: 2-6

Sports Law Interns work in offices focused on collegiate or professional sports to learn about the regulatory, compliance, and business aspects of sport and the sporting enterprise. Students analyze and apply regulatory standards, conduct legal research regarding novel legal issues, draft memoranda, legal documents, or other documentation.

Co-requisites: LAW 8749.

LAW 8892R Estate and Gift Tax Credits: 2-3

Problem method study of estate, gift and generation skipping transfer taxes and the income taxation of estates and gifts. Emphasis on lifetime and post-mortem planning as well as compliance requirements.

LAW 8893 International Taxation Credits: 2-3

An introduction to the taxation of income of U.S. citizens, residents and corporations from foreign sources and the income of foreign residents and non-residents from U.S. sources. Topics may include sources of income rules, foreign tax credit provisions, the earned income exclusion for foreign source income, income tax treaties and a survey of the tax treatment of U.S. investments made offshore.

LAW 8893R Taxation Of Property Transactions Credits: 2-3

Income taxation of property transactions. Detailed study of capital gains and losses, passive losses, the at-risk rules, and the alternative minimum tax.

LAW 8895S Jury Selection Credit: 1

Students study the purpose of voir dire and the law pertaining to jury selection and receive hands-on experience in selecting a jury role-playing as lawyers; jurors, and presiding judge in a concluding 2 1/2 hour courtroom simulation (where a jury is selected after making challenges for cause and exercising preemptory strikes); and learn that jury selection is an art not a science-which needs to be tailored to the facts of the case and the witnesses the attorney expects to present. An actual case involving a badly injured young plaintiff and a large corporate defendant-where liability is questionable-is used for the simulation. Students learn active listening skills and how to interpret non-verbal behavior. Examples from prominent, practicing lawyers are presented. The course is graded on a pass/fail basis.

LAW 8897 Seminar In Analytical Strategies Credits: 1-2

Pedagogical philosophy of legal education; common themes in first-year legal education; techniques of cooperative learning of legal materials. Students may act as study group leaders for various first-year course subjects. Ungraded.

LAW 8897B Building MBE Skills Credit: 1

Preparation of students for the bar exam by building bar exam multiple choice skills. Focus will be on strategies and tactics in the topics tested by multiple choice questions. Additional emphasis will be on learning how to self-assess understanding of concepts and judgment errors through intense review of errors. The course will require eight to ten hours a day of class and outside work.

LAW 8897E Introduction to Law Study Credits: 0

This course is designed to help incoming law students navigate the challenging transition to law study. The course is a rigorous, five-day introduction to law school. Each day focuses on a "stage" of law school learning; orientation, class preparation, class, after class review, exam preparation, and exam taking. The course addresses the skills of reading, writing, and thinking at each of these stages through simulated classes, direct teaching of study skills, written and oral exercises, and individual meetings with faculty.

LAW 8897R Governmental and Legal Aspects of Education Credits: 2-3

Study of legal issues within higher education. Focus is on state and federal law and regulations as they pertain to issues from academic freedom to governance and administration. Focus on strategies for preventive law is a major component of the course.

LAW 8898 Construction Law Credits: 2

The Construction Law course would emphasize state and federal construction law and would provide the students with practical experience in drafting contracts, negotiating disputes, and conducting a mock arbitration. The course would cover the contract responsibilities and remedies of contractors, subcontractors, design professionals, sureties and owners, including the United States Government. The course would emphasize the controlling state and federal statutes and regulations, as well as case law which illustrates the application of the statutes and other areas of law not covered by statute. The classroom sessions will include discussion of the practical aspects of legal practice in the construction industry, with instruction and examples regarding the drafting of documents and contracts, negotiation of disputes, and decision-making regarding the type of dispute resolution forum to recommend to a client.

LAW 8900 Takings Law Credits: 1-2

An examination of all aspects of takings law including the historical and constitutional basis for eminent domain, the public use requirement, regulatory takings, development exactions, and alternatives to takings. Comparisons between U.S. and state regimes and comparative takings law.

LAW 8901 Advising Life Sciences and Technology Entrepreneurs Credits: 1-2

A condensed study of the key legal issues for the entire cradle-to-grave (founding-to-exit transaction) life cycle of high-growth technology and life sciences ventures, focusing on these critical phases: structuring and organizing the high-growth venture; relationships with key constituencies; acquiring, protecting and licensing intellectual property assets; financing transactions and realizing wealth through exit transactions.

Prerequisites: LAW 8601.

LAW 8902 Topics and Cases Related to In-House Counsel Credit: 1

This course surveys a wide range of legal issues from the in-house counsel perspective, including those related to professional responsibility, corporate governance, transactions, compliance, risk management, intellectual property and litigation. Through the use of case studies, students will use legal principles and business judgement to analyze scenarios in various corporate settings.

Prerequisites: LAW 8601.

LAW 8903 Fundamentals of Legal Investigations Credits: 2

This course focuses on skills and methods needed to fully obtain facts so as to determine strategies and analyze possible outcomes for all stages of litigation, both criminal and civil. Detailed information on searching public records, Internet sites, and other document retrieval, as well as methods to locate and interview people, will be provided to students through an interactive format. Using an investigation on parallel tracks approach, i.e., paper and people, students will learn the relationship between documents/physical evidence and thorough, reliable interviewing of clients and witnesses.

LAW 8904 Multicultural Lawyering and Spanish for Lawyers Credits: 1-2

In this course, students acquire skills and knowledge needed to represent Spanish speaking clients, including mastering selected Spanish legal vocabulary, working with translators, conducting initial client interviews, and identifying cultural impacts on communication. Ethical dimensions of cross-linguistic and cross-cultural counseling are examined and students receive training in counseling skills.

Prerequisites: Audition with professor to determine minimum Spanish language ability.

LAW 8905 Intellectual Property Litigation Credits: 2

Advanced engagement with intellectual property concepts and practical skills in litigation of these cases. The course will address the three essential areas of intellectual property law concept (copyright, patent, and trademark) and explore how these differences translate into different procedural and substantive considerations in litigation. Simulations of various stages of litigation will focus on litigation strategy and drafting skills.

LAW 8907 Seminar in Advanced Trademark Credits: 2-3

This course examines advanced substantive topics in various trademark areas, some of which are not covered in prior classes and some of which explore areas of controversy in greater depth. Students will also be exposed to the trademark administrative process in greater depth.

LAW 8908 Family Tax Law Credit: 1

The study of federal tax issues relevant to attorneys who practice family law.

Prerequisites: LAW 8552.

LAW 8909 State and Local Government Law in a Nutshell Credit: 1

This course will examine the laws and structures through which Kansas City local government operates. Topics will include the context for local government functions, the city charter and structure of local government, and examination of the particular topics such as economic development tools, property tax abatement, and local agency interactions.

LAW 8910 Intellectual Property Clinic Credits: 2

Under the supervision of faculty who are licensed attorneys, students will counsel start-up companies and their owners and assist with intellectual property matters related to Trade Secrets, Copyright Trademark, Patent and planning in connection with concepts related to Business Torts. Students will conduct patentability and trademark searches, prepare patent landscape reports, trademark registrations, opposition and cancellation responses and assist Clinic clients in identifying trade secrets and potential patentable inventions and preparing invention disclosures as well as provide general intellectual property information and advice to Clinic clients.

Prerequisites: LAW 8808 or LAW 8797 and LAW 8798 or LAW 8882.

LAW 8911 Winning Voir Dire Credit: 1**LAW 8912 Client Interviewing Credits: 1-3**

Basics of client interviewing. Training will include the following components: a) Passive vs. Active Listening b) Forms of Questions c) Preliminary Problem Identification d) Techniques for conducting Initial Interviews e) Providing Information the Supervising Attorney Wants/Needs"

LAW 8913 Mental Health Investigation I Credits: 1-2

This is a one-week, one or two-credit hour practical skills course which focuses on skills and methods needed to identify and understand mental health issues and phenomena that every lawyer will encounter. Students will examine what mental illness is, how it affects sufferers, and how it presents to lay observers so that it can be understood and explored in relevant legal contexts. This course is offered in connection with the Mitigation Skills Workshop, which trains lawyers representing capital clients how to interview clients and witnesses for information relevant to developmental, cognitive and mental health issues; students will participate in role-playing a practical skills exercises with Workshop participants.

LAW 8913B Mental Health Investigations II Credits: 1-2

This is the second half of a practical skills course which focuses on skills and methods needed to identify and understand mental health issues and phenomena that every lawyer will encounter. This course is offered in connection with the Mitigation Skills Workshop, which trains lawyers representing capital clients how to interview clients and witnesses for information relevant to developmental, cognitive and mental health issues; students will participate in role-playing a practical skills exercises with Workshop participants.

LAW 8914 Selected Reading in Legal Scholarship Credit: 1

Students and faculty will read and discuss a substantial book by a legal scholar examining a contemporary issue in law and society from a historical, comparative, or jurisprudential perspective. The course will include discussions with the author and students will complete a short project related to the book topic.

LAW 8914F Law and Film Credits: 1-3

Exploration of the function of law and lawyers in society by examining legal decisions, statutes, and legal commentaries in the context of films, including classic, contemporary mainstream, foreign, documentary, and independent films. Students will view and critique films in light of assigned reading materials. Using films as analytical tools, the seminar examines the ways in which popular culture products (such as films and television) both reflect and change the social views about law and lawyers.

LAW 8915 Social Venture Creation Credit: 1**LAW 8917 Law and Human Trafficking Credits: 1-2**

Theory and legal structures relating to human trafficking, including practical skills in representing victims.

LAW 8919 The Insanity Defense Credits: 1-2

This course will review several aspects of the insanity defense: its history, how it works, and the public perception of the defense. The course will focus on the trial of John Hinckley Jr. for attempted murder of President Ronald Reagan as a vehicle for discussing how the defense is presented, the changes in the defense that the verdict in that trial brought about, recent significant cases and possible future changes in the defense.

LAW 8920 Introduction to Islamic Law Credits: 1-2

This course will provide a basic overview of Islamic law from its origins to the present. Students will study both primary and secondary sources of Islamic law. The course will also compare Islamic legal concepts to those in common law countries.

LAW 8921 Selected Projects in Law, Technology and Public Policy Credits: 1-6

This "studio" course involves the creation of interdisciplinary teams of law and graduate students from UMKC and other graduate and law schools and their media laboratories to work on cutting edge projects at intersections of law, technology and public policy.

LAW 8922 Access to Justice (A2J) Workshop Credits: 1-6

Students will identify an area of law or law process that can be made more accessible with the application of a technology solution. Specifically the students, after analyzing the area of law, will use the CALI A2J-Author guided interview software and document assembly software to create the forms and directions to assist self-represented litigants.

LAW 8923 Interdisciplinary Perspectives on Counseling an Aging Population Credits: 1-2

Study and practice of interdisciplinary perspectives of aging and core competencies in active listening, narrative translation, and service opportunity identification. Using a combination of readings, simulations, skills trainings, team preparations and presentations of case studies and individual reflective papers, the course is designed to engage professional students in understanding each discipline's approach to describing the problem, interacting with patients/clients in identifying the problem and sharing perspectives on developing plans to prevent and address the problem with and on behalf of these patients/clients.

LAW 8925 Entrepreneurial Urban Development Credits: 1-4

The projects-based Entrepreneurial Urban Development course will feature interdisciplinary teams of faculty and graduate or upper-level undergraduate students providing analysis on real estate-based projects relating to the development or redevelopment of properties in urban areas, with a particular focus in, but not necessarily limited to, Kansas City, MO and Kansas City, KS. Students enrolled in the course will receive classroom instruction through modules related to development, land use controls and entitlement processes, affordable housing law and policy, cost analysis, market analysis, feasibility analysis, investment analysis, finance, incentives, design, urban planning, and community engagement.

LAW 9740A Missouri Appellate Practice Credit: 1

Basic rules and procedures for preparing an appeal in Missouri.

Academic Rules and Regulations for Juris Doctor Degree Program

- Attendance
- Examinations and Grades
- Credit in Lieu of Grade Option
- Appeal of Grades
- Withdrawal from Courses
- Scholastic Probation and Dismissal
- Latin Honors
- Dean's Honor List
- Employment by Juris Doctor Degree Candidates
- Plagiarism Policy and Guidelines
- Honor Code

Appeal of Grades

Students are responsible for meeting the standards of academic performance established for each course in which they are enrolled. The establishment of the criteria for grades and the evaluation of student academic performance are the responsibilities of the professor.

The school's grade appeal procedure is available only for the review of allegedly capricious grading, and not for review of a professor's evaluation of a student's academic performance.

Capricious grading, for grade appeal purposes, consists only of any of the following:

- The assignment of a grade to a particular student on some basis other than the performance in the course.
 - The assignment of a grade to a particular student by resort to more exacting or demanding standards than were applied to other students in the course.
 - The assignment of a grade by a substantial departure from the professor's previously announced standards.
1. **Step 1:** The student should first discuss the course grade fully with the professor. This must be done within six weeks after the professor turns in the grade or the beginning of the succeeding regular academic semester, whichever is later.
 2. **Step 2:** If the matter is not resolved through consultation with the professor, the student may appeal to the dean. This must be done within 10 days after notification of the decision of the professor. The appeal to the dean shall be in writing, and shall state which of the three charges of capricious grading is alleged to have been violated and shall specify such facts as are relied upon to support the charge.
 3. **Step 3:** The dean shall review the appeal and, if found to be without merit, shall dismiss it. If it is determined that the appeal may have merit, the dean shall appoint an ad hoc faculty committee to review the record and provide advice on the matter. The grade in any course that is based on an anonymously-graded examination shall be presumed not to be capricious.
 4. **Step 4:** If the dean believes a change in the grade to be warranted, he or she shall present a report to the faculty of the Law School in order that the faculty may act on the matter.
 5. **Step 5:** If the student is dissatisfied with the action of the dean or the faculty, the student, within 10 calendar days of the decision of the dean, may appeal to the provost in accordance with the University of Missouri-Kansas City Procedure for the Appeal of Grades.

Attendance

UMKC School of Law Attendance Policy

Purposes

The American Bar Association requires law schools to have "sound academic standards, including those for regular class attendance." See American Bar Association, Standards & Rules of Procedure for Approval of Law Schools, Standard 308(a). Consistent with this directive, the UMKC School of Law faculty believes that dependability is an essential characteristic of a good lawyer. The Law School's attendance policy seeks to promote the development of good professional habits and to ensure that students succeed in their classes, on the bar exam, and as attorneys.

General Policy

Students should strive to have as few absences from classes as possible. A student will be allowed to miss up to 15 percent of the class sessions in a course. Each absence above the 15 percent level will result in a one-step reduction in the student's grade for the course (such as from a B+ to a B). If a student has absences that exceed 22 percent of the class sessions in a course, the student will be administratively withdrawn from the course.

The faculty member who is teaching the course may choose to waive one or more of the one-step grade reductions. The faculty member may require the student to do extra academic work (such as extra reading, writing, or research) as a condition for waiving a grade reduction.

Faculty members cannot waive or prevent the administrative withdrawal of a student from a course.

The Law School strongly advises students to miss as few classes as possible. While students are allowed to miss up to 15 percent of classes without penalty, students should treat that as a maximum amount that can be missed if absolutely necessary, not as the amount of absences that would be typical or expected.

Examples

The following examples illustrate how the policy applies to courses with some of the most common scheduling formats. [1] (p.)

For a Fall or Spring course that meets once per week for 14 weeks:

- 2 absences allowed without penalty
- 3rd absence results in a one-step grade reduction
- 4th absence results in withdrawal from the course

Fall or Spring course that meets twice per week for 14 weeks:

- 4 absences allowed without penalty

5th and 6th absences each result in one-step grade reductions

7th absence results in withdrawal from the course

Fall or Spring course that meets three times per week for 14 weeks:

6 absences allowed without penalty

7th and 8th and 9th absences each result in one-step grade reductions

10th absence results in withdrawal from the course

Summer course that meets once per week for 7 weeks:

1 absence allowed without penalty

2nd absence results in withdrawal from the course

Summer course that meets twice per week for 7 weeks:

2 absences allowed without penalty

3rd absence results in a one-step grade reduction

4th absence results in withdrawal from the course

Summer course that meets three times per week for 7 weeks:

3 absences allowed without penalty

4th absence results in a one-step grade reduction

5th absence results in withdrawal from the course

Mini-term course that meets five times in one week:

1st absence results in a one-step grade reduction

2nd absence results in withdrawal from the course

Stricter Requirements

Faculty members may choose to impose attendance requirements for their courses that are stricter than those of the general policy. In other words, a faculty member may allow fewer (but not more) absences than the general policy would allow. If a faculty member intends to impose a stricter attendance policy for a course, the faculty member must notify students of the policy, in writing (whether on paper or by electronic means), before or during the first week of the semester. The announcement must specify how many absences will be allowed and what the consequences will be for each absence exceeding the allowed number.

Procedures

1. Attendance will be taken at every class session of every course. The faculty member teaching the course may make a record of the attendance, or the attendance may be taken by other methods such as passing around an attendance sheet or by means that allow students to sign in electronically.
2. It is important that students arrive on time for classes. If a student misses any substantial portion of a class session (in other words, more than just a few minutes of the class) because the student arrived late or left before the class ended, the faculty member teaching the course will be entitled to count that as an absence. If a student is repeatedly late for class, even late by just a minute or two, the faculty member may give the student a warning that any further late arrivals will be counted as absences.
3. If a student is failing a course at the time of being administratively withdrawn for excessive absences, the student will get a "WF" designation (for withdraw failing) on the student's transcript for the course. Otherwise, a student who is administratively withdrawn for excessive absences will get a "W" designation (for withdraw) on the student's transcript for the course.
4. This policy addresses only attendance at classes. It does not affect a faculty member's requirements or guidelines for the submission of papers or other assignments. The faculty member teaching a course has the sole discretion to decide whether to accept late submissions of work or to award penalties for failing to turn in a paper or other assignment on time.
5. This policy does not draw a distinction between "excused" and "unexcused" absences. Students inevitably will have situations arise where they need to miss classes for perfectly understandable reasons, such as illness, a job interview, or car trouble. The need to occasionally miss class for these sorts of reasons is already accounted for under the policy, which allows students to miss up to 15 percent of the class sessions in a course

without being penalized. Every absence therefore will be counted regardless of the reason for the absence. Likewise, students will sometimes need to miss classes due to having a significant role in an activity that is part of a Law School course or program, such as participating in a legal skills competition as part of one of the Law School's teams, or attending a hearing as part of one of the Law School's clinical courses or field placements. All absences are counted, so whenever possible, students should attempt to schedule these sorts of matters so they do not conflict with classes. To the extent that conflicts sometimes cannot be avoided, students must plan ahead and avoid using up their allowed absences for other things, so that they will have enough absences left to cover the times when they need to miss class because of a Law School activity. In exercising their discretion about whether to allow a grade reduction for excessive absences to be waived, professors can take into account the extent to which the student's absences were due to participation in Law School activities.

6. When a class meets on a day or at a time other than when the class is regularly scheduled to meet (such as for a make-up class session), attendance is mandatory and absences will be counted unless the professor determines that extraordinary circumstances justify making an exception.

7. Falsification of attendance records (such as if a student signs in as present for a class that the student did not attend, or if another student signs in for a student who is absent) constitutes a violation of the UMKC School of Law Honor Code and will be reported to the Honor Court for prosecution.

Relationship to University Attendance Policies

This policy supersedes University attendance policies in all respects.

Adopted by the UMKC School of Law faculty on August 30, 2018; amended September 13, 2018, and October 11, 2018.

[1] (p.) Where a course has class sessions that are different lengths of time, the calculation of the 15 percent and 22 percent limits will be based on class minutes. For example, if a class met on Mondays for 50 minutes and on Wednesdays for 100 minutes, for 14 weeks, that would be a total of 2,100 minutes of class time. An absence for a Monday session of the class would count as missing 50 minutes of the class, and an absence for a Wednesday session of the class would count as missing 100 minutes of the class. So a student who missed three Mondays and two Wednesdays would have a total of 350 minutes of absences and would be over the 15 percent limit. A student who missed six Mondays and no Wednesdays would have a total of 300 minutes of absences and would be slightly under the 15 percent limit.

Credit in Lieu of Grade Option

After completion of the first year, a student may take one elective course ordinarily graded (except a 4-or-more-credit-hour class) on an ungraded basis. For a "pass" to be posted on the student's record, work done for the course must be equivalent to a grade of C- or better; otherwise, the actual grade received will be posted. If students are taking a graded course that is required for an emphasis, the student may not exercise this ungraded option and also have the course count toward the emphasis.

The student must make this election before the beginning of the semester by completing and filing the appropriate form (available at the Law School) in person at Registration and Records (Administrative Center (<http://www.umkc.edu/virtualtour/admincenter.asp>), Room 115, 5115 Oak).

Dean's Honor List

The Dean's Honor List recognizes students who have demonstrated academic excellence in a semester. To be so recognized, a student must have achieved at least a 3.0 GPA for the semester while taking at least 8 credit hours of law school courses, with at least 2 graded law school courses and at least 4 graded law school credit hours. A student will not be on the Dean's Honor List if the student has any incomplete grades in graded courses that semester. The names of the students on the Dean's Honor List will be announced after each Fall and Spring semester.

Employment by Juris Doctor Degree Candidates

Full advantage of the opportunity for a sound legal education only can be gained by devotion of sufficient energy and attention to legal studies. The excessive diversion of time and energy to employment can seriously impair success in law school and preparation for law practice. For this reason, full-time first-year law students **should not** engage in any outside work, and upper-class students **should not** engage in excessive outside work. UMKC School of Law defines "excessive outside work" as work in excess of 20 hours per week during the academic term. Full-time students on academic probation may not have outside work.

Examinations and Grades

In most courses, the final grade is based largely on the student's achievement on an examination or final paper given at the end of the semester. Examinations are anonymous, and papers are identified solely by number, unless the circumstances of the assessment make this inappropriate. Each student is expected to take examinations at the scheduled times, unless an appropriate arrangement is made with the Director of Student Services pursuant to policy. Failure to take an exam at the appropriate time or in the appropriate manner can result in a grade of F.

Grading of student work is on a 4.0 system:

A+	4.3
A	4.0
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	0.7
F	0

Some courses are graded on a credit/no credit (pass/fail) basis.

A student receiving a grade of F in a required course must repeat and pass the course. Grades of F remain on a student's transcript and count toward a student's grade-point average even if a course for which an F is given is repeated and passed.

The temporary grade of I (incomplete) is recorded when the student has not completed the work required for the course.

Exam Tardiness:

Students are expected to be in their seats five (5) minutes prior to the start of the exam. Absent exigent circumstances, students who arrive after the exam has started must begin their exams immediately and WILL NOT receive additional time (this also applies to time used to set up exam software).

Final Examination Rescheduling Policy

A student may request that one or more final examinations be rescheduled under the following circumstances:

- Two final examinations in the same calendar day.
- An evening final examination followed by a morning final examination the next calendar day.
- Three final examinations on three consecutive days (in the first week of examinations only).
- Four final examinations in five days (in the first week of examinations only).
- An emergency warrants rescheduling (request must be documented).

The policy with respect to take-home final examinations is as follows:

- If the take-home final examination is "floating," (e.g. the student may choose when to take it within a defined timeframe) the student may not **create** a conflict by opting to take it during an interval conflicting with another final examination.
- A take-home final examination does not conflict with the preceding final examination(s) under the first or third rules above (two exams in the same calendar day or three exams on three consecutive days), if it may be checked out at least four hours after the prior examination is scheduled to conclude.
- A take-home final examination does not conflict with the preceding final examination(s) under the fourth rule above (four exams in five days), if it may be checked out on Friday, at least four hours after the prior final examination is scheduled to conclude.
- Perceived conflicts involving take-home final examinations of greater than 48 hours in length will be dealt with on a case-by-case basis.

Requests to reschedule a final examination should be directed to the School's Director of Student Support Services.

Once a conflict has been identified, the director will determine which final examination(s) to move, and to what day and time, in order to eliminate the conflict.

Requests to reschedule a final examination on short notice because of severe illness or an emergency must be documented, and will be considered on a case-by-case basis. All such requests must be presented to the Director of Student Support Services for the School of Law **immediately**.

The policy with respect to requests to reschedule based upon disability is as follows:

- All disability-based requests must be approved by the University Office of Student Disability Services
- The Director of Student Support Services will reschedule a final examination because of disability only on request of the University Office of Student Disability Services.

Latin Honors

Three types of Latin honors are awarded to those UMKC School of Law graduates who have achieved academic distinction, they are:

- Summa Cum Laude ("with highest honor")
- Magna Cum Laude ("with great honor")
- Cum Laude ("with honor")

While the University's degree regulations provide some restrictions on the number of graduates in each class that may receive Latin honors which may reduce the percentage of students graduating with Latin honors in each category, in general, Latin honors are awarded as follows:

1. Summa: A student with at least a 3.7 GPA who is also ranked in the top 5 percent of the graduating class.
2. Magna: A student with at least a 3.5 GPA who is also ranked in the top 10 percent of the graduating class.
3. Cum Laude: A student who is in the top 20 percent of the graduating class.

Scholastic Probation and Dismissal

Policy on Academic Probation, Dismissal, and Readmission

The UMKC School of Law seeks to ensure that its students have solid foundations of learning and training for success in law school, on the bar exam, and in their careers. The school also has a responsibility to identify students who are not on track to achieving these objectives. The following standards have been established to provide clear and fair rules regarding academic performance.

GPA requirements

A student will not be subject to academic dismissal or being placed on academic probation until the student has completed taking a total of 12 or more credits of law school courses.

The following requirements apply at the end of each semester when a student has completed taking a total of at least 12 but not more than 32 credits of law school courses:

- A student who has a GPA below 1.8 will be dismissed from law school.
- A student who has a GPA that is greater than or equal to 1.8 but below 2.0 will be placed on academic probation.

The following requirements apply at the end of each semester thereafter once a student has completed taking a total of 33 or more credits of law school courses:

- A student who has a GPA below 2.0 will be dismissed from law school.

A student who is dismissed may seek readmission (see the provisions below on petitions for readmission).

Rules for applying the GPA requirements

1. The GPA requirements apply at the end of each semester (Fall, Spring, and Summer).
2. The "end of a semester" is the time when grades are due and have been submitted for the courses taken by the student that semester. In other words, if grades have been submitted for a course but the student received an "incomplete" in the course, that course will not be taken into account in the calculation of the student's cumulative GPA, and the determination of whether the student is subject to dismissal or placed on academic probation will be done at the end of the semester and will not be postponed until the "incomplete" becomes a grade.
3. Two GPAs will be calculated for students who start law school in the Spring or Summer semester: a cumulative GPA based on all courses taken, and a cumulative GPA based on only the required courses typically taken by first-year students (Civil Procedure I, Constitutional Law, Contracts I & II, Criminal Law, Lawyering Skills I & II, Property I & II, Torts). While the GPA based on the typical first-year required courses will be used for purposes of the first-year class ranks, the GPA based on all courses taken will be used for purposes of academic probation and dismissal.

Probation

A student who is placed on academic probation will have a probationary period in which to raise the cumulative GPA to 2.0. If the student's cumulative GPA is 2.0 or higher at the end of the probationary period, the student will be taken off academic probation and restored to good standing. If the student's cumulative GPA is below 2.0 at the end of the probationary period, the student will be dismissed from law school.

The probationary period will run until the end of the next Fall or Spring semester. For example, if a student was placed on academic probation at the end of the Spring 2020 or Summer 2020 semester, the probationary period would last until the end of the Fall 2020 semester. If a student was placed on academic probation at the end of the Fall 2020 semester, the probationary period would last until the end of the Spring 2021 semester.

If a student takes a leave of absence from school and is not enrolled in any courses, the probationary period will be postponed until the student resumes taking courses. For example, if a student was placed on academic probation at the end of the Fall 2020 semester, but decided not to take any courses in the Spring or Summer and resumed taking classes in the Fall 2021 semester, the probationary period would last until the end of the Fall 2021 semester.

Once a student has been restored to good standing after being on probation, the student must achieve a semester GPA of at least 2.0 for every semester (Fall, Spring, and Summer) in which the student takes any courses throughout the remainder of law school. If a student who was previously on probation has a semester in which the student's semester GPA is below 2.0, the student will be dismissed from law school.

Rules for students on probation

A student who is on academic probation must meet with the law school's director of academic support. In conjunction with the director of academic support, the student must develop a plan for improving academic performance, and the student must adhere to that plan.

A student who is on academic probation must obtain the permission of the Associate Dean for Students before engaging in any significant law school extracurricular activities.

A student who will have a job while on academic probation must obtain the permission of the Associate Dean for Students. If the student attends law school on a full-time basis, there will be a strong presumption that the request to work while on probation should be denied, and permission to work will be granted only in exceptional circumstances.

Effective date: The above policy was adopted by the UMKC law faculty on November 15, 2018. The policy will apply to all students who begin taking courses at UMKC School of Law after January 1, 2019. Students who began taking courses prior to that date will remain subject to the dismissal and probation policies previously in effect, below:

A student who obtains a GPA below 1.8 after completing twelve credit hours will be automatically dismissed from law school. Such student may apply for readmission in the summer of that academic year as under then existing standards and procedures for readmission, and may apply for admission, as a new student to the law school beginning no earlier than the following fall semester. Only under extraordinary circumstances beyond the student's control will the Student Affairs Committee consider a student's petition prior to that summer. If extraordinary circumstances exist, at least one faculty member of the committee and its chair must grant permission for early consideration.

A student will be placed on academic probation if his/her cumulative GPA falls below 2.0. Any student on probation will have one semester to raise the cumulative grade-point average to the required level (2.0) or be dismissed for academic deficiency. A student on academic probation may not work or engage in significant law school extracurricular activities.

Spring and Summer start students will have two cumulative GPAs calculated: a cumulative GPA will be based only on first year required courses ("1L GPA") and a cumulative GPA based on all courses completed, including upper level courses taken in their first spring, summer and fall semester ("Spring/Summer Start 1L GPA"). First year class ranks shall be determined using the 1L GPA. Dismissal and probation shall be determined using the cumulative G.P.A. based on all courses completed.

Students readmitted to the School after dismissal on the grounds of academic deficiency will have one semester to raise the academic average to the required level, unless the faculty decides that a longer period is warranted.

If a probationary student successfully raises his or her average to the required level at the end of the probationary period and subsequently falls below 2.0 again, the student will be dismissed and a second probationary period will be granted only after a petition and favorable faculty action.

Readmissions Policy Guidelines

A student who is dismissed from law school may submit a petition seeking to be readmitted to law school.

I. Student Affairs Committee

The Student Affairs Committee, which is composed of law faculty members and is appointed annually by the law school's dean, will consider and make decisions on all petitions for readmission. A student who submits a petition for readmission will have the opportunity to appear in person before the Student Affairs Committee to discuss and answer questions about the petition and the grounds for readmission.

II. Criteria for readmission

No petition for readmission will be granted unless the student submitting the petition clearly establishes that both of the following requirements are met:

1. There is a substantial likelihood that the student will be able to make up his or her grade deficiency within an appropriate time and manner in accordance with a plan established by the Student Affairs Committee (or by the faculty, if the faculty grants readmission under the appeal procedure set forth below).
2. The student's academic difficulties were substantially attributable to circumstances or events which do not reflect the student's abilities to perform successfully in law school and as a lawyer.

Circumstances or events that might meet the second element of this test include a serious illness or other medical problem; situations causing severe emotional distress for the student (such as the death of a close family member, divorce or separation from a longstanding partner, or being the victim of an assault or other serious crime); or having a documented disability that can be reasonably accommodated but previously was not.

Every factor which the student feels contributed to the student's academic difficulties should be clearly stated in the readmission petition. Every ground for readmission should be supported by relevant documentation to the extent practicable. The petition may also address any remedial steps the student plans to take, or that others might be able to implement on behalf of the student, in the event the petition is granted. The student submitting the petition must certify the truthfulness of all statements in the petition.

III. Timing for petitions

Readmission petitions generally will not be accepted or considered right away, so a student who is dismissed should expect to be out of school for at least one semester even if the student is ultimately going to be readmitted. This avoids having students rush to make decisions about seeking readmission, and gives students a reasonable period of time in which to step away from school and think about the student's experience with law school, the reasons for seeking readmission, and the means through which the student's academic performance can be improved. It also enables the Student Affairs Committee (or faculty, in the event of an appeal) to consider petitions carefully and not rush to make decisions in haste.

The following general rules therefore will apply:

- When a student is dismissed at the end of the Fall semester, the student's petition will not be accepted and considered until the Summer semester. If readmission is granted, it will take effect for the next Fall semester, at the earliest. For example, if a student was dismissed at the end of the Fall 2020 semester, the student's petition would be heard during the Summer 2021 semester and would result in readmission starting no earlier than the Fall 2021 semester.
- When a student is dismissed at the end of the Spring or Summer semester, the student's petition will not be accepted or considered until the Fall semester. If readmission is granted, it will take effect for the next Spring semester, at the earliest. For example, if a student was dismissed at the end of the Spring 2020 or Summer 2020 semester, the student's petition would be heard during the Fall 2020 semester and would result in readmission starting no earlier than the Spring 2021 semester.

A student may submit a request for a special exception to allow a readmission petition to be submitted and heard immediately after the dismissal occurs. A special exception will be made only if the chair of the Student Affairs Committee and at least one other faculty member on the committee agree that a special exception should be made. When a student is dismissed after the student's first semester of law school (or at the point where a student first has taken a total of 12 credits of law courses, if the student took less than 12 credits in the first semester), the burden of justifying a special exception will be extremely heavy, and a special exception will be made only in the most truly extraordinary circumstances.

IV. Attending classes after dismissal

A student who is dismissed from law school must stop attending classes and withdraw from all courses immediately upon receiving notification of the dismissal, unless a request for a special exception is made, under Part III of these rules, to allow the student to have a readmission petition heard immediately. If a request for a special exception is made, the student can remain enrolled and attend classes until a decision is made on the request for a special exception. If the request for a special exception is denied, the student then must immediately stop attending classes and withdraw from all courses. If the request for a special exception is granted, the student can remain enrolled and attend classes until the process of considering the readmission petition has been completed.

V. Granting a readmission petition

A readmission petition will be granted if a majority of the members of the Student Affairs Committee who are participating in the matter vote in favor of readmission. (This means that if the Student Affairs Committee has an even number of members and the vote is a tie, readmission will not be granted.)

If the Student Affairs Committee makes a decision in favor of readmission, that decision is final and there is no process for further review or rejection of the Committee's decision.

If the Student Affairs Committee makes a decision in favor of readmission, the Committee will specify in writing the conditions on which readmission is granted and provide this document to the readmitted student. The conditions might include (but are not limited to) specifying courses that the readmitted student must take; establishing steps that the readmitted student must take to improve academic performance; or imposing restrictions on having a job or other activities the readmitted student may undertake while attending law school. Ordinarily, a readmitted student will be placed on

academic probation and given one semester (Fall or Spring) to raise the cumulative GPA to 2.0, but in appropriate cases the Student Affairs Committee may set other schedules or deadlines that the student's cumulative GPA or semester GPAs must satisfy.

VI. Appeal from the denial of a readmission petition

If the Student Affairs Committee denies a readmission petition but at least one member of the Committee voted in favor of readmission, the student is entitled to appeal that decision and have it reviewed by the faculty of the law school.

If the Student Affairs Committee denies a readmission petition and no member of the Committee voted in favor of readmission, the student is not entitled to appeal the decision, but may ask the law school's dean to review the Committee's decision. Such a request for the dean's review must be made within 10 days of the student receiving notice of the Committee's decision. If the dean finds that extraordinary circumstances justify an appeal, the dean may permit the student to appeal the decision and have it reviewed by the faculty of the law school. If the dean decides to permit the appeal, the dean must state the reasons for doing so, in writing, and provide that explanation to the faculty. If the dean decides not to permit an appeal, that decision is final and not subject to any further review or appeal. The dean may delegate to an associate dean the responsibility for reviewing a Committee decision and determining whether extraordinary circumstances justify allowing an appeal to the faculty.

If an appeal goes to the faculty (either because the Student Affairs Committee's decision to deny the petition was not unanimous or because the dean opted to allow an appeal to the faculty), then the faculty will consider and vote on the appeal at a faculty meeting. If the appeal arises at a time (such as during the summer) when the faculty will not be having a meeting, the faculty's Policy & Planning Committee, which is elected to represent the faculty, may consider and vote on the appeal on behalf of the faculty.

If the faculty votes to deny the readmission petition, that decision is final and there is no process for further review or rejection of the faculty's decision. If the faculty votes to grant the readmission petition, the faculty will specify in writing the conditions on which readmission is granted and provide this document to the readmitted student (just as the Student Affairs Committee would do, under Part V above, if the Committee granted readmission).

VII. New evidence

A student whose readmission petition was not successful will be allowed to submit another petition only if the new petition presents new evidence. New evidence is evidence not available or not reasonably discoverable at the time the previous petition was considered. Subsequent petitions will be considered through the same process and with the same standards set forth above for readmission petitions.

VIII. Petition by a student who was previously readmitted

Only in the most exceptional circumstances will a student who has previously been readmitted and subsequently dismissed be readmitted again.

Withdrawal from Courses

A student enrolled in a course cannot unilaterally withdraw from it but must secure permission from the associate dean to do so, and must follow prescribed withdrawal procedures. A student who is not in good standing in the course at the time of withdrawal (has earned a grade of F at that point) will receive a grade of WF (withdraw failing) for the course.

Activities and Services

- Professional and Social Activities (p. 1642)
- Financial Aid (p. 1641)
- Law Library (<http://catalog.umkc.edu/colleges-schools/law/law-general-information/leon-e-bloch-law-library/>)
- Student Services
- Admission to the Bar (p. 1643)
- Internal Communication (p. 1645)
- Career Services (p. 1643)

Fee Information

Educational fees and student program/use fees are set by the University of Missouri Board of Curators. For the most current fee schedule, contact the Cashier's Office at (816) 235-1365.

Financial Aid

For information on financial aid, contact the UMKC Financial Aid and Scholarships Office at (816) 235-1154 or visit their Web site at <http://www.sfa.umkc.edu> (<http://www.sfa.umkc.edu/>).

Professional and Social Activities

Student Organizations

At UMKC, the law school experience extends far beyond the classroom. We offer many ways for students to get involved through organizations matching a variety of interests within the law school and the larger university community. These organizations are listed at the law school's website.

Scholarly Publications

The UMKC School of Law offers two opportunities for students to develop research, writing and editorial skills through membership on the staff of one of the law school's two journals: the UMKC Law Review and the Journal of the American Academy of Matrimonial Lawyers.

Competitions

UMKC Law School has established a strong tradition of excellence in national and regional skills competitions. Students may participate as a member of one of the law school's various lawyering skills competition teams.

Clinics and Internships

Through its various clinical opportunities the law school serves the urban community and provides important opportunities for students to gain valuable experience. More information can be found at the law school's website.

International Programs

Through its study-abroad opportunities, students at the law school can gain valuable global perspectives on the law. Summer study programs permit students to visit China or Ireland and Wales while semester-long study abroad programs are available for students desiring more in-depth experiences abroad.

General Information

- History, Vision, Mission & Values (p. 1643)
- Accreditation
- Fee Information (p. 1641)
- Nondiscrimination Policy

Accreditation

The Council of the Section of Legal Education and Admissions to the Bar of the American Bar Association (http://www.americanbar.org/groups/legal_education/about_us/section_staff.html.html) is the recognized national agency for accreditation of J.D. programs. UMKC School of Law is accredited by the American Bar Association and is a member of the Association of American Law Schools.

UMKC LAW SCHOOL POLICY ON STUDENT COMPLAINTS REGARDING ACCREDITATION STANDARDS

UMKC School of Law values student input regarding any aspect of the educational process and encourages students to raise concerns and suggestions at any time with the Dean or any Associate Dean. Students' concerns with accreditation standards or any other matter may often be resolved quickly and directly without the need for formal complaint. If, however, a student believes that his or her concerns regarding the law school's compliance with ABA accreditation standards has not been resolved or chooses to forgo informal complaint mechanisms, the following formal complaint procedure is available.

Student Complaints Regarding Compliance with Accreditation Standards

As an ABA-accredited law school, The University of Missouri-Kansas City is subject to the ABA Standards for Approval of Law schools. The Standards may be found at http://www.americanbar.org/groups/legal_education/resources/standards.html. Any student at the School of Law who wishes to bring a formal complaint to the Administration of the School of Law of a significant problem that directly implicates the School's program of legal education and its compliance with the ABA Standards should take the following steps:

1. The student complaint should be submitted in writing to the Dean or any Associate Dean of the School.
2. The writing should describe in detail the behavior, program, or process complained of, and demonstrate how it implicates the School's program of legal education and the School's compliance with a particular identified ABA Standard.
3. The writing must provide both the name of the student submitting the complaint, the student's official University of Missouri-Kansas City email address, telephone number, and a street address for further communication about the complaint.

Procedures for Addressing Complaints Regarding Compliance with Accreditation Standards:

The Dean to whom the complaint is submitted should acknowledge the complaint within ten business days of receipt of the written complaint or as soon as is reasonably possible under the circumstances. Acknowledgment may be made by email, U.S. mail, or by personal delivery.

Within one month of acknowledgment of the complaint or as soon as is reasonably possible under the circumstances, the Dean or the Dean's designee shall either meet with the complaining student or respond to the substance of the complaint in writing. The student should either receive a substantive response to the complaint or information about what steps are being taken by the School to address the complaint or further investigate the complaint.

Appeals may be taken to the Dean of the School, or, if the Dean of the School has decided the merits of the complaint, to the Executive Committee of the School of Law.

Any decision made on appeal by the Dean or the Executive Committee shall be final.

A copy of the complaint and a summary of the process and resolution of the complaint shall be kept in the office of the Dean of the School of Law for a period of eight years.

The Council of the Section of Legal Education and Admissions to the Bar requires that each law school provide a number of disclosures on its public website. Those disclosures can be found here (<http://law.umkc.edu/aba-required-disclosures/>): <http://law.umkc.edu/aba-required-disclosures>.

Admission to the Bar

Graduation from law school does not guarantee admission to the bar.

In addition to a bar examination, there are character, fitness, and other qualifications for admission to the bar in every U.S. jurisdiction. Applicants are encouraged to determine the requirements for any jurisdiction in which they intend to seek admission by contacting the jurisdiction. Addresses for all relevant agencies are available through the National Conference of Bar Examiners (<http://www.ncbex.org/>).

UMKC invites representatives from the Missouri and Kansas Bar Examiners to visit the Law School, participate in a Bar convocation and provide one-on-one meetings with students requesting them to help in successfully meeting character and fitness requirements.

UMKC's support for its students does not end at graduation. UMKC continues to assist our students as they face the last hurdle to practicing law. The bar examination for any state will be one of the most intellectually challenging experiences of any law school graduate's life. The stakes are high, as is the attendant stress. UMKC aids our students by supplementing their bar preparation from commercial vendors with a unique program focused on the strategies and tactics to focus their preparation in order to pass the bar exam.

Career Services

The Law School Professional and Career Development Center (PCDC) provides career planning, strategy counseling, and employer information to the student body and alumni. PCDC also handles all employer outreach, organizes employer events, teaches strategy workshops, and acts as a liaison to the legal community.

In accordance with Section 6-3 of the Bylaws of the Association of American Law Schools and Standard 211(d) of the American Bar Association, the University of Missouri-Kansas City School of Law is committed to the principle of equal employment opportunity for all its students and graduates, commensurate with their abilities and not limited by invidious discrimination, including discrimination based on, race, sex, age, religion, color, national origin, handicap, disability, sexual orientation, or any basis forbidden by applicable law or university regulation.

Disabled Student Services

The law school provides students with a variety of programs to support their academic success, through the office of students services and the law school strategies program.

The University of Missouri-Kansas City endeavors to make all activities, programs and services accessible to students with disabilities. A campus coordinator is available to assist students with a documented disability to arrange for reasonable accommodations concerning all aspects of campus life. It is recommended that students contact the coordinator at least six weeks prior to the beginning of classes to arrange appropriate documentation and reasonable accommodations in the classroom. For information call (816) 235-5696. Individuals with speech or hearing impairments may use Relay Missouri, 1-800-735-2966 (TT) or 1-800-735-2466 (voice).

History

HISTORY

In 1895, three young lawyers with energy and vision, William P. Borland, Edward D. Ellison and Elmer N. Powell, founded the Kansas City School of Law with the active assistance of leading members of the bench and bar. Borland, the first dean of the school, was elected to Congress in 1910 and

was succeeded by Ellison, who served as dean until the School of Law merged with the University of Kansas City in 1938. After affiliation with the University of Missouri System in 1963, the school assumed its present name as the University of Missouri-Kansas City School of Law.

VISION

To be a model urban public law school for the 21st century that economically and efficiently delivers excellent legal education, serves as an intellectual leader in law, and increases access to justice for our community

MISSION

To prepare students to practice law with the competencies needed to integrate academic theory and practical skills to become expert problem-solvers and trusted advisors who serve their clients and their communities in the interests of justice; to provide expertise to benefit our many constituencies through scholarship and engagement, and to increase access to justice through research and service to our community

VALUES

We value:

- Respect for law and lawyers
- Commitment to the rule of law and to justice
- Professionalism, integrity and excellence in everything we do
- Respect for interdisciplinary understandings in advancing law and effective legal practice
- Creativity and innovation and the role of entrepreneurship in advancing the profession and economic development
- The role of advocacy and persuasion to effect positive resolution of disputes and needed social change
- Diversity of backgrounds and views, inclusion and empowerment, and access to law and legal education
- Service to our constituencies, with particular regard to our urban community and its families and children

Leon E. Bloch Law Library

The Leon E. Bloch Law Library is not only a place to study, but a laboratory for students to master legal research skills, both in traditional print and electronic media. In fall 2011, a newly renovated library space opened. The space is designed to focus on first year legal research and writing and it provides a new collaborative technology learning lab to facilitate mastery of on-line legal research skills. In 2010, space in the first floor of the library was converted to provide three additional study rooms for students and a student lounge.

The library serves as a forum for self-directed learning; a place students take control of their educational experience through researching selected paper topics and their own law review notes.

The library contains holdings in major areas of legal scholarship and practice. It is home to rare, early seventeenth century editions of Sir Edward Coke's treatises and case reports. It also preserves the Charles D. Gould Jr. Collection, consisting of photographs and memorabilia from the Nuremburg trials. The collection focuses on trial advocacy, urban law, family law, small business entrepreneurship, and tax law. The library's foreign law holdings are targeted for expansion and access to historical materials have dramatically expanded. What is not held in print in the library, or in its many database services, is conveniently available through the library's online catalog request and delivery service. This service provides access to seventy Missouri libraries and about 18 million items. The service includes access to the holdings of the three other law school libraries in Missouri.

Additional hard to locate items can usually be retrieved through other specialized interlibrary loan services. Besides its collections, the UMKC's law library is especially strong with respect to the expertise of its librarians, most of whom teach courses in legal research and have practiced law for many years or worked as paralegals.

Electronic Resources

Technology has reshaped legal publishing in ways that will forever alter how attorneys and judges approach their work. The information professionals of the Leon E. Bloch Law Library have embraced this transformation in a variety of ways. The new Courtney Turner Trust Collaborative Technology Classroom allows for creative use of technology using laptops and cutting-edge software in both a classroom setting and for student group study. Stand-alone computers that allow access for research on the Internet, printing, and numerous database services are available as well. A fee is charged for some law student printing and for all other patron printing. The Library also provides a scanner and a dedicated workstation for the visually impaired. In addition, each law student receives a password free of charge for accessing law school and university databases from home or at other locations on campus. Wireless access to the Internet is provided to students throughout the law school and library. Perhaps, unique among law schools, the newly renovated lower level of the Library hosts a free laptop clinic, where law students can go with computer and technology problems, many of which can be fixed at the clinic. In Spring 2012, the Library installed state of the art book scanners on all three library floors. The scanners will provide digitization workflow solutions for library business processes, student needs, and other law school business processes. The scanners can create PDFs, OCR documents, as well as audio files for the visually impaired.

Nondiscrimination Policy

The Board of Curators of the University of Missouri and the University of Missouri-Kansas City are committed to the policy that there shall be no discrimination on the basis of race, color, creed, sex, sexual orientation, age, national origin, disability or Vietnam era veteran status. For additional information, see the Statement of Human Rights information included in the Introduction section of this catalog.

RooLaw

Internal communications at the law school are conducted through the Law School's intranet: mylaw.umkc.edu, also known as RooLaw. RooLaw is used for all communications with large, identifiable groups of students, faculty and staff, serving as the primary (and in many cases only) source of information about official and unofficial happenings at the School. A student's home page is a one stop shop for important information about courses, announcements, events, deadlines and the like.

J.D./MBA and J.D./M.P.A. Combined-degree Programs

The School of Law has established combined-degree programs with the Henry W. Bloch School of Business and Public Administration. The program allows students to earn a juris doctor degree and a master of business administration or a master of public administration degree on an accelerated basis through cross-acceptance of some credit hours.

Applicants to the program must satisfy the admission requirements of each school and, if admitted into the program, may enroll in the first year of law school either before or after beginning M.B.A. or M.P.A. courses.

Student Learning Outcomes

Students will demonstrate mastery of core doctrinal knowledge

Students will demonstrate mastery of the skills necessary for objective legal analysis

Students will demonstrate mastery of the skills necessary for effective legal research.

Students will demonstrate mastery of legal writing across formats

Students will demonstrate mastery of the duties of attorneys as members of the legal profession

Students will demonstrate ability to work with people in a professional environment

Students will demonstrate competency in professional work habits

Students will demonstrate entry-level proficiency in lawyering skills

Juris Doctor Degree

Program Description

The law school's Juris Doctor degree program is designed to prepare students for the general practice of law and for policy-forming functions in government, business and other organizations in society. Courses provide students with a basic knowledge of the principles and processes of the Anglo-American system of law and of the integration of law into other disciplines and institutions.

The curriculum and program recognize that in order to be of the utmost service to clients, the lawyer must "see life whole" and appreciate the relationships among legal, social and political aspects of human endeavor. They also recognize that the best interests of society require a lawyer to be a thinker and scholar as well as a skilled technician.

Both the curriculum and methods of instruction are designed to meet these objectives. Although the casebook method is the predominant form of classroom instruction in larger classes, the faculty also employ other approaches. Classes such as lawyering skills, negotiating mergers and acquisitions, mediation, and law practice management combine theory with opportunities to learn about lawyering first-hand. Many of the classes use documents and "real life" problems to demonstrate concepts studied in class. The curriculum also includes opportunities for research and writing, seminar discussions, clinical instruction and skills training.

Academic Support and Success (p. 1646)

Admission (p. 1646)

Scholarships (p. 1664)

Six-Year Law Scholars Program (p. 1664)

Areas of Study

Law students do not have a formal major, but have options for obtaining sequenced and advanced training in areas of interest to them, including:

- Advocacy and Litigation
- Business and Tax Law
- Commercial Law

- Estate Planning and Administration
- Criminal Law and Procedure
- Domestic Relations
- Labor and Employment
- International Law
- Property and Real Estate
- Civil Liberties and Civil Rights
- Environmental Law

In addition, through externships, competitions, journals and student organizations, students are able to develop skills and contacts in specialized areas of the law.

Students may also elect to participate in one of the Law School's formal areas of emphasis within the Juris Doctor degree program:

- Advocacy (p. 1652)
- Business & Entrepreneurial Law (p. 1655)
- Child & Family Law (p. 1658)
- Intellectual Property (p. 1660)
- International Law (p. 1661)
- Urban, Land Use and Environmental Law (p. 1663)

Academic Support and Success

The School of Law is committed to its students' success. Although the study of law is a difficult and challenging endeavor, the school attempts to work with students to maximize their efforts and see them through the process successfully. Several programs contribute to this effort.

The Law School Strategies Program (<http://law.umkc.edu/prospective-students/studying-law-at-umkc/law-school-strategies-program/>) is a comprehensive program including academic skills lectures and courses, study group opportunities, and individualized assistance.

The Law School Strategies Program is available to all students. It is especially beneficial for those students who feel they need assistance in the transition to law study. The Law School Strategies Program is not remedial in nature. Rather, it is designed to maximize the potential of students who participate by teaching skills and strategies for success in law school.

The program begins with a one-week orientation, during which students are introduced to essential learning strategies for law school. During the academic year, the program director and other faculty provide academic skills lectures and workshops focusing on learning styles, learning strategies, time management and development of skills necessary for law school success.

Study group programs maximize student learning through peer teaching. In Structured Study Groups, first-year students have the opportunity to participate in guided study groups in one of their first-year courses. The groups are led by an upper-class student who has successfully completed that course. The student leader attends the class with the first-year students and conducts weekly small-group sessions in which the leader models successful learning strategies for that class. These year-long study group programs are open to all students.

Admission to the Juris Doctor Program

Eligibility

To be eligible to apply for admission to the School of Law's Juris Doctor (J.D.) degree program, a person must have either:

- A bachelor's degree based on a program of courses with substantial intellectual content from an approved institution; or
- Completed at least 90 acceptable hours of credit in courses with substantial intellectual content in an approved institution, completed all non-elective coursework toward a bachelor's degree and made arrangements with the school that will award the degree to accept law school credits for the remainder of the work required to earn that degree, so that the student will earn the degree prior to the granting of the J.D. degree.

Criteria for Admission

The School of Law restricts the number of students admitted each year in order to maintain a favorable faculty-student ratio and to provide the best possible legal education for each student enrolled. Because many more people apply to the School of Law than there are seats available, admission is competitive.

While substantial weight is given to each applicant's LSAT score and undergraduate GPA, the School of Law and its faculty also consider other factors in shaping an entering class. These factors, consistent with the University's values of diversity, inclusiveness and respect, include:

- Advanced or specialized educational achievement demonstrating potential for academic excellence in the study of law.
- Contributions to the cultural diversity of the School of Law.
- A history of overcoming challenges and barriers based on societal discrimination or economic disadvantage.
- Demonstrated leadership qualities.
- A significant and sustained commitment to public or community service.
- Other accomplishments or qualities that indicate the applicant will contribute to the School of Law's academic and service missions.

Admissions Process

Applicants are required to submit a completed application form, the application fee, a personal statement, a resumé, official copies of all undergraduate and graduate transcripts, and two letters of recommendation. All of these items must be submitted through the Credential Assembly Service provided by the Law School Admission Council (LSAC). Instructions for this service may be found on the LSAC website. Once all materials have been submitted, a file is considered complete and ready for review.

The Admissions Committee invites qualified applicants to have a personal interview as part of the application process. The law school makes admission decisions on a rolling admissions basis. That is, decisions are made as files are completed. This process begins in September of the year preceding the academic year applicants are applying for and continues until sufficient admissions are granted to fill the entering class. Accordingly, applications should be submitted as early as possible.

Seat deposit fees must be paid by specified deadlines to secure a spot as a student at the School of Law. These fees are nonrefundable but will be credited toward the cost of tuition and fees for the first semester of law school classes. Students planning to start law school in the Spring semester typically will have seat deposit fees due in late November. Students planning to start law school in the Summer semester typically will have seat deposit fees due in April. Students planning to start law school in the Fall semester typically will have a first seat deposit fee due in April and a second seat deposit fee due in May. The exact deadlines for seat deposit fees will be specified when an applicant receives an offer of admission from the School of Law.

LSAT/LSAC

In order to gain admission, an applicant must take the LSAT. The test may be taken at various locations, including UMKC. An LSAT score is required to complete the application for admission, and it is the applicant's responsibility to take an LSAT exam that will be scored in time to meet the application deadline. Information concerning the test is available online at <http://www.lsac.org/> or by writing to:

Law School Admission Council (LSAC)
662 Penn Street
Newtown, PA 18940

Applicants also must submit official copies of their college and university transcripts (and graduate school transcripts, if any) to LSAC via their Credential Assembly Service. Further information and a registration form for this purpose may be obtained at the website and mailing address above. LSAC will automatically provide LSAT scores and copies of transcripts to the School of Law once an application has been submitted and processed.

Prerequisites

No undergraduate courses are specifically required for admission to the Law School. The best preparation is a broad liberal arts education designed to provide an understanding of the institutions and values with which the law deals and the development of those skills and habits of thought essential to legal reasoning.

Any course of study leading to an undergraduate degree will be sufficient for admission, as long as the emphasis was an intellectually demanding one that challenged the student to employ critical-thinking skills and communicate effectively. Courses with a strong emphasis on writing are particularly encouraged in light of the crucial role effective writing plays both in law school and law practice.

Matriculation Options: Full-Time and Part-Time Progress

Most students matriculate on a full-time basis. Some students, however, may do so on a part-time basis.

The opportunity to proceed part-time is designed for students who are unable to enroll on a full-time basis, such as those with family or career responsibilities. These students typically enroll in 8 to 9 hours of classes each semester in the first year, and 8 to 12 hours per semester thereafter. In all other respects, students enrolled part-time are required to satisfy all graduation requirements applicable to full-time students, including the requirement that they complete all degree requirements within five years (unless special permission is granted to extend that time limit). Part-time students develop programs with the associate dean that are designed to parallel, as much as possible, the sequence of courses for full-time students.

A full-time student may not become a part-time student without permission of the associate dean. Part-time students may not become full-time students until they have completed all first-year courses, unless they obtain permission to proceed full-time from the associate dean. Once part-time students have completed all required first-year courses, they may enroll full-time or part-time for remaining coursework at their option. Students are

cautioned, however, that enrollment in 13 or more hours triggers the rule limiting outside work to no more than 20 hours per week and full-time first-year law students should not engage in any outside work.

Admission with Advanced Standing

Except for transfer applicants enrolled at the University of Missouri-Columbia (to whom transfer is granted more liberally), an applicant for admission with advanced standing must meet the requirements applicable to entering students; be eligible to return as a student in good standing to their current law school; and present a letter from the Dean of their law school showing such eligibility. Transfer applicants typically have completed one full year of law study, and admission will be largely based on law school academic performance. For transfer applicants seeking to start courses at the School of Law in the Fall semester, an admissions decision generally would be made in the summer, as soon as the application is complete and the applicant's current law school has issued grades for the Spring semester.

When a transfer applicant is admitted, the School of Law will review the work successfully completed by the transfer applicant at other law schools in order to determine how many transfer credits the applicant will be awarded and which of the School of Law's course requirements the applicant has already fulfilled. The School of Law generally will award transfer credit for a maximum of 45 credit hours, but may grant special permission to give transfer credit for more than 45 credit hours.

Except in the case of students transferring from the University of Missouri-Columbia, hours for a course in which the transfer applicant received less than a C grade will not transfer. Although transfer credit will not be given for a course with a grade of C or below, the associate dean may opt to waive the need for a transfer student to retake the course. Grades earned at another law school are not transferred, nor do such grades count for class ranking purposes.

Admission Without Undergraduate Degree (90+ Program)

Students who have completed at least 90 acceptable hours of credit in courses with substantial intellectual content and have completed all non-elective coursework toward a bachelor's degree, may be admitted on the condition that the undergraduate degree be earned prior to or simultaneously with the granting of the J.D. degree. This condition can only be met if the institution which will grant the undergraduate degree will accept credits earned in the UMKC School of Law.

Since the UMKC School of Law does not confer the undergraduate degree and assumes no responsibility in regard to it, it is the duty of the student to make certain that the requirements for the degree are satisfied. Questions concerning requirements for the undergraduate degree or of the transferability of law credits to complete the degree should be directed to the institution granting the undergraduate degree.

A letter from the institution confirming that it will accept credits earned in the UMKC School of Law to complete the undergraduate degree must be submitted as part of the application for admission.

Assistance to Students with Financial Need

There are various government loan programs administered by the UMKC Financial Aid and Scholarships Office. They include the Federal Stafford Subsidized and Unsubsidized Loan Programs, the Perkins Loan Program and the Access Loan Program. The office also administers a limited amount of scholarship funds in which law students may participate.

The following funds administered by the Law School and the Law Foundation provide assistance to students with financial need.

Michael J. Albano Scholarship Fund

The UMKC Alumni Association has provided an endowment honoring Michael J. Albano for need based scholarship awards to Missouri resident students in the School of Law. The recipient must be in the high need category for financial aid.

The James A. Bayless Emergency Loan Fund

A fund established to provide emergency short-term loans for law students.

The Joseph S. Chartrand Memorial Fund

This is a memorial fund established from contributions in memory of Joseph S. Chartrand, an alumnus who taught part-time at the University of Kansas City (UKC was the predecessor to UMKC). The Chartrand fund provides an annual amount to assist students in purchasing law books. Selection is based on applications by both incoming and current students.

The Tiera Farrow Memorial Scholarship

A memorial fund established by Tiera Farrow, a 1903 graduate of the Law School, provides a partial scholarship to a worthy woman law student in need of financial aid. Selection is based on applications by both incoming and current students.

Max Foust Scholarship

Established by colleagues of Max Foust, this scholarship is awarded to a law student with financial need. Preference is given to a student who has experience or skills which can be indicators of success in the area of trial advocacy. Selection is based on applications by both incoming and current students.

Suzanne Gilmore Memorial Scholarship

Family, friends and classmates established this scholarship in memory of Suzanne Gilmore, an alumna of the class of 1991. The scholarship is awarded to an older-than-average law student who is a single custodial parent pursuing a law degree as a second degree. Selection is based on applications by both incoming and current students.

The Hispanic Bar Association of Greater Kansas City Scholarship Fund

The Hispanic Bar association of Greater Kansas City has established a fund to provide scholarships to UMKC School of Law students of Hispanic descent with financial need.

The Elmer B. Hodges Memorial Scholarship

An endowment fund established in the memory of Elmer B. Hodges provides scholarships for second- and third-year law students in need of financial aid.

Kavanaugh Family Trust

The law firm of Kenner & Kavanaugh has provided funding to award a scholarship to one or more worthy law students with financial need.

C.R. Krimminger Scholarships

Established by a gift from C.R. (Law 1934) and Katheryn L. Krimminger, the C.R. Krimminger Scholarships are awarded each year to academically qualified students who demonstrate financial need. An application is required.

Lathrop & Gage Diversity Scholarship

The law firm of Lathrop & Gage has created an endowment for the Law School to fund a scholarship for an outstanding student with financial need whose presence in the school furthers the goal of diversity to which the Law School is committed. Selection is based solely on admission files.

Judge Gene R. Martin Scholarship Fund

The Honorable Gene R. Martin has established a fund to award scholarships to deserving law students based upon need.

John Sublett Logan Scholarship

This scholarship was established by the John Sublett Logan Foundation in memory of Mr. Logan. It is designed to assist students in their legal education who, it is believed, will succeed in the legal profession and will give of themselves and their talents to the community in which they live. Selection is based on applications by incoming students. Preference will be given to those applicants who are natives or permanent residents of the St. Joseph, Missouri area.

The Robert B. McCreight Loan Fund

A memorial fund established by bequest from the estate of Gevene S. McCreight in memory of her husband Robert B. McCreight (Class of 1932), who had a long and distinguished career as an officer and director of stockyard companies and as president of the American Stockyards Association.

The Thomas McMorris, Jr. Scholarship Fund

A scholarship fund for the recruitment of under-represented students enrolling full-time at the School has been established to honor the memory and promote the vision of Thomas McMorris, Jr., who was active in the civil rights' movement and served as president of the local chapter of the NAACP. Mr. McMorris believed that for African-Americans to reach their potential and have a voice, they need to be represented where it matters—in the courtroom, boardroom and at every level of government. Applicants must have an undergraduate grade point average of 3.0 or higher and must demonstrate financial need. Selection is based solely on admission files.

Larence Schrader Scholarship

A fund was established by Diane King to endow a scholarship in her father's memory to assist a worthy student who cares about the law and has a need for financial assistance.

Additional Scholarships

For further information about available scholarships, see the School of Law website.

J.D. Degree Requirements

Student Learning Outcomes

Students graduating from this program will:

- Students will demonstrate mastery of core doctrinal knowledge.
- Students will demonstrate mastery of the skills necessary for objective legal analysis
- Students will demonstrate mastery of the skills necessary for effective legal research.
- Students will demonstrate mastery of legal writing across formats
- Students will demonstrate mastery of the duties of attorneys as members of the legal profession
- Students will demonstrate ability to work with people in a professional environment.
- Students will demonstrate competency in professional work habits
- Students will demonstrate entry-level proficiency in lawyering skills

Required Courses

First Year Required Courses

Full-time students complete the following required courses during the first year.

Full-Time Progress

Code	Title	Credits
Typical Fall Semester		
LAW 8501	Contracts I	3
LAW 8634	Criminal Law	3
LAW 8531	Lawyering Skills I ¹	3
LAW 8541	Property I	3
LAW 8511	Torts	3
Typical Spring Semester		
LAW 8521	Civil Procedure I	3
LAW 8631	Constitutional Law	4
LAW 8502	Contracts II	3
LAW 8532	Lawyering Skills II ¹	2
LAW 8542	Property II	3
Total Credits		30

¹ **Lawyering Skills I and II:** These two first-year courses introduce students to legal reasoning; analytical and critical thinking; case research and analysis; legal writing, including office memoranda, briefs and letters to and on behalf of clients; advocacy; and all forms of legal research. They offer education in many of the fundamental skills and processes of legal practice through a combination of lecture classes and small group sessions. They are required of all first-year law students in order to supply a strong foundation of thinking, research and writing skills upon which all later, advanced courses will depend.

Part-time Progress

Students enrolled on a part-time basis typically take three of the required courses, including Lawyering Skills, in their first year. The remaining courses must be completed in their second year of study.

Other Required Courses

Students must complete the following courses as a condition of graduation:

Code	Title	Credits
Required to be Taken During the Summer Preceding or During the Fall of the Second Year		
LAW 8601	Business Organizations	3
LAW 8552	Federal Taxation	3
LAW 8522	Civil Procedure II	2
Required to be Taken During the Summer Preceding or During the Second Year		
Evidence		3
Required to be Taken Prior to Graduation.		

LAW 8635	Criminal Procedure I	3
LAW 8731	Professional Responsibility	2
A course that fulfills the school's jurisprudential requirement		2-3
Experiential Course or courses (see below)		6
Total Credits		24-25

Experiential Course Requirement

A student must take 6 credit hours in a course or combination of courses that meet the school's experiential course requirement. These courses are primarily clinical, internship, or skills simulation courses. Courses fulfilling the requirement will be designated by the faculty.

Requirements for the J.D. Degree

1. Completion of 91 credit hours, 75 of which must be classroom credits.
2. A cumulative GPA of at least 2.0 (see Administrative Rules and Regulations, Scholastic Probation and Dismissal, in this section)
3. Completion of all required courses (see Required Courses in this section).
4. Fulfilling the school's research and writing requirement. This requires students to have a rigorous writing experience evidencing legal analysis resulting in a paper of professional quality.
5. Regular and punctual class attendance.
6. Successful completion of all coursework within five years from the day students began their course of studies leading toward the degree. A student will not be allowed to enroll in any course after the five-year period, unless an exception is granted by the Student Affairs Committee.

Policy on Certification of Completion of Graduation Requirements for Bar Authorities

The Law School will certify to a state's bar authorities (such as a board of law examiners) that a student has completed degree requirements and is eligible to take a bar exam only if the following conditions have been met.

1. **Graduation Date:** A student will not be certified to take a bar exam prior to the date the student's degree has been awarded. This means that:
 - a. A May graduate's first bar exam cannot be before July of the graduation year.
 - b. An August or December graduate's first bar exam cannot be before February following the graduation year.
2. **Papers:** A student writing a paper for any course (including seminars, independent studies, and all other courses) must submit a complete, finished version of the paper by the following dates. The deadlines apply to papers written to fulfill the Research & Writing (R&W) requirement, but the deadlines also apply to all other papers.
 - a. A student graduating in May and taking the bar exam in July must have every paper completed and submitted to the professor by May 1st of the graduation year.
 - b. A student graduating in December and taking the bar exam the following February must have every paper completed and submitted to the professor by December 1st of the graduation year.
 - c. A professor may set an earlier deadline for a particular course, independent study, paper, or R&W requirement.
 - d. These deadlines are not waivable.
3. **Incompletes:** A student who has an Incomplete for any credit or credits from a previous semester must have all work required to earn the credits completed by the following dates.
 - a. A student graduating in May and taking the bar exam in July must have all work required to earn the credits completed by May 1st of the graduation year.
 - b. A student graduating in December and taking the bar exam the following February must have all work required to earn the credits completed by December 1st of the graduation year.
 - c. A professor may set an earlier deadline for the completion of any work for an Incomplete.
 - d. These deadlines are not waivable.

These deadlines will not apply where the student has an Incomplete for credits from a previous semester only because the student was in a course involving a commitment to do something (such as for a law journal, clinic, or field placement) for multiple semesters and credit is not awarded for the prior semester until the full commitment has been completed.

Note: This policy will be in effect starting with the Spring 2019 semester. It therefore will apply to students graduating in May 2019 and thereafter. A special exception to part 1 of the policy may be made for students graduating in August 2019, allowing those students to be certified to take the bar exam in July 2019, but only if the student completes all work necessary to fulfill all graduation requirements by May 25, 2019.

J.D. Advocacy Emphasis Area Requirements

Emphasis in Advocacy

Admission Requirements

Selection of Students for Admission to the **Emphasis in Advocacy**

- Deadline for admission to the Emphasis in Advocacy program: Students should apply not later than their fifth semester of law school. Decisions as to whether a student will be admitted to the Emphasis in Advocacy will be made in the semester in which the student applies.
- Procedure and Criteria for Selection:
 - The maximum number of students who will be permitted to enter the emphasis each year will be set by the director of advocacy taking into account the ability to provide adequate supervision and advising.
 - The director of advocacy will select the students to be admitted to the program. Criteria to be considered may include previous general academic performance in law school, previous academic performance in courses seen as particularly relevant to advocacy, level of interest, and ability to identify an advisor willing to advise and supervise the student.
 - No student shall be admitted to the Advocacy program unless he or she has a grade-point average of 2.7 or above in all law school classes previously taken.
- Part-time Students and Other Students with Unusual Schedules: The director of advocacy is authorized to make appropriate adjustments in the deadlines for part-time students or other students whose schedules do not substantially conform to the six semester paradigm.

Student Learning Outcomes

Students graduating from this program will:

- Students will demonstrate mastery of core doctrinal knowledge within emphasis area.
- Students will demonstrate mastery of skills necessary for objective legal analysis.
- Students will demonstrate mastery of the skills necessary for effective legal research in the emphasis area.
- Students will demonstrate mastery of legal writing with particular emphasis on persuasive writing.
- Students will demonstrate mastery of the duties of attorneys as members of the legal profession.
- Students will demonstrate ability to work with people in a professional environment
- Students will demonstrate competency in professional work habits
- Students will demonstrate entry-level proficiency in lawyering skills essential to advocacy.

General Requirements

Minimum Total Hours Required

1. A student must take a total of at least 26 hours in approved courses. Approved courses are those listed as "Required Courses," "Grouped Required Courses" and "Elective Courses".
2. No more than three hours of required upper-level courses, (including those used by the student to satisfy the Jurisprudence requirement) may count toward the required 26 hours.
3. A course (including Law 8746) used to satisfy the student's writing requirement (see below) may be counted toward the total hours requirement even if it is also used to satisfy the student's Research and Writing Requirement.

Writing Requirement

1. Each student in the program must complete a written project, approved by an emphasis area supervisor, on a topic dealing directly with litigation.
2. The written project must be of a scope and quality that would satisfy the law school's research and writing requirement for a J.D. degree.
3. The written project may satisfy both the program's requirement and the J.D. requirement.

Practical Skills Component

All students in the program must take either Introduction to Appellate Advocacy or Trial Advocacy I and at least one of the following courses:

- Advanced Legal Writing: Litigation Drafting
- Appellate Advocacy - Ellison Moot Court
- Appellate Advocacy - National Moot Court
- Trial Advocacy II
- Trial Advocacy III

1. Mastery of Clinical Advocacy
2. Lawyering Skills Competition: App. Ad. Team
3. Lawyering Skills Competition: Client Counseling Team
4. Lawyering Skills Competition: Int'l Comm. Arbitration
5. Lawyering Skills Competition: Negotiation Team

Ethics Component

1. Each student in the program must participate in at least one, substantial, non-credit workshop on ethical issues for litigators.
2. Workshops will be organized by the advisors and conducted by faculty, practicing lawyers, or judges.

Research Component

1. Each student in the program must participate in at least one, half-day, non-credit workshop on research materials and sources frequently consulted by litigators on issues directly related to the litigation process.
2. Workshops will be organized by the program advisers and the librarians. They will be conducted by faculty, librarians, practicing lawyers or judges.

Supervising and Advising Component

1. Each student in the program shall be assigned an advisor.
2. Each student in the program shall meet with his or her advisor not less than twice a semester.

Curriculum Requirements

Distribution of Courses

1. Required Courses: All students in the program must take each of the following courses:

Code	Title	Credits
LAW 8521	Civil Procedure – Pleadings, Motions, and Related Matters	3
LAW 8522	Civil Procedure - Jurisdiction	2
LAW 8532	Lawyering Skills II	2-3
LAW 8621	Evidence	3
LAW 8635	Criminal Procedure I	3

2. Grouped Required Courses:

All students in the program must also satisfy the Core Course Requirement, the Advanced Course Requirement, and the Skills Requirement set forth below:

a. Core Course Requirement: All students in the program must take at least two of the following core courses:

Code	Title	Credits
LAW 8636	Criminal Procedure II	3
LAW 8702	Conflict of Laws	1-3
LAW 8706	Class Actions and Multidistrict Litigation	2-3
LAW 8711	Remedies	2-3
LAW 8764	Administrative Law	1-3
LAW 8765	Federal Jurisdiction	2-3
LAW 8822	Post Conviction Remedies	2-3

b. Advanced Course Requirement: All students in the program must take at least one of the following advanced courses:

Code	Title	Credits
LAW 8636A	Federal Trial Practice	2-3
LAW 8732	Lawyers and Dispute Resolution	2-3
LAW 8734	Mediation	2
LAW 8740M	Missouri Civil Procedure	2-3

LAW 8791	Civil Rights	2-3
LAW 8820	Criminal Trial Techniques	2
LAW 8850	Applied Evidence	1-3
LAW 8905	Intellectual Property Litigation	2

c. Skills Requirement: All students in the program must take either Law 8747 Introduction to Appellate Advocacy or Law 8700 Trial Advocacy I and at least one of the following courses:

Code	Title	Credits
LAW 8700	Trial Advocacy I	2
LAW 8703	Trial Advocacy II	2-3
LAW 8704A	Lawyering Skills Competition-Appellate	1-2
LAW 8704C	Lawyering Skills Competition-Client Counseling Team	1-2
LAW 8704N	Lawyer Skills Competition-Negotiation Team	1-2
LAW 8705	Trial Advocacy III	2
LAW 8707C	Advanced Legal Writing: Litigation Drafting	2-3
LAW 8747	Introduction to Appellate Advocacy	1
LAW 8775	Appellate Advocacy National Moot Court Competition	1-2
LAW 8903	Fundamentals of Legal Investigations	2

3. Electives: The following electives may also help satisfy the minimum total hours requirement:

a. Clinics and Externships

Code	Title	Credits
LAW 8637R	U.S. Attorney's Office Law Internship	3-6
LAW 8656	Public Defender Trials Internship	3-6
LAW 8656A	Missouri Attorney General's Office Internship	3-6
LAW 8656C	Jackson County Prosecutor Internship-Family Law Prosecution	1-3
LAW 8656F	Federal Public Defender Internship	3-6
LAW 8656P	Jackson County Prosecutor Internship	3-6
LAW 8662	Federal Court Internship	2-6
LAW 8662F	Family Court Internship	2-6
LAW 8713	Death Penalty Clinic	1-2
LAW 8713P	Wrongful Convictions Clinic	1-6
LAW 8746C	Court Internship	3-6
LAW 8750C	Municipal Internship	1-6
LAW 8752S	Child & Family Services Clinic	1-6
LAW 8768R	Department of Labor Internship	3-6
LAW 8773R	Environmental Law Internship	3-6
LAW 8790	Legal Aid Internship	3-6
LAW 8814E	Unemployment Compensation Clinic - Appellate Practice	2
LAW 8877	Bankruptcy Court Internship	2-6

b. Other Coursework

Code	Title	Credits
LAW 8609	Ethical Issues In Family Law Representation	1-2
LAW 8743	Global Legal Systems	1-3
LAW 8746R	Independent Study	1-3
LAW 8764	Administrative Law	1-3
LAW 8813	Employment Discrimination Law	2
LAW 8858L	Consumer Protection Lab	1

(if approved by student's emphasis area adviser on the basis that the course of study or legal research relates directly to litigation)

LAW 8635S	Wrongful Convictions	2-3
LAW 8635T	Wrongful Convictions II	2-3

LAW 8712	Problems And Issues In The Death Penalty	1-2
LAW 8732R	Intro to the Resolution of International Commercial Disputes	1
LAW 8735	Seminar In Famous Trials	2-3
LAW 8745S	UMKC All Journal Staff	1-4
LAW 8746W	Introduction to Workers' Compensation Law and Practice	1-2
LAW 8881	Seminar on the Supreme Court	2-3
LAW 8911	Winning Voir Dire	1
LAW 8913	Mental Health Investigation 1	1-2

Any other course if, before beginning the course, the student obtains written approval from both the emphasis area adviser in consultation with the associate dean. Such approval shall not be granted unless the adviser can find that, in light of the student's other courses and the student's litigation-related goals, the course will advance the student's study of litigation to an extent equivalent to other litigation electives.

Courses may be added or deleted from the lists contained in sections 1 through 3 above with approval of the advocacy emphasis committee and the faculty.

All emphasis students will be required to develop an electronic portfolio of self-selected documents and videos, and which will include a final skills assessment. Students will present their portfolio before a panel of two or three people including faculty and members of the bar.

Important Note: Because the School is committed to keeping up with changes in the practice of law, the requirements for emphasis areas may change during the course of a student's enrollment at the School. The requirements at the time a student is granted admission into the emphasis area are the requirements that govern completion of the student's emphasis requirements. For possible revised requirements that will take effect with the next academic year, ask the emphasis area advisor for the most recent iteration of requirements. A course not listed above can meet emphasis area requirements if approved by the emphasis area advisors, Professors Sean O'Brien, Mikah Thompson, Michaelle Tobin, Ryan Copus, and Steve Leben.

Graduation Requirements

For a student to be recognized as having graduated with an Emphasis in Litigation, the student must have fulfilled the following requirements:

- The student must have satisfied all general and curriculum requirements set forth above.
- The student must have achieved a grade-point average of at least 3.0 in the field. This grade-point average shall be computed considering all Required Courses, Grouped Required Courses, and Elective Courses in the emphasis taken by the student, including any that exceed the minimum hour requirements for the Emphasis in Litigation.

J.D. Business and Entrepreneurial Emphasis Area Requirements

Emphasis in Business & Entrepreneurial Law

The Emphasis in Business and Entrepreneurial Law program is designed to provide within the J.D. degree a well-rounded course of study for students interested in an emphasis in business law and transactional practice.

Admission

Any candidate for the J.D. degree who has earned passing grades in the Business Organizations and Federal Taxation courses may apply for the Emphasis in Business and Entrepreneurial Law program.

The deadline for application to the program shall be no later than the beginning of the second week of classes of the student's sixth semester of law school. Any student who applies after the beginning of his or her fourth semester must demonstrate that the program can be completed by the end of the sixth semester of law school. Appropriate adjustments will be made to deal with part-time students not on the regular semester schedule. Exceptions to the deadlines may be made with approval of the Emphasis Faculty Advisors, Professors Chris Hoyt, Anthony Luppino, Del Wright and Dani Merrick, by majority vote.

Student Learning Outcomes

Students graduating from this program will:

- Students will demonstrate mastery of core doctrinal knowledge within emphasis area
- Students will demonstrate mastery of skills necessary for objective legal analysis.
- Students will demonstrate mastery of the skills necessary for effective legal research in the emphasis area.
- Students will demonstrate mastery of legal writing with particular emphasis on transactional drafting.
- Students will demonstrate mastery of the duties of attorneys as members of the legal profession.
- Students will demonstrate ability to work with people in a professional environment

- Students will demonstrate competency in professional work habits
- Students will demonstrate entry-level proficiency in lawyering skills especially relevant to the emphasis area.

Requirements

Minimum Total Hours Required

The program will require satisfaction of the required courses (Group A) and a minimum of 9 credit hours of courses from the approved elective courses (Group B) listed below. Any course in Group A or B may be counted toward the required total hours even if it is also used to satisfy the student's Emphasis Research and Writing Requirement.

Writing Requirement

Students must complete an academic research paper of high professional quality, concerning a business or entrepreneurial law topic. The research paper must be certified as acceptable by one of the Emphasis Faculty Advisors. Students may fulfill this requirement, with a research paper on a business or entrepreneurial law topic, in conjunction with any of the Group A or B courses, or independently as part of the general J.D. Research and Writing Requirement, as part of an Independent Study option, or through one of the Law Schools' journal offerings. There is no separate requirement that the research paper be graded.

Practical Skills Requirement

Students must complete at least one course containing a substantial practical skills component. The following courses satisfy this requirement:

Code	Title	Credits
LAW 8601L	Transactional Lawyering Skills Lab	1
LAW 8638R	Entrepreneurial Lawyering: Solo And Small Firm Practice	3
LAW 8707B	Advanced Legal Writing: Business Contract Drafting	3
LAW 8757	Business Planning	2-3
LAW 8757R	Entrepreneurial Law & Practice Clinic	2
LAW 8837	Negotiating Mergers And Acquisitions	2-3
LAW 8875	Real Estate Transactions	2-3

Also, an Advanced Research course on business, tax or securities law, or on another area of law approved by the Emphasis Faculty Advisors

In lieu of one of those courses, the Practical Skills Requirement may be met by such other internships, externships, simulation courses, drafting courses, or other courses designed to provide exposure to the type of work commonly performed by lawyers in the business and entrepreneurial law field, as the Emphasis Faculty Advisors find acceptable.

Ethics Requirement

Each candidate for the Emphasis must attend at least four clock hours of these ethics offerings prior to graduation, provided through lectures, seminars, workshops, or other instruction dealing with ethical issues that frequently arise in the business and entrepreneurial law field, as approved by the Emphasis Faculty Advisors.

Research Requirement

All students in the program must satisfy an advanced research requirement which provides familiarity with materials and sources frequently consulted by lawyers practicing in the business and entrepreneurial law field. Subject to approval by the Emphasis Faculty Advisors this may entail a separate course, a component of an existing course, a separate lecture, seminar or workshop offering, or demonstrably satisfactory training on advanced research in connection with the Emphasis Writing Requirement.

Curriculum Requirements

Prerequisites or Co-requisites

Code	Title	Credits
LAW 8552	Federal Taxation	3
LAW 8601	Business Organizations	3

Required Courses(Group A) (All must be taken on a graded basis unless otherwise approved by the Emphasis Faculty Advisors)

Code	Title	Credits
LAW 8720 or LAW 8861	Secured Transactions Real Estate Finance	3
LAW 8758S	Securities Regulation	2-3
LAW 8838L	Legal Accounting (or other approved prior accounting education)	1

LAW 8886 & LAW 8888R or LAW 8603	Corporate Taxation I and Partnership Taxation I Taxation Of Business Organization	2-3
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Grouped Required Courses (Group B) (Must take at least 9 credit hours, all taken on a graded basis, from among these courses)

Code	Title	Credits
LAW 8590 or LAW 8763	Special Topics Labor Law	1-6
LAW 8601L	Transactional Lawyering Skills Lab	1
LAW 8605	Antitrust And Fair Competition Law	2-3
LAW 8638R or LAW 8757L	Entrepreneurial Lawyering: Solo And Small Firm Practice Special Topics In Entrepreneurial Lawyering	3
LAW 8720	Secured Transactions (if not taken to satisfy Group A course)	3
LAW 8721 or LAW 8732C or LAW 8590	Commercial Transactions Cross-Cultural Dispute Resolution Special Topics	3
LAW 8754 or LAW 8832	International Business Transactions Law Of International Trade And Finance	2-3
LAW 8757	Business Planning	2-3
LAW 8757R or LAW 8757N	Entrepreneurial Law & Practice Clinic Entrepreneurship & New Venture Creation	2
LAW 8757V or LAW 8915	Social Entrepreneurship Ventures Social Venture Creation	1
LAW 8763 or LAW 8813 or LAW 8814R	Labor Law Employment Discrimination Law Employment Law	2-3
LAW 8764	Administrative Law	1-3
LAW 8771	Public Finance	2-3
LAW 8798A or LAW 8890A or LAW 8890B or LAW 8890R	Art Law Sports Law I, Amateur Sports Law Sports Law II, Professional Sports Law Entertainment Law	2-3
LAW 8808 or LAW 8798 or LAW 8882	Intellectual Property Law Copyright Law Patent Law	2-3
LAW 8837	Negotiating Mergers And Acquisitions	2-3
LAW 8861 or LAW 8875 or LAW 8875L	Real Estate Finance (if not taken to satisfy Group A course) Real Estate Transactions Legal Context of Real Estate Decision Making	2-4
LAW 8874	Tax-Exempt Organizations	2
LAW 8876	Sales and Leasing	1-3
LAW 8898	Construction Law	2
LAW 8901	Advising Life Sciences and Technology Entrepreneurs	1-2

If a Group B course is properly counted toward the 9 credit hour Group B requirement and also listed above as a course satisfying the Practical Skills Requirement, it may be applied to satisfaction of both the those requirements. A course listed above as a course satisfying the Practical Skills Requirement but not listed as a Group B course may not be applied to satisfaction of the Group B requirement.

Graduation

For a student to be recognized as having graduated with an Emphasis in Business and Entrepreneurial Law, the student must have achieved a grade-point average of at least 3.0 in the minimum number of Emphasis course requirements listed as Required (Group A) or Grouped Required (Group B); provided that a student may, at the student's option, omit a grade received in either Corporate Tax or Partnership Tax, while still counting the course to reach the required number of academic credit hours for the Emphasis; and that a student may also omit any grade received in any Grouped Required

(Group B) course, so long as the student has grades from at least 9 credit hours of other Group B courses properly included and counted in the grade point average necessary for the Emphasis.

Important Note: Because the School is committed to keeping up with changes in the practice of law, the requirements for emphasis areas may change during the course of a student's enrollment at the School. The requirements at the time a student is granted admission into the emphasis area are the requirements that govern completion of the student's emphasis requirements. For possible revised requirements that will take effect with the next academic year, ask the emphasis area advisor for the most recent iteration of requirements. A course not listed above can meet emphasis area requirements if approved by the emphasis area advisors, Professors Chris Hoyt, Anthony Luppino, Del Wright, and Dani Merrick.[LN1] (p.)

J.D. Child & Family Law Emphasis Area Requirements

UMKC School of Law Emphasis in Child and Family Law

The UMKC School of Law Emphasis in Child and Family Law prepares students to serve the whole family – from infants to elders – and maintains a unique collaborative and interdisciplinary framework. The emphasis program requires that students master the basic doctrine and legal theories involved when the legal system interacts with families. In addition, however, students undertake study exposing them to the perspectives of other disciplines such as psychology and social work. Students study the unique ethical dilemmas of this area of law and gain hands-on experience in representing children and families in the program's clinical components. Finally, all students in the emphasis complete an in-depth capstone research and writing project and a portfolio presentation.

Admission Requirements

Students may apply after completing their second semester (or 29 credit hours). Students who are close to completing the hourly requirements may petition for early admission for good cause shown.

An application form will be available and must be submitted by the deadline announced by the Child and Family Law Faculty. Decisions as to whether a student will be admitted to the Emphasis in Child and Family Law will be made in the semester in which the student applies.

Procedure and Criteria for Selection:

The Child and Family Law Faculty will select the students to be admitted to the program. Criteria to be considered may include previous general academic performance in law school, previous academic performance in courses seen as particularly relevant to the emphasis area, level of interest in serving children or families, and availability of an advisor to advise and supervise the student.

The Child and Family Law Faculty is authorized to make appropriate adjustments in the deadlines for part-time students or other students whose schedules do not substantially conform to the six-semester paradigm.

Student Learning Outcomes

Students graduating from this program will:

- Research, identify issues, analyze, and apply core legal doctrines relating to families and children
- Prepare professional letters, pleadings, agreements, and other legal documents necessary for child and family law practice
- Speak and listen respectfully and effectively with families and children, counsel their clients competently, and interact effectively on their behalf with lawyers and other professionals
- Identify and resolve ethical issues and act in conformity with the rules of professional regulation
- Demonstrate entry-level proficiency in client counseling, and courtroom advocacy.

General Requirements

Curriculum Requirements

Of the 15 hours required for the emphasis, the student must complete

Code	Title	Credits
LAW 8751	Family Law	3
LAW 8752S	Child & Family Services Clinic	1-6
LAW 8733	Children In The Law	2-3
LAW 8751S	Family Violence	2-3

The remainder of the required credit hours from other core curriculum courses or a list of elective courses (listed below)

Prerequisite Course

All students in the emphasis must take Family Law. Because this foundational course is a prerequisite for most other courses in the emphasis, students accepted for the emphasis will be given a priority in enrollment in the course.

Code	Title	Credits
LAW 8751	Family Law	3

Jurisprudence Requirement

Students must fulfill their Jurisprudence requirement through Gender and Justice unless approval is given for another course by the Child and Family Law Faculty.

Code	Title	Credits
LAW 8714	Gender and Justice	2-3

Clinical Requirement

All students in the Child and Family Law program must successfully complete the Child & Family Services Clinic.

Code	Title	Credits
LAW 8752S	Child & Family Services Clinic	1-6

Elective Courses

Code	Title	Credits
LAW 8590	Special Topics	1-6
LAW 8611L	Estates and Trusts Lab	1-3
LAW 8617R	Elder Law For Estate Planners	1
LAW 8732C	Cross-Cultural Dispute Resolution	2-3
LAW 8733E	Elder Law	2-3
LAW 8733R	Juvenile Offenders & The Law	2-3
LAW 8734	Mediation	2
LAW 8738	Immigration Law And Process (if approved by Child and Family Law advisor)	2-3
LAW 8746R	Independent Study	1-3
LAW 8752G	Guardian Ad Litem Workshop	1-2
LAW 8752R	Family Law Practice	2
LAW 8778	American Academy Matrimonial Lawyers Board	2
LAW 8815R	Disabilities And The Law	2-3
LAW 8815S	Leadership In Disability Studies: A Multidisciplinary Approach	3-4
LAW 8870R	Education Law: Government & Legal Aspects Of Education	2-3
LAW 8908	Family Tax Law	1

Field Placement courses with the permission of the Child and Family Law Faculty

Miniterm courses if approved by the Child and Family Law Faculty. In the past, these have included: Poverty Law, Violence Against Women Act, Law & Human Trafficking, and Family Law and Film

Any other law school course if, before beginning the course, the students obtains written approval from the Child and Family Law Faculty. Such approval shall not be granted unless the Child and Family Law Faculty find that, in light of the student's other courses and the student's goals in the emphasis study, the course will advance the student's study of Child and Family Law to an extent equivalent to other Child and Family Law electives.

Courses may be added or deleted from the lists contained in the sections above with approval of the Child and Family Law Faculty.

Writing Requirement

A paper on a Family Law related topic satisfied through:

A seminar course, R & W (LAW 8746), Independent Study (LAW 8746R) or a Journal note/comment for Law Review or the Journal of the American Academy of Matrimonial Lawyers

Ethics Requirement

Satisfied through separate assessment focused on ethical issues in family representation

Graduation Requirements

For a student to be recognized as having graduated with an Emphasis in Child and Family Law, students must have

- timely completed all emphasis requirements
- made application at the time of graduation
- received the approval of a member of the Child and Family Law faculty of the student's portfolio, and
- earned a 3.0 grade point in emphasis course work (required and elective courses). This grade-point average shall be computed considering all Required and Elective Courses in the emphasis taken by the student, including any that exceed the minimum hour requirements for the Emphasis

Important Note: Because the School is committed to keeping up with changes in the practice of law, the requirements for emphasis areas may change during the course of a student's enrollment at the School. The requirements at the time a student is granted admission into the emphasis area are the requirements that govern completion of the student's emphasis requirements. For possible revised requirements that will take effect with the next academic year, ask the emphasis area advisors for the most recent iteration of requirements. A course not listed above can meet emphasis area requirements if approved by the emphasis area advisors, Yvette Lindgren, Mary Kay O'Malley, and Barbara Glesner Fines.

J.D. Intellectual Property Emphasis Area Requirements

Student Learning Outcomes

Students graduating from this program will:

- Be able to identify legal issues in intellectual property practice and apply basic principles of intellectual property law necessary to resolve those issues. Assessed by essay tests, graded with rubrics, in required courses.
- Be able to use specialized knowledge of intellectual property doctrine to resolve emerging issues in the field. Assessed by tests or papers, graded with rubrics, in elective courses.
- Be able to research advanced topics in the field and use that research to solve a focused, complex issue in the field. Assessed by faculty critique of the research paper requirement and re-writing until paper is of faculty-agreed standard of quality.

Student will have to take a total of 16 credit hours from the below mandatory and elective courses. All courses must be taken for a grade (with the exception of those courses for which a grade option is unavailable).

Required

Code	Title	Credits
The following class must be taken:		
LAW 8808	Intellectual Property Law	2-3
At least two of the following must be taken:		
LAW 8797	Business Torts and Unfair Competition	2-3
LAW 8798	Copyright Law	2-3
LAW 8882	Patent Law	2-3

Electives (The remaining hours to be satisfied from the following)

Code	Title	Credits
LAW 8798A	Art Law	2-3
LAW 8808L	Intellectual Property Licensing	2-3
LAW 8808S	Intellectual Property Remedies	2-3
LAW 8853	Seminar in Law Science & Technology	2-3
LAW 8882R	Patent Prosecution	2-3
LAW 8901	Advising Life Sciences and Technology Entrepreneurs	1-2
LAW 8905	Intellectual Property Litigation	2
LAW 8907	Seminar in Advanced Trademark	2-3

No more than one of the following can count toward the required 16 credit hours: LAW 8910 Intellectual Property Clinic, Technology Transfer Externship, or LAW 8757N Entrepreneurship & New Venture Creation (with IP faculty advisor approval).

Other courses may be approved by the IP faculty advisor to count towards the Emphasis. Where a course includes a substantial component of IP law, part of that course may count towards the 16-hour requirement with advance approval from the IP faculty advisor.

The above requirements are in addition to any hours received in connection with completion of the Advanced Research Requirement (See below).

Advanced Research Requirement

A paper satisfying the R&W requirement or an equivalent independent study writing project (including law review notes or comments) must be undertaken by writing on an IP subject, which subject has been approved by the student's IP faculty advisor. This requirement may also be satisfied through the writing of a professional quality brief as a team member in the Giles Sutherland Rich Memorial Moot Court Competition or, with the approval of the student's IP faculty advisor, by writing of a professional quality brief in another equivalent IP competition that has a brief writing component.

Class papers do not satisfy this requirement, but may be expanded as an independent paper or the R&W paper, with approval of the IP faculty advisor, the expanded paper may satisfy this requirement. Any credits earned through satisfaction of this writing requirement will NOT be counted towards the 16 hours.

Practical Skills Requirement

Students must complete at least one course containing a substantial practical skills component. A course used to satisfy the practical skills requirement can also count toward the 16 hours of required coursework. The following courses satisfy this requirement:

Code	Title	Credits
LAW 8757N	Entrepreneurship & New Venture Creation (with IP faculty advisor approval)	3
LAW 8910	Intellectual Property Clinic	2
LAW 8808L	Intellectual Property Licensing	2-3
LAW 8905	Intellectual Property Litigation	2
LAW 8882R	Patent Prosecution	2-3
Technology Transfer Externship		

Alternatively and with approval of the IP faculty advisor, the requirement may be met by other internships, externships, moot courts, simulation courses, drafting courses, or other courses or activities designed to provide exposure to type of work we performed as IP lawyers in the field.

Ethics Requirement

Ethical considerations will be incorporated into the listed required emphasis area courses.

Important Note: Because the School is committed to keeping up with changes in the practice of law, the requirements for emphasis areas may change during the course of a student's enrollment at the School. The requirements at the time a student is granted admission into the emphasis area are the requirements that govern completion of the student's emphasis requirements. For possible revised requirements that will take effect with the next academic year, ask the emphasis area advisor for the most recent iteration of requirements. A course not listed above can meet emphasis area requirements if approved by the emphasis area advisors, Professors Jasmine Abdel-khalik, Chris Holman, and Paul Callister.

J.D. International Law Emphasis Area Requirements

Admission Requirements

After their first year, students may be admitted to the International Law Emphasis.

Student Learning Outcomes

Students graduating from this program will:

- Students will demonstrate mastery of core doctrinal knowledge within emphasis area
- Students will demonstrate mastery of skills necessary for objective legal analysis. This is a general student learning outcome for the JD degree and is assessed through essay examinations graded using rubrics in required courses and through performance on licensing examinations.
- Students will demonstrate mastery of the skills necessary for effective legal research in the emphasis area.
- Students will demonstrate mastery of legal writing in the emphasis area.
- Students will demonstrate mastery of the duties of attorneys as members of the legal profession.
- Students will demonstrate ability to work with people in a professional environment
- Students will demonstrate competency in professional work habits
- Students will demonstrate entry-level proficiency in lawyering skills especially relevant to the emphasis area.

Program Requirements

Courses:

Student will have to take a total of 16 credit hours from the below mandatory and elective courses.

Code	Title	Credits
Required Course		
LAW 8753	International Law	2-3
Additional Required Courses (must take one of the following):		1-4.5
LAW 8743	Global Legal Systems	
LAW 8754	International Business Transactions	
LAW 8738R	Chinese Law	
LAW 8743C	Comparative Criminal Law	
or LAW 8735R	Law Of The European Union (Part I)	
or LAW 8737R	Law Of The European Union (Part II)	

Electives:

The remaining credit hours (10) must be satisfied from the following courses (note: not all below are offered every year):

Code	Title	Credits
LAW 8702	Conflict of Laws	1-3
LAW 8704A	Lawyering Skills Competition-Appellate	1-4
or LAW 8704I	Lawyering Skills Competition	
LAW 8738P	Immigration Law and Policy	2-3
or LAW 8738	Immigration Law And Process	
LAW 8753L	Transnational Litigation & Arbitration	2-3
LAW 8754	International Business Transactions	2-3
LAW 8831R	International Human Rights Law	1-3
LAW 8832	Law Of International Trade And Finance	3
LAW 8883	Seminar In National Security Law	2-3
LAW 8904	Multicultural Lawyering and Spanish for Lawyers	1-2
International Law		2-3

Courses offered as part of an approved overseas experience (while typically only one approved overseas experience will count towards the emphasis, the International Law Faculty may, in his or her discretion, count additional credits earned from other overseas experiences. Other Courses may be approved by the International Law Faculty to count towards the Emphasis. Where a course includes a substantial component of comparative and/or foreign law, part or all of that course may count towards the 16 hour requirement with advance approval from the International Law Faculty.

Required Overseas Legal Experience

This would include such experiences as:

- The **Ireland, China, Oxford** or other law summer programs; or
- An **overseas Mini-Term** course (if offered); or
- Another experience approved in advance by the ICF advisor.
These experiences may constitute a “skills” component, depending on the specifics of the experience.

Required Writing Project:

- A paper satisfying the R&W requirement or an equivalent independent study writing project (including Law Review Comments) must be undertaken by writing on an international or comparative law subject (subject to be approved by the International Law Faculty advisor).
- This requirement may also be satisfied through participation on the Jessup International Moot Court Team or other equivalent international competition with approval of the International Law Faculty advisor.
- Class papers do not satisfy this requirement, but may be expanded as an independent paper or the R&W paper, and with approval of the International Law Faculty advisor, the expanded paper may satisfy this requirement. Any credits earned through satisfaction of this writing requirement will **NOT** be counted towards the 16 hours.

Graduation Requirement

To graduate with the International Law Emphasis, students must have a minimum GPA within the emphasis area of 3.0.

Important Note: Because the School is committed to keeping up with changes in the practice of law, the requirements for emphasis areas may change during the course of a student's enrollment at the School. The requirements at the time a student is granted admission into the emphasis area are the requirements that govern completion of the student's emphasis requirements. For possible revised requirements that will take effect with the next academic year, ask the emphasis area advisor for the most recent iteration of requirements. A course not listed above can meet emphasis area requirements if approved by the emphasis area advisors Timothy Lynch, Jeffrey Thomas, and Rana Lehr-Lehnardt.

J.D. Urban, Land Use and Environmental Law Emphasis Area Requirements

UMKC students can engage in a course of study within the J.D. degree with an emphasis in Urban and Land Use Law, Environmental Law or both.

Admission Requirements

Students in their second or third year may elect to specialize in the "Urban, Land Use and Environmental Law" curricular emphasis program. To do so, a student should apply no later than the end of the second year. Advice about compliance with the requirements is available from the Emphasis Faculty Advisors Professors Julie Cheslik, John Ragsdale, and Irma Russell.

Student Learning Outcomes

Students graduating from this program will:

- Students will demonstrate mastery of core doctrinal knowledge within emphasis area
- Students will demonstrate mastery of skills necessary for objective legal analysis.
- Students will demonstrate mastery of the skills necessary for effective legal research in the emphasis area.
- Students will demonstrate mastery of legal writing.
- Students will demonstrate mastery of the duties of attorneys as members of the legal profession.
- Students will demonstrate ability to work with people in a professional environment
- Students will demonstrate competency in professional work habits
- Students will demonstrate entry-level proficiency in lawyering skills especially relevant to the emphasis area.

Program Requirements

Minimum Total Hours Required

Students must complete at least 15 semester hours of approved course work in the emphasis including at least two of three Group A Core Courses, at least two Group B Specialized Courses, and at least one Group C Elective and Interdisciplinary Courses. All courses used to satisfy the emphasis requirements must be taken for a grade (with the exception of those courses for which a grade option is not available) and a grade of B- or higher must be earned.

Advanced Research and Writing Requirement

Students must complete an academic research paper of publishable quality concerning a topic within the purview of the emphasis area. This requirement may be filled (1) in conjunction with any of the approved emphasis courses, (2) as part of the law school's Research and Writing requirement, (3) as part of an Independent Study, (4) through one of the Law School's journal offerings, or (4) through a research project pursued through an internship, externship or other practical experience. Emphasis faculty advisors must approve of the topic and paper quality in order to satisfy this requirement.

Practical Skills Requirement

Students must satisfactorily complete a one-semester practical skills experience or its equivalent. The following coursework and clinics satisfy this requirement:

Code	Title	Credits
LAW 8773C	Environmental Compliance Auditing and Permitting	3
LAW 8773N	Negotiating SuperFund Settlements	1-2
LAW 8773R	Environmental Law Internship	3-6
LAW 8921	Selected Projects in Law, Technology and Public Policy	1-6
LAW 8925	Entrepreneurial Urban Development	1-4
Abandoned Housing Clinic		

EPA Law Clinic Region VII, EPA Law Clinic Agricultural Center, and placement with an approved governmental or other private or public agency including the City of Kansas City and other entities as approved by a Emphasis Faculty Advisor.

Course Requirements

Code	Title	Credits
Group A: Core Courses; must take a minimum of two:		2-6
LAW 8764	Administrative Law	
LAW 8766	Land Use Law	
LAW 8773	Environmental Law	
Group B: Specialized Courses; must take a minimum of two:		2-8
LAW 8725	Water Law	
LAW 8725E	Energy Law	
LAW 8728	Law And The American Indian	
LAW 8765	Federal Jurisdiction	
LAW 8783P	Preservation of Land & Natural Resources	
LAW 8783	Federal Public Land & Resource Law	
LAW 8783P	Preservation of Land & Natural Resources	
LAW 8848R	State And Local Taxation	
LAW 8861	Real Estate Finance	
LAW 8863	Fair and Affordable Housing Seminar	
LAW 8870	Seminar in Educational Equality and the Law	
LAW 8875	Real Estate Transactions	
LAW 8898	Construction Law	
Group C: Elective and Interdisciplinary Courses; may count one additional course from Group C		1-6
LAW 8641R	Legislation	
LAW 8706	Class Actions and Multidistrict Litigation	
LAW 8734	Mediation	
LAW 8771	Public Finance	
LAW 8773C	Environmental Compliance Auditing and Permitting	
LAW 8773N	Negotiating SuperFund Settlements	
LAW 8773R	Environmental Law Internship	
LAW 8783B	Buffalo National River: Issues in National Park Law & Management	
LAW 8796	Economics And The Law	
LAW 8870R	Education Law: Government & Legal Aspects Of Education	
LAW 8900	Takings Law	
LAW 8909	State and Local Government Law in a Nutshell	
LAW 8921	Selected Projects in Law, Technology and Public Policy	
LAW 8925	Entrepreneurial Urban Development	
Any graduate level course in PUB-ADM		
Any graduate level course in RL-EST		

Important Note: Because the School is committed to keeping up with changes in the practice of law, the requirements for emphasis areas may change during the course of a student's enrollment at the School. The requirements at the time a student is granted admission into the emphasis area are the requirements that govern completion of the student's emphasis requirements. For possible revised requirements that will take effect with the next academic year, ask the emphasis area advisor for the most recent iteration of requirements. A course not listed above can meet emphasis area requirements if approved by the emphasis area advisors, Professors Julie Cheslik, John Ragsdale, and Irma Russell.

Scholarships

Scholarship information is available at the law school's website (<http://law.umkc.edu/prospective-students/financial-aid/scholarships/>) at <http://law.umkc.edu/prospective-students/financial-aid/scholarships/>.

Six-Year Law Scholars Program

For information on the six-year law scholars program, see the Pre-Law (p. 951) section of the catalog.

LL.M./M.P.A. Combined Degree Program

A combined LL.M./M.P.A. degree program between the School of Law and the Henry W. Bloch School of Business and Public Administration can be arranged with the approval of the Law School graduate studies committee.

Master of Laws Degree

Eligibility for the LL.M. Program

The School of Law offers two graduate study programs in law leading to the master of laws degree: the LL.M. (Taxation); and the LL.M. in Law (General). The Master of Laws permits students to emphasize their study in one of eight emphasis areas or in an areas of the student's choice based on the curriculum, subject to approval by the student's academic advisor and to availability of courses. An emphasis area is elective and is not required. Admission to the LL.M program in taxation is limited to applicants who have attained the juris doctor or equivalent degree from an approved law school and who have a law school GPA of at least 2.7 on a 4.0 scale.

Admission to the Master of Laws requires a degree in law which may be a bachelor's degree, an LL.B., a juris doctor or some other law degree from an accredited or similarly recognized institution. The Master of Laws (General) does not have a minimum GPA requirement, but academic performance is a significant consideration in the admissions decision. If the law degree was obtained at an institution where the language of instruction is not English, the applicant must also demonstrate English competency through either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) examinations and in an admissions interview. Successful applicants typically have a minimum TOEFL score of 550 on the paper exam or 80 on the Internet version, or a minimum IELTS score of 5.5, but not all students with scores that meet the minimum requirements will be admitted. In some cases, the School of Law will require additional English student at UMKC prior to the start of the LL.M. program as a condition of admission.

Admissions Process

An LL.M. admission application, application fee and official law school (if applicable) and undergraduate transcripts must be submitted for admission. In addition, the Master of Laws requires a personal statement and one letter of recommendation. International students whose first language is not English or whose law instruction was not in English also must provide an office TOEFL or IELTS score, literal English translations of academic credentials that are not in English, a copy of the biographical information page from the applicant's passport, and an original or certified copy of a financial statement proving financial ability to pay the first year of educational and living expenses. If a letter of support is provided for the financial proof, the letter must be notarized and must explain the relationship between the sponsor and the applicant. Documents that are not in English must be accompanied by an English translation. International students also must have an interview with the Director or Associate Director of the LL.M. as part of the application process.

There is no formal application deadline for the LL.M. program in taxation, but early submission of applications is recommended.

The application deadline for the Master of Laws is March 1 to allow time for international students to obtain their visas, but applications are accepted after the deadline subject to availability in the entering class.

Academic Rules and Regulations (p. 1666)

Scholarships (p. 1666)

Master of Laws Degree Requirements

1. Completion of 24 credit hours. For taxation, 18 of the 24 credit hours must be taken from the list of required and elective courses provided for each program. For the Masters of Laws, the student must take four required courses (unless an equivalent course was taken in an accredited U.S. J.D. program), and elective courses as required for the specific emphasis area or as approved by the academic advisor.
2. A cumulative GPA of at least 2.7 is required for the LL.M. (Taxation), and 2.0 for the Master of Laws.
3. Completion of all required courses. See the "Required Courses" for each program.
4. Enrollment in a minimum of 2-4 credit hours each semester.
5. For any of the emphasis areas in the LL.M. program, each student will be required to complete an internship. That internship will need to be approved as appropriate by the academic advisor.
6. Successful completion of all coursework (including thesis, if applicable) within three years from the beginning of the course of studies leading toward the degree.

Upon enrollment in the graduate program, a student is assigned a faculty advisor. In consultation with the advisor, the student develops a plan of study that meets the requirements for the degree in the program area selected. The advisor must approve enrollment in all courses. Post-J.D. study may be undertaken on a non-LL.M. basis. Applicants who wish to obtain an LL.M. degree but who do not have the required grade-point average may be permitted to enroll as a non-degree candidate. They may be considered for later admission to the degree program on the basis of performance in courses taken as a non-degree candidate. Additional information on the specific programs, can be found at the law school's website. (<http://law.umkc.edu/prospective-students/llm-program/>)

LL.M. Academic Rules and Regulations

Appeal of Grades,

The rules and regulations for the LL.M. programs in regard to appeal of grades is the same as specified for the Juris Doctor degree program.

Scholastic Probation and Dismissal

A student will be placed on scholastic probation whenever the student's GPA falls below 3.0 for the LL.M. (Urban Affairs), 2.7 for the LL.M. (Taxation) or when a student fails to earn at least a grade of Credit in one course for the LL.M. in Lawyering. For the LL.M. programs in taxation and urban affairs, a student on probation must attain the required cumulative GPA by the end of the next semester of coursework, or, unless an exception is made by the Graduate Studies Committee, the student will be dismissed from the program for academic deficiency. For the LL.M. in Lawyering, a student who fails to obtain a grade of at least Credit in a second course will be dismissed from the program for academic deficiency.

Attendance, Examinations and Grades, and Withdrawal from Courses

The rules and regulations for the LL.M. programs in regard to attendance; examinations and grades; and withdrawal from courses are the same as specified for the Juris Doctor degree programs, unless modified by the student's LL.M. advisor with the consent of the graduate studies committee.

LL.M. Scholarships

Scholarship information is available at the law school's website (<http://law.umkc.edu/prospective-students/financial-aid/scholarships/>) at <http://law.umkc.edu/prospective-students/financial-aid/scholarships/>.

Master of Laws

Student Learning Outcomes

Students graduating from this program will:

- 1. Law Skills. All LL.M. in Law students will acquire or improve the following legal skills: the ability to read and analyze legal texts, including cases; the ability to conduct legal research on U.S. law sources; the ability to spot legal issues raised by typical legal problems; the ability to apply the law to factual scenarios; the ability to analyze legal issues and predict likely judicial outcomes; the ability to communicate legal analysis clearly in writing and orally; the ability to interview witnesses and clients; the ability to counsel clients with legal analysis and legal options; the ability negotiate a legal issue or problem with an adversary; the ability to make persuasive arguments based on the combination of law and facts.
- 2. Legal English. For those students who were trained in law outside of the U.S. or another English-speaking, common law country, they will develop a working knowledge of key legal English terms used in law practice in the United States.
- 3. Knowledge of U.S. Law. Students in the LL.M. in Law program will learn or deepen their understanding of U.S. law generally and in particular sub-areas of U.S. law in one of the emphasis areas or such other area or combination of areas selected by the student with the approval of the academic advisor.

Required Coursework

Law 8730I Introduction to American Law & Culture

Law 8531I Common Law, Legal Writing and Analysis

Law 8532I Introduction to American Legal Skills

Law 8532R American Legal Research

Emphasis Areas

For an emphasis, a student must earn at least 12 credit hours towards the LL.M. in Law in courses that will support the emphasis area. Students also must complete a significant writing project, academic or professional, which may be undertaken in connection with a course, as an independent study, or in connection with a thesis.

The following emphasis areas are available: Business and Entrepreneurial Law (p. 1667), Child and Family Law (p. 1668), Criminal Law (p. 1669), Intellectual Property Law (p. 1669), International Law (p. 1670), Litigation (p. 1670), Tax Law (p. 1671), and U.S. Law (p. 1672). Some courses have been pre-approved as supporting these emphasis areas, and others may be approved by the student's academic advisor. Students are not required to select an emphasis area, but may choose a different course of study with approval of the academic advisor. Course schedules change on an annual basis, so all courses listed below may not be available in a particular year. The LL.M. student's academic advisor may approve additional courses not listed as counting towards an emphasis area. One course, Global Legal Systems, is listed for each emphasis area because students write papers to compare US law to the law of other countries, and that course can count towards an emphasis area if the paper topic supports the emphasis and is approved by the academic advisor.

Grading

The grading scale for students in the LL.M. in Law is as follows:

- A (including + and -)
- B (including + and -)
- C (including + and -)
- Credit
- No Credit

The A, B, C grades are given consistent with standards for J.D. students, and credits for courses taken from the J.D. curriculum may count towards a J.D. degree in the event of transfer to that program if the LL.M. student earns a grade of C or better. A “Credit” grade signifies that the student has not performed to the level required of a juris doctor student, but that the student has demonstrated basic competency on course objectives as those objectives relate to the LL.M. in Law. Courses in which a student earns a grade of “Credit” count towards the LL.M. in Law, but will not count towards a J.D. degree. A “No Credit” indicates that the student did not demonstrate basic competency on course objectives, and that course does not count towards fulfilling the graduation requirements for the LL.M. in Law degree.

Accommodation of English as a Second Language students.

Students who speak English as a second language may be given additional time on timed final exams in courses offered in the J.D. program. Students may be given up to 50% additional time depending on the English ability and the length and nature of English immersion experienced by the student, but may not be given any additional time depending on the circumstances to be evaluated by the Manager of Student Services in consultation with the Associate Dean of International Programs.

As an additional accommodation of ESL students, a professor in his or her discretion may allow additional work beyond that assigned generally in the course to allow a student in the LL.M. in Law to achieve a “Credit” grade. The professor is to indicate at the beginning of the course whether he or she will allow additional work, and what conditions or standards may apply. The nature, quality and length of any additional work is to be decided upon by the faculty member who is the instructor in the course. Examples of additional work include a paper, re-taking of an exam, an oral examination, field observations and reports.

Thesis

The LL.M. in Law does not require the completion of a thesis, but students may choose to undertake a thesis on a subject matter to be approved by the student’s academic advisor. The thesis must show substantial evidence of original research and should be at least 20 pages in length for each credit hour of thesis credit in which the student enrolls. Students may take thesis credit for up to a maximum of eight credit hours with approval of the academic advisor.

Master of Laws - Business and Entrepreneurial Law

Student Learning Outcomes

Students graduating from this program will:

- **Lawyering Skills.** All LL.M. in Lawyering students will acquire or improve the following legal skills: the ability to read and analyze legal texts, including cases; the ability to conduct legal research on U.S. law sources; the ability to spot legal issues raised by typical legal problems; the ability to apply the law to factual scenarios; the ability to analyze legal issues and predict likely judicial outcomes; the ability to communicate legal analysis clearly in writing and orally; the ability to interview witnesses and clients; the ability to counsel clients with legal analysis and legal options; the ability negotiate a legal issue or problem with an adversary; the ability to make persuasive arguments based on the combination of law and facts.
- **Legal English.** For those students who were trained in law outside of the U.S. or another English-speaking, common law country, they will develop a working knowledge of key legal English terms used in law practice in the United States.
- **Knowledge of U.S. Law.** Students in the LL.M. in Lawyering program will learn or deepen their understanding of U.S. law generally and in particular sub-areas of U.S. law in one of the emphasis areas or such other area or combination of areas selected by the student with the approval of the academic advisor.

Below is a partial list of courses that would support the emphasis area identified. Course schedules change on an annual basis, so all courses listed below may not be available in a particular year. The LL.M. student’s academic advisor may approve additional courses not listed as counting towards an emphasis area. One course, Global Legal Systems, is listed for each emphasis area because students write papers to compare US law to the law of other countries, and that course can count towards an emphasis area if the paper topic supports the emphasis and is approved by the academic advisor.

Code	Title	Credits
LAW 8643F	Advanced Legal Research: Foreign, Comparative and International Law	1
LAW 8707B	Advanced Legal Writing: Business Contract Drafting	2-3
LAW 8605	Antitrust And Fair Competition Law	2-3
LAW 8797	Business Torts and Unfair Competition	2-3
LAW 8501	Contracts I	3
LAW 8502	Contracts II	3
LAW 8721	Commercial Transactions	3
LAW 8725E	Energy Law	3
LAW 8757R	Entrepreneurial Law & Practice Clinic	2-3
LAW 8754	International Business Transactions	2-3
LAW 8918	International Commercial Arbitration	1
LAW 8837	Negotiating Mergers And Acquisitions	2-3
LAW 8758S	Securities Regulation	2-3
LAW 8720	Secured Transactions	3
LAW 8601L	Transactional Lawyering Skills Lab	1
LAW 8743	Global Legal Systems (with appropriate topic for paper)	1-3

Master of Laws - Child and Family Law

Student Learning Outcomes

Students graduating from this program will:

- **Lawyering Skills.** All LL.M. in Lawyering students will acquire or improve the following legal skills: the ability to read and analyze legal texts, including cases; the ability to conduct legal research on U.S. law sources; the ability to spot legal issues raised by typical legal problems; the ability to apply the law to factual scenarios; the ability to analyze legal issues and predict likely judicial outcomes; the ability to communicate legal analysis clearly in writing and orally; the ability to interview witnesses and clients; the ability to counsel clients with legal analysis and legal options; the ability negotiate a legal issue or problem with an adversary; the ability to make persuasive arguments based on the combination of law and facts.
- **Legal English.** For those students who were trained in law outside of the U.S. or another English-speaking, common law country, they will develop a working knowledge of key legal English terms used in law practice in the United States.
- **Knowledge of U.S. Law.** Students in the LL.M. in Lawyering program will learn or deepen their understanding of U.S. law generally and in particular sub-areas of U.S. law in one of the emphasis areas or such other area or combination of areas selected by the student with the approval of the academic advisor.

Below is a partial list of courses that would support the emphasis areas identified. Course schedules change on an annual basis, so all courses listed below may not be available in a particular year. The LL.M. student's academic advisor may approve additional courses not listed as counting towards an emphasis area. One course, Global Legal Systems, is listed for each emphasis area because students write papers to compare US law to the law of other countries, and that course can count towards an emphasis area if the paper topic supports the emphasis and is approved by the academic advisor.

Code	Title	Credits
LAW 8752S	Child & Family Services Clinic	2-3
LAW 8733	Children In The Law	2-3
LAW 8733E	Elder Law	2-3
LAW 8609	Ethical Issues In Family Law Representation	1-2
LAW 8751	Family Law	2-3
LAW 8908	Family Tax Law	1
LAW 8662F	Family Court Internship	1-3
LAW 8752G	Guardian Ad Litem Workshop	1-2
LAW 8733R	Juvenile Offenders & The Law	2-3
LAW 8751S	Family Violence	2-3
LAW 8738V	Immigration Law & The Violence Against Women Act	1
LAW 8743	Global Legal Systems (with appropriate topic for paper)	1-3

Master of Laws - Criminal Law

Student Learning Outcomes

Students graduating from this program will:

- **Lawyering Skills.** All LL.M. in Lawyering students will acquire or improve the following legal skills: the ability to read and analyze legal texts, including cases; the ability to conduct legal research on U.S. law sources; the ability to spot legal issues raised by typical legal problems; the ability to apply the law to factual scenarios; the ability to analyze legal issues and predict likely judicial outcomes; the ability to communicate legal analysis clearly in writing and orally; the ability to interview witnesses and clients; the ability to counsel clients with legal analysis and legal options; the ability negotiate a legal issue or problem with an adversary; the ability to make persuasive arguments based on the combination of law and facts.
- **Legal English.** For those students who were trained in law outside of the U.S. or another English-speaking, common law country, they will develop a working knowledge of key legal English terms used in law practice in the United States.
- **Knowledge of U.S. Law.** Students in the LL.M. in Lawyering program will learn or deepen their understanding of U.S. law generally and in particular sub-areas of U.S. law in one of the emphasis areas or such other area or combination of areas selected by the student with the approval of the academic advisor.

Below is a partial list of courses that would support the emphasis areas identified. Course schedules change on an annual basis, so all courses listed below may not be available in a particular year. The LL.M. student's academic advisor may approve additional courses not listed as counting towards an emphasis area. One course, Global Legal Systems, is listed for each emphasis area because students write papers to compare US law to the law of other countries, and that course can count towards an emphasis area if the paper topic supports the emphasis and is approved by the academic advisor.

Code	Title	Credits
LAW 8634	Criminal Law	3
LAW 8635	Criminal Procedure I	3
LAW 8636	Criminal Procedure II	2-3
LAW 8820	Criminal Trial Techniques	2
LAW 8822	Post Conviction Remedies	2-3
LAW 8635S	Wrongful Convictions	2-3
LAW 8635T	Wrongful Convictions II	2-3
LAW 8713P	Wrongful Convictions Clinic	1-6
LAW 8634I	International Criminal Law	1-2
LAW 8831R	International Human Rights Law	1-3
LAW 8743	Global Legal Systems (with appropriate topic for paper)	1-3

Master of Laws - Intellectual Property Law

Student Learning Outcomes

Students graduating from this program will:

- **Lawyering Skills.** All LL.M. in Lawyering students will acquire or improve the following legal skills: the ability to read and analyze legal texts, including cases; the ability to conduct legal research on U.S. law sources; the ability to spot legal issues raised by typical legal problems; the ability to apply the law to factual scenarios; the ability to analyze legal issues and predict likely judicial outcomes; the ability to communicate legal analysis clearly in writing and orally; the ability to interview witnesses and clients; the ability to counsel clients with legal analysis and legal options; the ability negotiate a legal issue or problem with an adversary; the ability to make persuasive arguments based on the combination of law and facts.
- **Legal English.** For those students who were trained in law outside of the U.S. or another English-speaking, common law country, they will develop a working knowledge of key legal English terms used in law practice in the United States.
- **Knowledge of U.S. Law.** Students in the LL.M. in Lawyering program will learn or deepen their understanding of U.S. law generally and in particular sub-areas of U.S. law in one of the emphasis areas or such other area or combination of areas selected by the student with the approval of the academic advisor.

Below is a partial list of courses that would support the emphasis areas identified. Course schedules change on an annual basis, so all courses listed below may not be available in a particular year. The LL.M. student's academic advisor may approve additional courses not listed as counting towards an emphasis area. One course, Global Legal Systems, is listed for each emphasis area because students write papers to compare US law to the law of other countries, and that course can count towards an emphasis area if the paper topic supports the emphasis and is approved by the academic advisor.

Code	Title	Credits
LAW 8797	Business Torts and Unfair Competition	2-3
LAW 8798	Copyright Law	2-3
LAW 8716	Cyberlaw	2-3
LAW 8808	Intellectual Property Law	2-3
LAW 8910	Intellectual Property Clinic	2-3
LAW 8905	Intellectual Property Litigation	2
LAW 8808S	Intellectual Property Remedies	2-3
LAW 8808L	Intellectual Property Licensing	2-3
LAW 8882	Patent Law	2-3
LAW 8882R	Patent Prosecution	2-3
LAW 8743	Global Legal Systems (with appropriate topic for paper)	1-3

Master of Laws - International Law

Student Learning Outcomes

Students graduating from this program will:

- **Lawyering Skills.** All LL.M. in Lawyering students will acquire or improve the following legal skills: the ability to read and analyze legal texts, including cases; the ability to conduct legal research on U.S. law sources; the ability to spot legal issues raised by typical legal problems; the ability to apply the law to factual scenarios; the ability to analyze legal issues and predict likely judicial outcomes; the ability to communicate legal analysis clearly in writing and orally; the ability to interview witnesses and clients; the ability to counsel clients with legal analysis and legal options; the ability negotiate a legal issue or problem with an adversary; the ability to make persuasive arguments based on the combination of law and facts.
- **Legal English.** For those students who were trained in law outside of the U.S. or another English-speaking, common law country, they will develop a working knowledge of key legal English terms used in law practice in the United States.
- **Knowledge of U.S. Law.** Students in the LL.M. in Lawyering program will learn or deepen their understanding of U.S. law generally and in particular sub-areas of U.S. law in one of the emphasis areas or such other area or combination of areas selected by the student with the approval of the academic advisor.

Below is a partial list of courses that would support the emphasis areas identified. Course schedules change on an annual basis, so all courses listed below may not be available in a particular year. The LL.M. student's academic advisor may approve additional courses not listed as counting towards an emphasis area. One course, Global Legal Systems, is listed for each emphasis area because students write papers to compare US law to the law of other countries, and that course can count towards an emphasis area if the paper topic supports the emphasis and is approved by the academic advisor.

Code	Title	Credits
LAW 8643F	Advanced Legal Research: Foreign, Comparative and International Law	1
LAW 8702	Conflict of Laws	2-3
LAW 8735R	Law Of The European Union (Part I)	1
LAW 8737R	Law Of The European Union (Part II)	2
LAW 8754	International Business Transactions	2-3
LAW 8634I	International Criminal Law	1-2
LAW 8831R	International Human Rights Law	1-3
LAW 8753	International Law	2-3
LAW 8738	Immigration Law And Process	2-3
LAW 8832	Law Of International Trade And Finance	3
LAW 8883	Seminar In National Security Law	2-3

Master of Laws - Litigation

Student Learning Outcomes

Students graduating from this program will:

- **Lawyering Skills.** All LL.M. in Lawyering students will acquire or improve the following legal skills: the ability to read and analyze legal texts, including cases; the ability to conduct legal research on U.S. law sources; the ability to spot legal issues raised by typical legal problems; the ability to apply the law to factual scenarios; the ability to analyze legal issues and predict likely judicial outcomes; the ability to communicate

legal analysis clearly in writing and orally; the ability to interview witnesses and clients; the ability to counsel clients with legal analysis and legal options; the ability negotiate a legal issue or problem with an adversary; the ability to make persuasive arguments based on the combination of law and facts.

- Legal English. For those students who were trained in law outside of the U.S. or another English-speaking, common law country, they will develop a working knowledge of key legal English terms used in law practice in the United States.
- Knowledge of U.S. Law. Students in the LL.M. in Lawyering program will learn or deepen their understanding of U.S. law generally and in particular sub-areas of U.S. law in one of the emphasis areas or such other area or combination of areas selected by the student with the approval of the academic advisor.

Below is a partial list of courses that would support the emphasis areas identified. Course schedules change on an annual basis, so all courses listed below may not be available in a particular year. The LL.M. student's academic advisor may approve additional courses not listed as counting towards an emphasis area. One course, Global Legal Systems, is listed for each emphasis area because students write papers to compare US law to the law of other countries, and that course can count towards an emphasis area if the paper topic supports the emphasis and is approved by the academic advisor.

Code	Title	Credits
LAW 8747	Introduction to Appellate Advocacy	1
LAW 8748	Appellate Advocacy - Ellison Moot Court Competition	2
LAW 8850	Applied Evidence	1-3
LAW 8521	Civil Procedure – Pleadings, Motions, and Related Matters	3
LAW 8522	Civil Procedure - Jurisdiction	2-3
LAW 8791	Civil Rights	2-3
LAW 8706	Class Actions and Multidistrict Litigation	2-3
LAW 8702	Conflict of Laws	2-3
LAW 8621	Evidence	3
LAW 8662	Federal Court Internship	2-3
LAW 8765	Federal Jurisdiction	2-3
LAW 8711	Remedies	2-3
LAW 8700	Trial Advocacy I	2
LAW 8703	Trial Advocacy II	2-3
LAW 8743	Global Legal Systems (with appropriate topic for paper)	1-3

Master of Laws - Tax Law

Student Learning Outcomes

Students graduating from this program will:

- Lawyering Skills. All LL.M. in Lawyering students will acquire or improve the following legal skills: the ability to read and analyze legal texts, including cases; the ability to conduct legal research on U.S. law sources; the ability to spot legal issues raised by typical legal problems; the ability to apply the law to factual scenarios; the ability to analyze legal issues and predict likely judicial outcomes; the ability to communicate legal analysis clearly in writing and orally; the ability to interview witnesses and clients; the ability to counsel clients with legal analysis and legal options; the ability negotiate a legal issue or problem with an adversary; the ability to make persuasive arguments based on the combination of law and facts.
- Legal English. For those students who were trained in law outside of the U.S. or another English-speaking, common law country, they will develop a working knowledge of key legal English terms used in law practice in the United States.
- Knowledge of U.S. Law. Students in the LL.M. in Lawyering program will learn or deepen their understanding of U.S. law generally and in particular sub-areas of U.S. law in one of the emphasis areas or such other area or combination of areas selected by the student with the approval of the academic advisor.

Below is a partial list of courses that would support the emphasis areas identified. Course schedules change on an annual basis, so all courses listed below may not be available in a particular year. The LL.M. student's academic advisor may approve additional courses not listed as counting towards an emphasis area. One course, Global Legal Systems, is listed for each emphasis area because students write papers to compare US law to the law of other countries, and that course can count towards an emphasis area if the paper topic supports the emphasis and is approved by the academic advisor.

Code	Title	Credits
LAW 8888A	Partnership Taxation II	1-3
LAW 8886	Corporate Taxation I	2-3

LAW 8887	Corporate Taxation II	3
LAW 8892R	Estate and Gift Tax	2-3
LAW 8908	Family Tax Law	1
LAW 8552	Federal Taxation	3
LAW 8843	Federal Income Taxation Of Estates And Trusts	2
LAW 8888R	Partnership Taxation I	2-3
LAW 8889		2-3
LAW 8848R	State And Local Taxation	2-3
LAW 8603	Taxation Of Business Organization	2-3
LAW 8834	Tax Procedure	2
LAW 8612R	Tax Planning With Life Insurance	1
LAW 8838R	Tax Practicum I	1-3
LAW 8743	Global Legal Systems (with appropriate topic for paper)	1-3

Master of Laws - U.S. Law

Student Learning Outcomes

Students graduating from this program will:

- **Lawyering Skills.** All LL.M. in Lawyering students will acquire or improve the following legal skills: the ability to read and analyze legal texts, including cases; the ability to conduct legal research on U.S. law sources; the ability to spot legal issues raised by typical legal problems; the ability to apply the law to factual scenarios; the ability to analyze legal issues and predict likely judicial outcomes; the ability to communicate legal analysis clearly in writing and orally; the ability to interview witnesses and clients; the ability to counsel clients with legal analysis and legal options; the ability negotiate a legal issue or problem with an adversary; the ability to make persuasive arguments based on the combination of law and facts.
- **Legal English.** For those students who were trained in law outside of the U.S. or another English-speaking, common law country, they will develop a working knowledge of key legal English terms used in law practice in the United States.
- **Knowledge of U.S. Law.** Students in the LL.M. in Lawyering program will learn or deepen their understanding of U.S. law generally and in particular sub-areas of U.S. law in one of the emphasis areas or such other area or combination of areas selected by the student with the approval of the academic advisor.

Below is a partial list of courses that would support the emphasis areas identified. Course schedules change on an annual basis, so all courses listed below may not be available in a particular year. The LL.M. student's academic advisor may approve additional courses not listed as counting towards an emphasis area. One course, Global Legal Systems, is listed for each emphasis area because students write papers to compare US law to the law of other countries, and that course can count towards an emphasis area if the paper topic supports the emphasis and is approved by the academic advisor.

Code	Title	Credits
U.S. Law (Subjects on the bar exam)		
LAW 8601	Business Organizations	3
LAW 8521	Civil Procedure – Pleadings, Motions, and Related Matters	3
LAW 8522	Civil Procedure - Jurisdiction	2-3
LAW 8631	Constitutional Law	4
LAW 8501	Contracts I	3
LAW 8502	Contracts II	3
LAW 8634	Criminal Law	3
LAW 8635	Criminal Procedure I	3
LAW 8636	Criminal Procedure II	2-3
LAW 8611	Estates And Trusts	3-4
LAW 8621	Evidence	3
LAW 8633	First Amendment Law	2-3
LAW 8541	Property I	3
LAW 8542	Property II	3
LAW 8720	Secured Transactions	3
LAW 8735	Seminar In Famous Trials	2-3

LAW 8511	Torts	3
LAW 8743	Global Legal Systems (with appropriate topic for paper)	1-3

Master of Laws in General Law

Student Learning Outcomes

Students graduating from this program will:

- 1. Law Skills. All LL.M. in Law students will acquire or improve the following legal skills: the ability to read and analyze legal texts, including cases; the ability to conduct legal research on U.S. law sources; the ability to spot legal issues raised by typical legal problems; the ability to apply the law to factual scenarios; the ability to analyze legal issues and predict likely judicial outcomes; the ability to communicate legal analysis clearly in writing and orally; the ability to interview witnesses and clients; the ability to counsel clients with legal analysis and legal options; the ability negotiate a legal issue or problem with an adversary; the ability to make persuasive arguments based on the combination of law and facts.
- 2. Legal English. For those students who were trained in law outside of the U.S. or another English-speaking, common law country, they will develop a working knowledge of key legal English terms used in law practice in the United States.
- 3. Knowledge of U.S. Law. Students in the LL.M. in Law program will learn or deepen their understanding of U.S. law generally and in particular sub-areas of U.S. law in one of the emphasis areas or such other area or combination of areas selected by the student with the approval of the academic advisor.

Required Coursework

Law 8730I Introduction to American Law & Culture

Law 8531I Common Law, Legal Writing and Analysis

Law 8532I Introduction to American Legal Skills

Law 8532R American Legal Research

Emphasis Areas

For an emphasis, a student must earn at least 12 credit hours towards the LL.M. in Law in courses that will support the emphasis area. Students also must complete a significant writing project, academic or professional, which may be undertaken in connection with a course, as an independent study, or in connection with a thesis.

The following emphasis areas are available: Business and Entrepreneurial Law (p. 1667), Child and Family Law (p. 1668), Criminal Law (p. 1669), Intellectual Property Law (p. 1669), International Law (p. 1670), Litigation (p. 1670), Tax Law (p. 1671), and U.S. Law (p. 1672). Some courses have been pre-approved as supporting these emphasis areas, and others may be approved by the student's academic advisor. Students are not required to select an emphasis area, but may choose a different course of study with approval of the academic advisor. Course schedules change on an annual basis, so all courses listed below may not be available in a particular year. The LL.M. student's academic advisor may approve additional courses not listed as counting towards an emphasis area. One course, Global Legal Systems, is listed for each emphasis area because students write papers to compare US law to the law of other countries, and that course can count towards an emphasis area if the paper topic supports the emphasis and is approved by the academic advisor.

Grading

The grading scale for students in the LL.M. in Law is as follows:

- A (including + and -)
- B (including + and -)
- C (including + and -)
- Credit
- No Credit

The A, B, C grades are given consistent with standards for J.D. students, and credits for courses taken from the J.D. curriculum may count towards a J.D. degree in the event of transfer to that program if the LL.M. student earns a grade of C or better. A "Credit" grade signifies that the student has not performed to the level required of a juris doctor student, but that the student has demonstrated basic competency on course objectives as those objectives relate to the LL.M. in Law. Courses in which a student earns a grade of "Credit" count towards the LL.M. in Law, but will not count towards a J.D. degree. A "No Credit" indicates that the student did not demonstrate basic competency on course objectives, and that course does not count towards fulfilling the graduation requirements for the LL.M. in Law degree.

Accommodation of English as a Second Language students.

Students who speak English as a second language may be given additional time on timed final exams in courses offered in the J.D. program. Students may be given up to 50% additional time depending on the English ability and the length and nature of English immersion experienced by the student, but may not be given any additional time depending on the circumstances to be evaluated by the Manager of Student Services in consultation with the Associate Dean of International Programs.

As an additional accommodation of ESL students, a professor in his or her discretion may allow additional work beyond that assigned generally in the course to allow a student in the LL.M. in Law to achieve a "Credit" grade. The professor is to indicate at the beginning of the course whether he or she will allow additional work, and what conditions or standards may apply. The nature, quality and length of any additional work is to be decided upon by the faculty member who is the instructor in the course. Examples of additional work include a paper, re-taking of an exam, an oral examination, field observations and reports.

Thesis

The LL.M. in Law does not require the completion of a thesis, but students may choose to undertake a thesis on a subject matter to be approved by the student's academic advisor. The thesis must show substantial evidence of original research and should be at least 20 pages in length for each credit hour of thesis credit in which the student enrolls. Students may take thesis credit for up to a maximum of eight credit hours with approval of the academic advisor.

Master of Laws in Taxation

Student Learning Outcomes

Students graduating from this program will:

- 1.KNOWLEDGE: Graduates be able to demonstrate in-depth knowledge of tax law; the policies underlying systems of taxation and procedures relating to the administration of tax laws and the resolution of disputes with taxing authorities; and the context of tax rules, so that analysis of uncertain areas of the law can be aided by an appreciation of underlying theory and policy
- 2.SKILLS: Graduates will be able to research and analyze tax issues. Students will be able to read carefully and comprehend intricate statutes and regulations, exercising the patience and diligence needed to work with detailed definitions, cross-references and exceptions to general rules. Students will have mastered issue-spotting and problem-solving skills through detailed analysis of tax problems. Students will have demonstrated an ability to communicate tax advice to in clear terms understandable to clients and non-tax professionals.
- ETHICS: Students will demonstrate sensitivity to ethical obligations associated with giving tax advice, and will demonstrate knowledge of the statutory, regulatory and common law anti-abuse rules.

Required Courses

Code	Title	Credits
LAW 8834	Tax Procedure	2
or LAW 8834R	Tax Clinic	
LAW 8838R	Tax Practicum I	2
or LAW 8746R	Independent Study	
LAW 8886	Corporate Taxation I	2-3
LAW 8888R	Partnership Taxation I	3
LAW 8893R	Taxation Of Property Transactions	2-3
LAW 8889R	Subchapter S Taxation	1
Total Credits		12-14

Elective Courses

Code	Title	Credits
LAW 8614R	Estate Planning For Retirement Plan Benefits	1
LAW 8615R	Estate Planning For Charitable Giving	1
LAW 8617R	Elder Law For Estate Planners	1
LAW 8746R	Independent Study	0.5-3
LAW 8838L	Legal Accounting	1
LAW 8838R	Tax Practicum I	1-3
LAW 8838L	Legal Accounting	1
LAW 8838R	Tax Practicum I	1-3

LAW 8843	Federal Income Taxation Of Estates And Trusts	2
LAW 8845	Deferred Compensation	2-3
LAW 8848R	State And Local Taxation	2-3
LAW 8874	Tax-Exempt Organizations	2
LAW 8888A	Partnership Taxation II	1-3
LAW 8892R	Taxation Of Estates, Gifts And Trusts	2-3
LAW 8908	Family Tax Law	1

In addition to those approved electives, the Director of the Graduate Tax Program may approve a post-J.D. Tax, LL.M. student taking up to 6 credit hours of other elective courses offered at the UMKC School of Law or other UMKC graduate or professional schools, without the necessity of obtaining Graduate Studies Committee approval, if, in the Director's judgment, such courses are graduate level courses suitable to prepare the student for a tax-sensitive practice area (e.g., business planning, estate planning or real estate development). The following courses are currently pre-approved for purposes of that option (but students may petition the Director of the Graduate Tax Program for approval of other courses if the Director finds such courses appropriate under the standard set forth in the previous sentence).

Code	Title	Credits
LAW 8757	Business Planning	2-3
LAW 8601R	Doing Business In Ireland, Part I	1
LAW 8757R	Entrepreneurial Law & Practice Clinic	2-3
LAW 8638R	Entrepreneurial Lawyering: Solo And Small Firm Practice	3
LAW 8771	Public Finance	2-3
LAW 8754	International Business Transactions	2-3
LAW 8757N	Entrepreneurship & New Venture Creation	3
LAW 8614	Estate Planning and Drafting	1-4
LAW 8875L	Legal Context of Real Estate Decision Making	1-3
LAW 8837	Negotiating Mergers And Acquisitions	2-3
LAW 8861	Real Estate Finance	2-4
LAW 8875	Real Estate Transactions	2-3
LAW 8757L	Special Topics In Entrepreneurial Lawyering	2
LAW 8832	Law Of International Trade And Finance	3
LAW 8915	Social Venture Creation	1
LAW 8757V	Social Entrepreneurship Ventures	1
LAW 8874	Tax-Exempt Organizations	2
LAW 8614R	Estate Planning For Retirement Plan Benefits	1

Special Rules for Application of Courses Taken at Other Law Schools Toward Tax, LL.M. Degree

The Director of the Graduate Tax Law Program may allow Tax, LL.M. candidates to count towards degree requirements up to 6 credit hours of tax courses taken as J.D. or LL.M. students at other law schools so long as (i) they are, in the judgment of both the Director and the applicable instructor here, of comparable coverage and quality to the corresponding required or elective tax courses eligible or required for LL.M credit at UMKC and (ii) the student earned a grade of "B" or higher in such course(s). A student seeking to have one or more courses taken at another law school counted toward the UMKC Tax, LL.M. degree requirements under this provision must petition the Director of the Graduate Tax Program for such treatment and provide the Director with the necessary information to determine if such treatment is in order (this would normally involve reviewing the student's transcript and the syllabus and assignments list for the subject course(s) taken elsewhere).

Combined J.D./LL.M. (Taxation) Degree Program

Qualified UMKC J.D. students will be permitted to apply up to 10 credit hours (12 with the permission of the Graduate Studies Committee) of UMKC graduate courses approved for this purpose toward an LL.M. (Taxation) degree as well as toward a J.D. degree. This will allow students to earn the Tax, LL.M. on an accelerated basis.

This "combined" J.D./Tax, LL.M program is available to qualified students who begin their legal studies at the UMKC School of Law, and to students who transfer to the UMKC School of Law or who attend it as visiting/certification students during their fifth or sixth semester of law study. With respect to students who take some courses at a different law school and some at UMKC School of Law (as a transfer or visiting/certification student) in no event will more than a total of 12 credit hours toward the Tax, LL.M be awarded for courses approved under "Special Rules for Application of Courses Taken at Other Law Schools Toward Tax, LL.M Degree" above and the Combined J.D./Tax, LL.M program. For further information on admissions and combined degree requirements, contact the Director of the Graduate Tax Law Program.

School of Law Administrative Rules

Inclement Weather Policy

In the event of inclement weather and a determination by the University that classes are to be cancelled and/or closed, the University will provide for immediate distribution of information through UMKC Alert!, the University's mass notification system program, including: text messaging, personal and UMKC voice mail, personal and UMKC email, and pagers; mass email/voicemail notice to UMKC Everyone (faculty, staff & students); and postings on UMKC home page (<http://umkc.edu/>), Law School Intranet a/k/a the Rooniverse (<https://mylaw.umkc.edu>); and UMKCA!ert! (<http://www.umkc.edu/umkcalert/>). Faculty/staff and students can opt to have the emergency notification, which includes school closing and class cancellations sent by text or voice mail to their personal phones. The link to the emergency notification FAQ page is http://www.umkc.edu/umkcalert/umkcalert_faq.asp.

Alcoholic Beverages

It is a violation of University regulations to use, sell, purchase or serve alcoholic beverages on University property unless specifically approved by the Vice Chancellor for Student Affairs and Enrollment Management.

Student groups desiring approval must request the approval at least two weeks prior to the date of the intended use. Request forms are available on the All Organizations Council Site on the Law School Intranet a/k/a RooLaw (<https://roolaw.umkc.edu>).

Parking

The parking lot and driveway on the north side of the law building are for faculty and staff parking. Violators deprive faculty and staff of parking spots they pay for and violators will be ticketed and their vehicles may be towed or locked by a "boot." Students must register their vehicles at UMKC Parking Operations and pay for a student parking permit. Student permits are valid only in student parking lots. Parking regulations are enforced Monday through Friday, 6 a.m.-10 p.m. throughout the year, including the time between semesters. The following link pertains to parking operations: <http://www.umkc.edu/adminfinance/parking/>.

School of Management, Henry W. Bloch

Bloch School (<http://www.bloch.umkc.edu/>)
5110 Cherry Street
(816) 235-2215
bloch@umkc.edu
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Mailing Address

University of Missouri-Kansas City
Henry W. Bloch School of Management
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Dean:

Brian Klaas

Executive Associate Dean:

Brian Anderson

Associate Dean:

Sidne Ward

Chair, Department of Accountancy:

Leigh Salzsieder

Chair, Department of Global Entrepreneurship:

Jeff Hornsby

Chair, Department of Finance:

John Clark

Interim Chair, Department of Management:

Jeff Hornsby

Chair, Department of Marketing & Supply Chain Management:

Kalpesh Desai

Chair, Department of Public Affairs:

Arif Ahmed

Director, Executive M.B.A. and M.P.A. Programs:

Scott Helm

Director, Lewis White Real Estate Center:

Charles Connely

Coordinator, Doctoral Studies in Public Affairs and Administration:

Arif Ahmed

Coordinator, Doctoral Studies in Entrepreneurship and Innovation:

Brian Anderson

Degree Programs

The Bloch School offers the degrees of Bachelor of Business Administration (B.B.A.); Bachelor of Science in Accounting (B.S.A.); Master of Business Administration (M.B.A.); Master of Public Administration (M.P.A.); Master of Science in Accounting (M.S.A.); Master of Science in Finance (M.S.F.); and Master of Science in Entrepreneurial Real Estate (M.S.E.R.E.). Within the M.B.A. program there are Executive M.B.A. (E.M.B.A.), and Professional M.B.A. (P.M.B.A.) offerings. Additionally, the School has two joint degree programs with the UMKC School of Law, the J.D./M.B.A. and the J.D./M.P.A. degrees, participates in the Interdisciplinary Ph.D. program and offers a Ph.D. in Entrepreneurship & Innovation. The Bloch School also offers business and entrepreneurship minors and a Graduate Certificate in Data Analytics. The Department of Public Affairs also has a Graduate Certificate in Nonprofit Management and Innovation and a Graduate Certificate in Urban Policy and Management.

History

The University has offered business courses since 1933. In 1953, with the support and encouragement of the Kansas City community, the School of Business Administration was established. Since that time, the Bloch School has grown to a student body of 2000 and a faculty of approximately 50 professional educators. In January 1988, the School was renamed for Henry W. Bloch, co-founder of H&R Block, and moved into a newly expanded building. In 2010, the School officially changed its name to the Henry W. Bloch School of Management to reflect our differentiation as a school that integrates business management, public administration and the infusion of a global, innovative and entrepreneurial mindset. In the fall of 2013, a second building was added to the Bloch School, the Bloch Executive Hall for Entrepreneurship and Innovation.

Vision

We are Kansas City's business school, partnering with for-profit, non-profit, and public sector stakeholders to promote inclusive prosperity.

Mission

We leverage our partnerships and connectivity to promote experiential learning, encourage career and entrepreneurial success, provide access to thought leaders, and develop talent through distinctive education experiences.

Values

Following the inspiration offered by Mr. Henry W. Bloch, our work is guided by our commitment to:

- Entrepreneurial thinking
- Civic mindedness and a community orientation
- Inclusiveness and respect for diversity
- Global awareness
- Integrity
- Working hard, persevering, and making a difference

Accreditation

The Bloch School is accredited by AACSB International - The Association to Advance Collegiate Schools of Business and by the Network of Schools of Public Policy, Affairs, and Public Administration (NASPAA).

Advising and Student Services

Staff in the Student Services Office, room 115 of Bloch Heritage Hall, assist undergraduate students in planning programs and registering for courses. Freshmen and junior students must be advised each semester and advising is required for new students and students on probation. Students pursuing the M.B.A., M.S.A., M.S.E.R.E., and M.S.F. degrees are advised by staff in the Graduate Programs Office, room 418 of the Bloch Executive Hall.

Advising information can be found at <https://bloch.umkc.edu/students/advising/>. Faculty of the School's six curricular departments are also available to discuss students' programs. Students in the M.P.A. programs are advised by departmental faculty with support from the Graduate Programs Office.

Scholarships

The Bloch School offers numerous scholarships for students enrolled in Bloch degree programs. Information and application links are available on the Bloch School Web site at <https://bloch.umkc.edu/students/paying-for-school/>. March 1 is the deadline for the majority of these scholarships, which are awarded for the following academic year. For information on loans, grants and other financial aid, contact the UMKC Student Financial Aid and Scholarships Office.

Internships

Students who want to experience work opportunities while in school are encouraged to take their learning beyond the classroom through internships. For-credit internships typically carry one to three hours of credit. To earn academic credit, students should identify a Bloch School faculty member qualified and willing to supervise an internship, complete an internship form available on the Bloch School Web site at <https://bloch.umkc.edu/students/policies-and-forms/> and enroll in an approved internship course. Interested students should contact the Bloch Career Center for internship opportunities. International students must also apply through the International Student Affairs Office to receive approval to work off campus.

International Study Abroad

Bloch School students have the opportunity to study abroad for credit. Students may study for a week, a semester, or an academic year. Students who are interested in study abroad opportunities should contact the Bloch School Student Services Office or the UMKC Study Abroad and Global Engagement Office.

Career Support

The Bloch Career Center is a full-service office working with students, alumni and employers. Their staff are committed to helping Bloch students connect with careers they care about and collaborate with Kansas City's top employers to create opportunities for Bloch School students.

Faculty

Arif Ahmed^{2,3}; associate professor of health administration, and chair, Department of Public Affairs; B.D.S. (Dhaka Dental College); M.S.P.H., Ph.D. (University of Illinois - Urbana-Champaign).

M. Ishrat N Ali^{2,3}; assistant professor of global entrepreneurship, and innovation; B.S., M.S. (University of Dhaka); M.B.A., Ph.D. (Darden School of Business, University of Virginia).

Brian Anderson^{2,3}; associate professor of global entrepreneurship, and Ph.D. program director; B.S. (University of Colorado at Denver); M.S. (University of Denver); Ph.D. (Indiana University)

Barbara A. Bichelmeyer²; provost, UMKC, and professor of management; B.S., B.A., Ph.D. (University of Kansas).

Erin E. Blocher¹; assistant teaching professor, B.A., M.A. (University of Kansas)

Bryan C. Boots; assistant teaching professor, and managing director for venture creation, Regnier Institute for Entrepreneurship and Innovation; B.S., M.S. (Kansas State University); M.B.A. (University of Missouri-Kansas City).

Bonnie Brown²; assistant professor of accountancy; B.S., M.S. (Appalachian State University); Ph.D. (University of Central Florida); C.P.A.

Ranjit Christopher²; assistant professor of marketing; B.E. (University of Madras); Ph.D. (Arizona State University).

Kimberly Church²; assistant professor of accounting; B.B.A. (Pittsburg State University); M.A. (Kansas State University); Ph.D. (University of Arkansas).

John Clark^{2,3}; associate professor of finance and chair, Department of Finance; B.A., M.A., Ph.D. (University of Alabama).

Charles Connely; associate teaching professor, and managing director, Lewis White Real Estate Center; B.B.A., M.B.A. (University of Missouri - Kansas City); C.C.I.M., C.F.P., C.P.M.

James R. DeLisle; academic director of the Lewis White Real Estate Center, and associate professor of real estate; B.B.A., M.S., Ph.D. (University of Wisconsin).

Kalpesh Kaushik Desai; professor of marketing and supply chain management, and chair, Department of Marketing and Supply Chain Management; B.Commerce (Bombay University); M.B.A. (Jamnalal Bajaj Inst. of Mgmt. Studies, India); Ph.D. (University of Texas at Austin).

David Donnelly²; professor of accounting; B.S.B.A., M.B.A. (Kansas State University); Ph.D. (University of Illinois); C.P.A.

Christopher Garmon²; assistant professor of public affairs; B.A. (New College of Florida); Ph.D. (University of Florida).

Phillip Gonsher, assistant director of mentor programs, Regnier Institute for Entrepreneurship and Innovation, and associate teaching professor of entrepreneurship; B.A. (Ottawa University); M.A. (Webster University); M.L.A. (Baker University).

Hye-Sung Han^{2,3}; assistant professor in urban affairs; B.A., M.A. (Seoul National University); MCP (Massachusetts Institute of Technology); Ph.D. (University of North Carolina at Chapel Hill).

Andy Heise; assistant director, Regnier Institute for Entrepreneurship and Innovation, and assistant teaching professor; B.M., M.B.A. (Millikin University).

Scott Helm; associate teaching professor, director of E.M.B.A., director of E.M.P.A., and associate director of the Midwest Center for Nonprofit Leadership; B.A. (Washington College); M.P.A., I.Ph.D. (University of Missouri-Kansas City).

Jeffrey S. Hornsby^{2,3}; professor of entrepreneurship, and innovation/Henry W. Bloch Missouri Endowed Chair in entrepreneurship and innovation, director, Regnier Institute for Entrepreneurship and Innovation, and chair, Department of Global Entrepreneurship and Innovation; B.A. (Miami University, Ohio); M.A. (Western Kentucky University); Ph.D. (Auburn University).

David Jarrett; visiting assistant professor; B.A. (University of North Carolina at Chapel Hill); M.B.A. (University of Virginia).

Jeff S. Johnson; associate professor of marketing; B.S., M.B.A., Ph.D. (University of Nebraska-Lincoln).

Jae C. Jung^{2,3}; associate professor of international business; B.A., M.B.A. (Korea University); Ph.D. (University of Western Ontario).

William R. Keeton; assistant teaching professor; B.A., M.A. (Yale University); Ph.D. (Massachusetts Institute of Technology).

David Kenner; instructor; B.A. (University of Kansas); J.D. (Columbia University).

Brian S. Klaas²; dean, Henry W. Bloch School of Management, and professor of management; B.S., M.S. (Illinois State University); Ph.D. (University of Wisconsin-Madison).

Julie K. Kline; assistant teaching professor; B.S. (Kansas State University); M.S.A. (University of Missouri-Kansas City); C.P.A.

David Kuipers; associate professor of finance; B.S. (Iowa State University); M.S. (University of Houston-Clear Lake); Ph.D. (University of Missouri-Columbia).

Atul Kulkarni; assistant professor of marketing; B. Engg. (Pune University); M.S., M.B.A., Ph.D. (University of Illinois at Urbana-Champaign).

Robyn M. Martin; assistant teaching professor; B.B.A., M.B.A. (University of Missouri-Kansas City).

Alexandria Krause Matlack; instructor; B.A. (University of Nebraska-Omaha); M.S. (New York University).

Nathan Mauck^{2,3}; associate professor of finance; B.S. (Kansas State University); Ph.D. (Florida State University).

Anthony Mendes; assistant teaching professor; B.A., M.S. (Central Missouri State University); M.B.A. (Rockhurst University); Ph.D. (University of Missouri-Kansas City).

Forest E. Myers; instructor; M.A., Ph.D. (Kansas State University).

Brent Never^{2,3}; associate professor of nonprofit leadership; B.A. (Connecticut College); Ph.D. (Indiana University).

David Nicol; assistant teaching professor; B.Sc. (Ohio State University); M.A. (Case Institute of Technology), Ph.D. (Case Western Reserve University).

Mark Parry^{2,3}; Ewing Marion Kauffman/Missouri Endowed Chair in Entrepreneurial Leadership, and professor of marketing; B.A. (Metropolitan State College); M.A. (University of Texas-Arlington); Ph.D. (University of Texas-Dallas).

Nicholas Carl Peroff; professor emeritus and emeritus James C. Olson Professor of Public Administration; B.S., M.A., Ph.D. (University of Wisconsin-Madison).

Stephen W. Pruitt; Arvin Gottlieb/Missouri Endowed Chair in Business Economics and Finance; B.S. (Purdue University); M.B.A. (Ohio State University); Ph.D. (Florida State University).

David O. Renz; professor emeritus and director, Midwest Center for Nonprofit Leadership; B.S., M.A., Ph.D. (University of Minnesota).

Seyed Roozmehr Safi^{2,3}; assistant professor of management information systems; B.S. (Azad University); M.B.A. (Sharif University of Technology); Ph.D. (Texas Tech University).

Leigh Salzsieder; associate professor of accounting, and chair, Department of Accountancy; B.A. (Drury University); M.B.A. (University of Kansas); Ph.D. (University of South Carolina).

Tammie Schaefer^{2,3} associate professor of accounting; B.S., MBA (Rockhurst University); Ph.D. (University of South Carolina); C.P.A.

Melissa Schulte; assistant teaching professor; B.S., M.Acc. (Kansas State University), C.P.A.

Anthony Vatterott; visiting assistant professor; B.A., M.A., M.B.A. (Webster University); Ph.D. (University of Missouri-St. Louis).

Nikita Waldron; instructor; B.A., B.S., M.A. (University of Kansas), C.P.A.

Sidne G. Ward^{2,3}; associate dean, director of global management education initiatives, and associate professor of management information systems; B.A., M.B.A. (University of Oklahoma); Ph.D. (University of California-Los Angeles).

Robert Waris; instructor; B.A. (University of Missouri-Columbia); M.A., M.B.A., Ph.D. (University of Missouri-Kansas City).

Alan W. Weber; assistant teaching professor; B.S. (Purdue University); M.B.A. (University of Missouri-Kansas City).

John Patrick Welsh; assistant teaching professor; B.S. (University of Missouri-Columbia); M.B.A. (St. Louis University).

Larry D. Wigger, Jr.; assistant teaching professor; B.A. (William Jewell College); M.S., M.B.A. (Elmhurst College).

Benjamin J. Williams; assistant teaching professor; managing director, Regnier Institute for Entrepreneurship and Innovation, and Enactus coordinator; B.B.A. (Drury University); J.D. (University of Connecticut School of Law); M.B.A. (University of Missouri-Kansas City).

Anne Williamson^{2,3}; Victor and Caroline Schutte/Missouri Professor of Urban Affairs; B.B.A. (middle Tennessee State University); M.A. (University of Florida); Ph.D. (University of Georgia).

Michael Wizniak; assistant teaching professor; B.A. (University of Kansas); M.B.A. (University of Missouri-Kansas City).

Professor Emeriti

Latheff N. Ahmed; professor emeritus of public administration; B.A. (University of Mysore); M.A., Ph.D. (University of Kansas).

Raj Arora; professor emeritus of marketing; B.S., M.S. (University of South Carolina); Ph.D. (Claremont Graduate School).

Brian L. Belt; professor emeritus of business and public administration; B.I.E, M.S.I.E (Ohio State University); M.B.A. (Texas Christian University); Ph.D. (University of North Texas).

Lee Bolman; professor emeritus; B.A. Ph.D. (Yale University).

Rita-Marie Cain Reid; professor emerita of business law; B.A. (Rockhurst University); J.D. (University of Kansas).

David Cornell; associate professor emeritus of accounting; B.S. (University of Kentucky); M.B.A. (Eastern Kentucky University); Ph.D. (Louisiana State University); C.P.A., C.M.A.

Nancy Day; professor emerita of human resources; B.S. (Missouri State University); M.A. (University of Missouri-Kansas City); Ph.D. (University of Kansas).

Stephen DeLurgio; professor emeritus; B.S. (University of Missouri-Rolla); M.B.A., Ph.D. (St. Louis University).

William B. Eddy; dean emeritus, Bloch School, and professor emeritus; B.S., M.S. (Kansas State University); Ph.D. (Michigan State University).

Nolen M. Ellison; professor emeritus of public administration; B.S. (University of Kansas); Ph.D. (Michigan State University).

Larry R. Garrison; professor emeritus of accounting; B.S.B.A. (University of Central Missouri); M.S. (University of Missouri-Kansas City); Ph.D. (University of Nebraska-Lincoln); C.P.A.

Fred H. Hays; (<https://cf1.umkc.edu/intapps/lookup/?LastName=hays>) associate professor emeritus of finance; B.B.A., M.S. (Baylor University); Ph.D. (Louisiana State University).

Robert D. Herman; professor emeritus of organizational behavior; B.A. (Kansas State University); M.S., Ph.D. (Cornell University).

Jack D. Heysinger; dean emeritus, Bloch School, and professor emeritus of law and administration; B.A., J.D. (University of Iowa); LL.M. (University of Michigan).

Karl F. Johnson; professor emeritus of public administration; B.B.A., M.P.A. (University of Missouri-Kansas City); Ph.D. (University of Oregon).

LaVern E. Krueger; associate professor emeritus of accounting; B.S. (University of Wisconsin - Whitewater); M.S.B.A. (University of Denver); D.B.A. (University of Colorado); C.P.A.

Neil E. McNeill; associate professor emeritus of accounting; B.S. (University of Kansas); M.B.A. (University of Pittsburgh); D.B.A. (Harvard University); C.M.A.

Alfred N. Page; professor emeritus of management, finance and communication studies; B.A. (Macalester College); M.B.A., Ph.D. (University of Chicago).

Roger A. Pick; professor emeritus of management information systems; B.S. (University of Oklahoma); M.S., Ph.D. (Purdue University).

Leon Robertson professor emeritus of strategic and international management; B.S., M.S. (Georgia Institute of Technology); Ph.D. (Georgia State University).

Probir Roy; associate professor emeritus of quantitative analysis; B.S. (Indian School of Mines); M.B.A. (Indian Institute of Management); Ph.D. (University of Cincinnati).

Robert D. Schrock; professor emeritus of finance; B.A. (McPherson College); M.A., Ph.D. (University of Kansas).

Eleanor Brantley Schwartz; chancellor emerita, UMKC; dean emerita, Bloch School; and professor emerita of business and public administration; B.A.A., M.B.A., D.B.A. (Georgia State University).

Joseph F. Singer; professor emeritus of business operations and analysis; B.S. (Morningside College); M.B.A. (University of Missouri-Kansas City); Ph.D. (University of Arkansas).

Marilyn Taylor; professor emerita of strategic management; B.A. (University of South Florida); M.B.A., D.B.A. (Harvard University).

Edwin H. White; professor emeritus of law and administration; A.B., J.D. (University of Missouri-Columbia); M.A. (University of Missouri-Kansas City).

Walter B. Wright; dean emeritus of continuing education and extension; dean emeritus, Bloch School; and professor emeritus of business administration; B.A. (University of Iowa); M.B.A. (University of Kansas).

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

⁴ Located at UM-St. Louis campus

Undergraduate Undergraduate Programs:

- Bachelor of Business Administration
- Bachelor of Science in Accounting
- Business Administration Minor
- Entrepreneurship Minor

Graduate Graduate Programs:

- Graduate Certificate in Business Analytics (p. 1714)
- Graduate Certificate in Nonprofit Management and Innovation (p. 1715)
- Graduate Certificate in Urban Policy Administration (p. 1716)
- Master of Business Administration
- Master of Science in Entrepreneurial Real Estate (p. 1726)
- Master of Public Administration
- Master of Science in Accounting
- Master of Science in Finance (p. 1727)
- PhD in Entrepreneurship and Innovation (p. 1729)
- Interdisciplinary Ph.D. Programs

Accounting Courses

ACCTNG 210 Introduction To Financial Accounting Credits: 3

An overview of basic concepts and terminology associated with reporting financial information to parties outside of an organization. This course requires students to take an accompanying lab that meets one day a week.

Prerequisites: MATH 110 or MATH 120 or higher; or ALEKS score of 61 or higher; or ACT MATH sub-score of 28 or higher; or SAT MATH sub-score of 660 or higher; and 30 hours completed.

ACCTNG 211 Introduction To Managerial Accounting Credits: 3

An introduction to the use of cost accounting concepts and information in managing the activities of a business.

Prerequisites: ACCTNG 210 and completion of 45 hours.

ACCTNG 306 Introduction to the Accounting Profession and Procedures Credits: 3

A study of the profession of accounting, the accounting process, and tools used in implementing that process.

Prerequisites: ACCTNG 210 and completion of 45 hours.

ACCTNG 307 Cost Management Credits: 3

A study of the principles and techniques of cost accounting with emphasis on the structure of cost accounting systems and the processing, summarizing and reporting of cost information. Topics include various issues relevant for manufacturing and service organizations, and introduction of situations that require the application of cost information to managerial settings.

Prerequisites: ACCTNG 211 and junior standing Bloch student.

ACCTNG 310 Intermediate Accounting Credits: 3

A study of theory and application of external corporate reporting. The course covers a variety of financial accounting issues including assets, liabilities, revenue recognition, and accounting change analysis. Publications and pronouncements of the accounting professions are emphasized where applicable.

Prerequisites: ACCTNG 306 and Bloch student.

ACCTNG 318 Introduction to Data Analysis in Accounting Credits: 3

With the proliferation of large data sets, the ability to use a variety of software tools to gain understanding of this data has become an invaluable skill set in modern accounting. The statistical concepts and spreadsheet versatility presented in earlier course work will be augmented with graphical presentation types and best practices, database structure and usability, and statistical application here. These skills will be embedded in the methodology of data analysis commonly found in accounting environments.

Co-requisites: ACCTNG 310.

ACCTNG 350 Accounting Systems And Controls Credits: 3

This course examines a number of systems employed to process accounting information, the internal control activities typically used in each system and associated documentation techniques.

Prerequisites: ACCTNG 310 (or co-requisite, ACCTNG 306, and Pre-MSA student).

ACCTNG 360 Accounting Research and Communications Credits: 3

A study of solving accounting issues by conducting research in the professional literature and communicating the results of that research to users. Students practice oral and written communication skills.

Prerequisites: ACCTNG 310.

ACCTNG 405 Auditing Credits: 3

A study of how the auditor determines the nature and amount of evidence that should be accumulated considering the unique aspects of an engagement, as well as some idea of how that evidence is evaluated in the context of a financial audit.

Prerequisites: ACCTNG 311 and ACCTNG 350.

ACCTNG 412 Introduction to Income Taxation Credits: 3

An examination of the theory, practice, and research methodology of taxation as applied to individuals and business entities.

Prerequisites: ACCTNG 211.

ACCTNG 418 Data Analytics for Accounting Credits: 3

Data Analytics is an investigation of the stories that large data stores can tell if only we know how to unravel them. As such, this course will examine big data sources from both a data-mining and a hypothesis-testing approach.

Prerequisites: Senior standing and BS Accounting student.

ACCTNG 420 Advanced Accounting Credits: 3

A study of the accounting for business combinations and the preparation of consolidated financial statements.

Prerequisites: ACCTNG 310.

ACCTNG 421 Governmental/Not-For-Profit Accounting Credits: 3

An overview of accounting for state and local governments and not-for-profit entities. Pronouncements of the accounting profession are emphasized where applicable.

Prerequisites: ACCTNG 310.

ACCTNG 464 Principles of Internal Auditing Credits: 3

A study of how the internal auditor determines the nature and amount of evidence that should be accumulated considering the unique aspects of an engagement, as well as some idea of how that evidence is evaluated in the context of a financial audit.

Prerequisites: ACCTNG 311 and ACCTNG 350.

ACCTNG 470 Fraud Examination Credits: 3

An examination of the elements of fraud and the fraud auditing process.

Prerequisites: Junior standing Bloch student.

ACCTNG 487 Special Topics Credits: 3

Special topics in accounting.

ACCTNG 496 Internship: Accounting Credit: 1

An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

Prerequisites: Departmental consent.

ACCTNG 497 Special Topics In Accounting Credits: 1-3

Study and research in accounting areas of special student interest, under individual faculty supervision and guidance.

Prerequisites: Departmental consent.

ACCTNG 5503 Financial Accounting for Decision Making Credits: 3

An introduction to the role of financial accounting in organizational decision making. The course provides students with an understanding of the process for reading, analyzing, and interpreting financial accounting data to make informed business decisions. Students will learn the strengths and limitations of accounting information and how it can be used to create value for the organization.

Prerequisites: Students must be enrolled in a Bloch School graduate program.

ACCTNG 5517 Survey Of Accounting Credits: 3

An overview of financial and managerial accounting. The course introduces the various reports that are used by stockholders, creditors, and managers to assess company performance and evaluate financial health. In addition, techniques are presented that assist firm managers in planning, control, and decision-making activities.

ACCTNG 5550 Accounting Information Systems Credits: 3

This course examines a number of systems employed to process accounting information, the internal control activities typically used in each system, and associated documentation tools.

Prerequisites: ACCTNG 310, MIS 202.

ACCTNG 5551 Governmental/Not-for-Profit Accounting Credits: 3

An overview of accounting for state and local governments and not-for-profit entities. Pronouncements of the accounting profession are emphasized where applicable. Recommended preparation: ACCTNG 310.

ACCTNG 5556 Cost Management Credits: 3

A study of the principles and techniques of cost accounting with emphasis on the structure of cost accounting systems and the processing, summarizing, and reporting of cost information. Topics include various issues relevant for manufacturing and service organizations, and introduction of situations that requires the application of cost information to managerial settings.

Prerequisites: ACCTNG 5517.

ACCTNG 5557 Introduction To Income Taxation Credits: 3

An investigation of the structure of federal, state, and local taxation, along with an examination of the impact of taxes on the management decision process. This course is not open to students who have completed ACCTNG 412.

ACCTNG 5558 Financial Accounting Theory Credits: 3

A study of the theory and practice of financial accounting with emphasis upon financial statement preparation and analysis of asset, liability, and equity measurement.

Prerequisites: ACCTNG 360.

ACCTNG 5559 Advanced Financial Accounting Theory Credits: 3

A study of advanced topics in financial accounting. Topics include business combinations and financial statement consolidation theory and practice. Recommended preparation: ACCTNG 310.

ACCTNG 5560 Introduction To Auditing And Accounting Systems Credits: 3

Fundamentals underlying the design of accounting systems and the processing of accounting data. Current auditing standards and procedures are extensively investigated, with emphasis on the nature of internal control, audit evidence, and audit reports.

Prerequisites: ACCTNG 5558.

ACCTNG 5564 Principles of Internal Auditing Credits: 3

A study of how the internal auditor determines the nature and amount of evidence that should be accumulated considering the unique aspects of an engagement, as well as some idea of how that evidence is evaluated in the context of a financial audit.

Prerequisites: ACCTNG 311 and ACCTNG 350.

ACCTNG 5568 Data Analytics for Accounting Credits: 3

Data Analytics is an investigation of the stories large data stores can tell if only we know how to unravel the story. As such, this course will investigate big data sources from both a data-mining and a hypothesis-testing approach.

Prerequisites: Admission to the MS Accounting degree program.

ACCTNG 5570 Fraud Examination Credits: 3

An examination of the elements of fraud and the fraud auditing process.

Prerequisites: Must be admitted to a graduate program in the Bloch School of Management.

ACCTNG 5572 Tax Theory And Business Applications Credits: 3

A study of substantive issues relating to the taxation of business entities including multi-jurisdictional considerations. Topics include business formation and dissolution, business valuation, selection of business entity, compensation of employees, sales or exchanges of business property, and business tax credits. Recommended preparation: ACCTNG 412 or ACCTNG 5557.

ACCTNG 5575 Managerial Accounting: Issues, Tools And Analysis Credits: 3

A look at various tools used to assist in the planning, control, performance evaluation, and decision-making activities of managers. Contemporary issues that confront management are introduced where appropriate.

Prerequisites: ACCTNG 307.

ACCTNG 5576 Tax Research, Procedure And Practice Credits: 3

An examination of the theory, practice, and research methodology of taxation as applied to individuals and business entities. Recommended preparation: ACCTNG 412 or ACCTNG 5557 or equivalent.

Prerequisites: MS Accounting program student.

ACCTNG 5577 Advanced Auditing Credits: 3

An analysis of real-world cases of audit problems with emphasis on red flags, pressures auditors face, and serious implications of audit failure (both perceived and real). Recommended preparation: ACCTNG 405 or ACCTNG 5560.

ACCTNG 5578 Current Problems In Accounting Credits: 3

This course will focus on an in-depth exploration of specific problems including, but not confined to those accounting problems which have resulted in official positions being published or considered by the accounting profession.

Prerequisites: ACCTNG 360.

ACCTNG 5580 Financial Reporting Systems Credits: 3

Executive decision making and leadership requires financial fluency. Using a blended format, students develop the necessary capacities to manage financial reporting systems. Case materials offer students the opportunity to build on their analytical skill in regards to financial statements.

Prerequisites: Admission to Executive MBA Program.

ACCTNG 5587 Special Topics Credits: 3

This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

ACCTNG 5595 Internship Credit: 1

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

ACCTNG 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

ACCTNG 5899 Required Graduate Enrollment Credit: 1

Business Public Administration Courses

B&PA 524 Public Policy Context for Business Decisions Credits: 2

This course is designed to provide intensive exposure to the forces and personalities in Washington, D.C. that shape America's business policy. EMBA participants learn how to understand and anticipate the impact of public policy on their businesses and how to become more effective participants in the national decision-making process.

Prerequisites: Admission to the Executive MBA program.

Dec Science and Operation Mgmt Courses

DSOM 211 Business Analytics I Credits: 3

Business Analytics I is an engaging, interactive course, ensuring the student has relevant, useful analytic skills applicable in both coursework and workplace. The student will learn in an interdisciplinary fashion, by analyzing practical business scenarios from Accounting, Finance, Marketing, Operations, and Supply Chain Management. The student will become proficient in spreadsheet use for data administration, analysis, and visual presentation. The statistical analysis focus in Business Analytics I is on descriptive and predictive measures, equipping the student for analysis, reporting, and business forecasting.

Prerequisites: MATH 110 with a grade of C- or higher; or MATH 120 or higher with a grade of C- or higher; or ALEKS Score of 61 or higher; or ACT Math Sub-score of 28 or higher; or SAT Math Sub-score of 660 or higher.

DSOM 309 Intermediate Business Statistics Credits: 3

This course emphasizes statistical applications in business, and students will complete research projects using one or more multivariate statistical techniques. Topics covered will include statistical software (such as SAS or SPSS), multiple regression, Chi-Square, analysis of variance, non-parametric methods, multidiscriminant analysis, factor analysis, and a brief introduction to structural equation models.

Prerequisites: MATH 206 and STAT 235.

DSOM 311 Business Analytics II Credits: 3

Business Analytics II explores data science, including database access/query, big data, cloud computing, and the internet of things (IoT). The student will consider business ethics, information security, and privacy concerns in today's virtual/gig economy. The student will learn to integrate data from outside sources into various platforms, including Excel, Tableau, and Domo. The student will learn prescriptive analytics and will practice useful optimization methods. Practical interdisciplinary business exercises will draw from Accounting, Finance, Marketing, Operations, and Supply Chain Management, for future use.

Prerequisites: DSOM 211 or STAT 235 or STAT 115 or MOTRMATH 110 and completion of 45 hours.

DSOM 326 Production/Operations Management Credits: 3

This course presents an introduction to the concepts, models, and methods of operations management. Students will study approaches to planning, scheduling, and controlling product and service facilities, processes, cost, quality, quantity, production, capacity, inventory, and distribution requirements. Computer applications and computer-based operations control systems will be introduced as a means to effectively manage the operations functions of both product and service organizations.

Prerequisites: ECON 202 and STAT 235 and completion of 45 hours.

DSOM 340 Supply Chain and Operations Management Credits: 3

The student will become familiar with and appreciate the concepts, models, methods, and technologies of supply chain and operations management in modern enterprises. Students will become familiar with the integrated view of procurement, operations and logistics management. Students will also understand the management of the flow of products from raw material sourcing and acquisition through delivery to the final user. Students will also become familiar with the modern technologies used in supply chain and operations management.

Prerequisites: DSOM 211 (or STAT 235 or STAT 115 or MOTRMATH 110) and ECON 202 and completion of 45 hours.

DSOM 346 Service Industry Analytics Credits: 3

This course presents an introduction to the concepts, models, and methods of decision making in service operations management. Students will study approaches to project management, decision analysis, scheduling, queuing systems, optimization/allocation models, forecasting, and profitability analysis. Computer applications and computer-based operations control systems will be introduced as a means to effectively manage the operations functions of service organizations.

Prerequisites: DSOM 326 or DSOM 340.

DSOM 431 Quality Management and Process Improvement Credits: 3

A study of planning and managing effective quality and processes in organizations. Students are expected to master important quality management and process improvement tools including Six Sigma, Statistical Process Control, TQM, Theory of Constraints, and other contemporary tools via appropriate software, case studies, and projects.

Prerequisites: DSOM 309 or DSOM 311; and DSOM 326 or DSOM 340.

DSOM 432 Spending Analytics, Contracts, and Risk Management Credits: 3

Students will advance to competency their understanding of the role of contracting, sourcing and supply management to support firm strategies. A comprehensive review of the process of costing, pricing, supplier evaluation and development and product cost aggregation will be used in analyzing spend and improving the supply chain partnerships, transactional relationships and intermediary distributors, agents and brokers with the goal of risk mitigation, cost efficiency and value added.

Prerequisites: DSOM 326 or DSOM 340.

DSOM 442 Logistics, Transportation, Warehousing, and Distribution Credits: 3

Logistics, Transportation, Warehousing and Distribution teaches effective, efficient design and management of supply chain networks, including complexities and challenges of warehousing, channel distribution and transportation, global logistics, value chains and performance management. We focus on practical examples of integrated networks of activity and data-driven performance-based logistics decisions.

Prerequisites: DSOM 326 or DSOM 340.

DSOM 443 Project Management Credits: 3

Planning and control of projects, to include network models, risk analysis, time reduction, resource scheduling, leadership, and evaluation.

DSOM 444 Digital Transformations and Supply Chain Credits: 3

This course provides the foundation for understanding the key issues associated with the digital transformation in the supply chain landscape and its implications for security and business continuity. Students learn about emerging technologies such as artificial intelligence (AI), blockchain, cloud computing, and the Internet of things (IoT) as they relate to operations and supply chain management. They learn how these technologies can contribute to the flexibility, traceability, compliance, and accountability in production, transportation, warehousing, and distribution. They also learn about the security risks associated with the use of these technologies.

Prerequisites: DSOM 326 or DSOM 340.

DSOM 445 Strategic Sourcing and Supplier Relationship Management Credits: 3

This course explores the roles of procurement and strategic sourcing as components of an overall supply chain strategy, and the impact this strategy has on the competitive success and profitability of organizations. The course is structured into three segments: before you source, how to source, and after sourcing.

Prerequisites: DSOM 326 or DSOM 340.

DSOM 487 Special Topics Credits: 3

Special topics in decision science and operations management.

DSOM 5508 Statistical Analysis In Business Credits: 3

Data analysis and statistical inference in the context of business management. Communication of analysis and conclusions using text, numbers, and graphics is emphasized. Understanding the conceptual framework of probability and statistics as it relates to statistical tests and procedures is emphasized more than computational methods. Most of the work will be done using a computer spreadsheet. The course includes the topics of estimation, tests of hypotheses, analysis of variance, and multiple regression.

DSOM 5509 Business Analytics for Strategic Decision Making Credits: 3

Business analytics has become a key component in accomplishing strategic and operational goals. Students will become familiar with the concepts and principles of analytics. Utilizing real world cases, students will apply current analytical concepts to help solve managerial problems and support decision processes.

Prerequisites: Admission to Executive MBA Program.

DSOM 5511 Global Supply Chain and Operations Management Credits: 3

Global Supply Chain and Operations Management (SCOM) provides a holistic investigation of how businesses produce goods and offer services. Strategic approaches to planning, scheduling, and controlling cost, time, and quality are discussed. Students are exposed to the full circle of supply chain management, including demand planning, sourcing and procurement, production decisions, inventory and handling, MRP and ERP systems, Lean/JIT, quality management, CSR and sustainability. Spreadsheet models for managing operations, analyzing performance, and forecasting expectations are examined.

Prerequisites: MIS 5507

DSOM 5540 Service Operations Management Credits: 3

This course focuses on the increasing importance and role of service in our economy. Topics studied are: the role of services in an economy, the nature of services, service strategy, the service delivery system, service facility location, the service encounter, service quality, productivity and quality improvement. Methods of process analysis in service organizations, methods improvement procedures, and work measurement techniques are developed to provide the basis for analyses of processes, layouts, and job design in a service organization.

Prerequisites: DSOM 5507 or DSOM 5511.

DSOM 5543 Project Management Credits: 3

Planning and control of projects, to include network models, risk analysis, time reduction, resource scheduling, leadership, and evaluation.

DSOM 5544 Global Supply Chain and Logistics Management Credits: 3

A study of integrated global supply chain management and logistics. Topics include integrating global ERP and forecasting systems, inventory management, distribution requirements planning, supply chain management, purchasing and supplier/vendor networks, logistics, transportation networks, and E-operations. ERP systems and network optimization are studied relative to both production and service operations.

Prerequisites: DSOM 5507 or DSOM 5511.

DSOM 5545 Strategic Sourcing & Supplier Relationship Management Credits: 3

This course explores the roles of procurement and strategic sourcing as components of an overall supply chain strategy, and the impact this strategy has on the competitive success and profitability of organizations. The course will be structured into three segments: before you source, how to source, and after sourcing. Topics will include spend analysis, supplier research, market analysis, supplier evaluation, global sourcing considerations, negotiating, and supplier relationship management. The students will also gain an appreciation of the ethical, contractual, risk management, sustainability, and legal issues faced by purchasing professionals.

DSOM 5566 Supply Chain and Operations Management Credits: 3

An examination of the basic principles and strategies used to manage the production and distribution of goods and services. This course positions operations management (OM) as an important tool for achieving strategic leadership through competitive advantage, and illustrates how the managerial integration of OM functions with corporate strategy improves business processes.

Prerequisites: DSOM 5509 or equivalent; Admission to the Executive MBA program.

DSOM 5587 Special Topics Credits: 3

Special topics in decision science and operations management.

DSOM 5595 Internship Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

DSOM 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

DSOM 5899 Required Graduate Enrollment Credit: 1

Entrepreneurship Innovation Courses

ENT 301 Entrepreneurship Toolkit Credits: 3

This course is for non-business majors (majors outside of the Bloch School) working towards an entrepreneurship minor. In this course students learn the basic elements of organizational functions including management, accounting, finance, and economics as foundational principles of entrepreneurship.

ENT 315 Entrepreneurial Mindset and Opportunity Recognition Credits: 3

This course teaches students how to develop an entrepreneurial mindset. Students will utilize play, creative problem solving, design thinking, and creativity tools while developing skills to mitigate risk and recognize opportunities.

ENT 321 Real Estate Principles Credits: 3

Starting with the basics of real estate terminology, students learn real estate's role in the economy, it's legal foundations, government controls, appraisal processes, valuation processes, brokering and closing transactions, time value of money, basic management issues and lease clauses, and basic standard form purchase contracts.

ENT 326 Creativity, Innovation, and Problem Solving Credits: 3

This course examines creativity and innovation, and their application to problem solving and developing new initiatives. Students will develop the ability to understand and solve problems and initiate opportunities by thinking new things. They will understand the concepts, skills, information, attitudes, and resources that leaders need to create valuable ideas, products, or initiatives.

ENT 327 Designing the Business Model Credits: 3

This course will teach students how to design a business model, refine that business model, and create a plan for a new venture. This course will take students through several different toolkits that can be used to create for-profit startups, social ventures, or create value within an existing organization.

Prerequisites: ENT 315.

ENT 329 Entrepreneurship Scholars Credits: 3

In this course, students will acquire the skills required to manage and grow a successful new venture through hands-on, real-world work on their own venture. Students will work with the instructor and at least one mentor to identify specific deliverables and a long term venture plan. Students will manage their enterprise, attend a series of workshops, and work with their peers, instructional coaches and mentors to further their venture. Special application and selection process.

Prerequisites: Departmental consent.

ENT 332 Managing the New Venture: Experiential Learning Credits: 3

In this course, students will acquire the skill sets needed to manage and grow a successful new venture, and will actually manage a new enterprise.

Prerequisites: ENT 327.

ENT 341 Technology Entrepreneurship Credits: 3

This course is designed to familiarize students with the creation of successful, high-value enterprises, with an emphasis on markets for technology and venture capital. Students identify a business opportunity, create a technology-based solution, and assess the commercial and technological viability of the business opportunity. Case studies will emphasize life sciences, engineering, and information technologies.

ENT 361 New Product Development Credits: 3

This course introduces students to a formal process used to develop new physical products. Throughout the process, students learn how an abstract idea can be transformed into concrete product concepts that will in turn be translated into tangible working prototypes.

ENT 364 Entrepreneurial Management and Innovation Credits: 3

Students are exposed to the unique entrepreneurial experience of conceiving, evaluating, creating, managing, and eventually selling a business. The goal is to provide a comprehensive background with practical application of important concepts applicable to an entrepreneurial environment. Key business areas of finance, accounting, marketing, and management will be addressed from an entrepreneurial perspective.

ENT 412 Entrepreneurial Finance Credits: 3

This course examines the financing and valuation of new ventures from the perspectives of entrepreneurs and venture capitalists. The focus is on financial thinking, tools, and techniques that are relevant for seeking new venture financing and making investment decisions. The course is suitable for anyone with an interest in startup companies, venture capital, or private equity firms.

Prerequisites: ACCTNG 210; or ENT 301 and ENT 327.

ENT 421 Real Estate Finance Fundamentals Credits: 3

This course will provide a fundamental understanding of basic financial concepts of real estate including compounding and discounting, construction of amortization tables and after-tax yield analysis for a simple real estate investment. It also touches on the basics of title insurance, ownership issues, fixed rate versus variable rate mortgages in residential real estate, understanding housing bubbles, and trends in valuation of residential real estate. In addition, the student will complete mathematical comparisons of leasing versus owning a home.

ENT 425 Corporate Entrepreneurship Credits: 3

This course seeks to equip students with the skills required to develop new ideas and create viable new businesses or processes within the context of an established organization. The course will address the development of an internal culture of innovation, processes for reviewing ideas and for developing business concepts, strategic analysis, and positioning for competitive advantage.

ENT 432 Entrepreneurial Marketing and Selling Credits: 3

This course exposes students to the objectives, challenges, and requirements for effective, results-oriented marketing activities and sales efforts for the entrepreneur/new venture. Key topics include the selection, design, and budgeting of entrepreneurial marketing and advertising programs, along with effective selling, customer acquisition, and service/retention efforts.

ENT 460 Creating the Enterprise Credits: 3

This course looks at the processes and skills individuals require in order to create their own enterprise, manage a new business, or work within an entrepreneurial organization. Students will learn how to take a good idea, assess that idea, and develop an appropriate business model, and will work in teams to develop a full-length business plan.

Prerequisites: (or concurrent) ACCTNG 211, FIN 325, MKT 324, MGT 330, DSOM 326.

ENT 461 Social Entrepreneurship Credits: 3

This course introduces students to social entrepreneurship through lectures and discussions, key readings, guest speakers such as social entrepreneurs, case studies, videos, service-learning activities, and group assignments. Students will develop an understanding of the social entrepreneurship process, the differences between social entrepreneurship and business entrepreneurship, social enterprise, and different revenue streams including the importance of sustainability. By the end of the course, students will be able to develop a social entrepreneurship project proposal on a social problem they are compassionate about and make a presentation to the class.

ENT 462 Entrepreneurial Experience Credits: 3

In this course students integrate skillsets and apply an entrepreneurial mindset to a practical experience. The process includes identifying an opportunity, taking action, and evaluating outcomes of actions taken. The experience will be through project based consulting for a startup or entrepreneurial organization or within the context of a student's own venture with prior approval.

Prerequisites: ENT 327, ENT 412.

ENT 487 Special Topics Credits: 3

Special topics in entrepreneurship.

ENT 496 Internship: Entrepreneurship Credits: 1-3

This course provides an opportunity for students to integrate their academic studies via employment with a business or organization in the community.

Prerequisites: Departmental consent.

ENT 497 Special Topics: Entrepreneurship Credits: 1-3

Study and research in areas of special interest under individually faculty direction.

Prerequisites: Departmental consent.

ENT 5508 Corporate Entrepreneurship and Innovation: Meeting the Management Challenge Credits: 3

This course seeks to equip students with the skills required to develop new ideas and create viable new businesses within the context of an established organization. The course will address the development of an internal culture of innovation, processes for reviewing ideas and for developing business concepts, strategic analysis, and positioning for competitive advantage.

Prerequisites: Enrolled in a Bloch School graduate program.

ENT 5525 Entrepreneurship: Managing Creativity And Innovation Credits: 3

The course examines the nature of creativity and innovation and how entrepreneurship involves the ability to identify market opportunity based on new ideas. Detailed attention is given to the entrepreneurial process: the concepts, skills, know-how and know-who, information, attitudes, alternatives and resources that entrepreneurs need to manage creativity in the process of creating something with tangible economic value.

ENT 5529 Entrepreneurship Scholars Credits: 3

In this course, students will acquire the skills required to manage and grow a successful new venture through hands-on, real-world work on their own venture. Students will work with the instructor and at least one mentor to identify specific deliverables and a long term venture plan. Students will manage their enterprise, attend a series of workshops, and work with their peers, instructional coaches and mentors to further their venture.

ENT 5531 New Product Development Credits: 3

A systematic overview of the management issues that arise during the process of new product development (NPD). Students learn integration across the traditional management functions and the tools and concepts for linking development to strategy and for managing the development process for speed, efficiency, and market impact. Students will develop a physical prototype of a product that meets and exceeds real customer needs.

ENT 5533 Technology Management Credits: 3

This course introduces the student to formal frameworks for considering ethical, management, and commercial opportunities and challenges of new technologies. The student will consider the business model, business process, and commercial impact of cutting-edge technologies in a survey-style format. Technologies will be considered both from the perspective of an established organization seeking to innovate, as well as from the perspective of a new startup.

ENT 5535 Small Business Management And Entrepreneurship Credits: 3

This course focuses on the nature of the entrepreneurial organization; its volatility and flux, where standard operating procedures are lacking and organizational structure, culture and leadership style are created anew each day. Successful small business management requires that a series of developmental challenges be identified and addressed if the venture is to succeed.

ENT 5545 Entrepreneurship And New Venture Creation Credits: 3

The objectives of this course are: (1) to build personal appreciation for the challenges and rewards of entrepreneurship in an independent mode by examining/simulating its environment; (2) to present and examine, through the use of complex case studies and high level guest/lectures, economic, legal and managerial mechanisms proven useful in creating new wealth; and (3) to foster continued development of venture ideas, suitable as career entry options or for investments, using a tutorial approach to business plan development, presentation and evaluation.

ENT 5552 Entrepreneurial Marketing Credits: 3

This course exposes students to the objectives, challenges, and requirements for effective, results-oriented marketing activities and sales efforts for the entrepreneur/new venture. Key topics include the selection, design, and budgeting of entrepreneurial marketing and advertising programs, along with effective selling, customer acquisition, and service/retention efforts.

ENT 5561 Product and Service Innovation Credits: 2

Product and Service Innovation provides students with experience in new venture creation and product innovation management. Each learning team will be challenged to uncover opportunities in industry. In the process, students will explore customer preferences and translating preferences into the development process.

Prerequisites: Admission to the Executive MBA program.

ENT 5563 Social Entrepreneurship Credits: 3

This course introduces students to social entrepreneurship through lectures and discussions, key readings, guest speakers such as social entrepreneurs, case studies, videos, service-learning activities, and group assignments. Students will develop an understanding of the social entrepreneurship process, the differences between social entrepreneurship and business entrepreneurship, social enterprise, and different revenue streams including the importance of sustainability. In this course, students will develop a social entrepreneurship project proposal on a social problem in collaboration with a non-profit organization in the Kansas City area.

ENT 5567 Strategy and New Venture Creation Credits: 3

Strategy and New Venture Creation provides a capstone experience for Executive MBA students. Students are exposed to and experience entrepreneurship topics relevant to high-growth potential new ventures including the various stages, processes, and issues involved with creation through to venture harvest / exit. Through completion of the course students will understand and undergo the process for new venture creation, developing specific skills of benefit in both entrepreneurial and corporate environments.

Prerequisites: Admission to the Executive MBA program.

ENT 5576 Real Estate Property Management Credits: 3

This course explores the complexities and integration of property and portfolio management which are critical to the creation, control and capture of real estate value. Students learn how to approach real estate in a more holistic manner by integrating management functions that range from individual property types to portfolios of properties. Students learn how to incorporate marketplace factors in their decisions and apply modern portfolio theory and other tools to construct and manage properties and portfolios in a socially responsible manner. Using experiential methods students learn to apply critical thinking to solve complex property and portfolio management problems.

Prerequisites: ENT 5571.

ENT 5585 Entrepreneurial Finance and Venture Capital Investment Credits: 3

This course exposes students to the process of financing and investing in a new venture. The primary objective of this course is for students to develop a good understanding of the objectives, strategies, and challenges in financing and valuation of entrepreneurial firms through analyzing unique financial issues these firms and their investors face. Students will develop skills for assessing new venture financial viability, cash needs, funding sources, valuation, and funding structure.

ENT 5587 Special Topics Credits: 3

Special topics in entrepreneurship.

ENT 5591 Small Business Management Practicum Credits: 3

An integrated management course designed to examine the principles of business management applicable to solving the problems of small and medium size businesses and assisting in their development.

ENT 5595 Internship Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

ENT 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

ENT 5681 Multivariate Statistical Methods-II Credits: 3

Theoretical and research applications of MANOVA, canonical correlation, multiple discriminant analysis, factor analysis, and introduction to structural equation modeling using appropriate software. Students are expected to undertake a major research project during this class and to apply appropriate multivariate statistical analyses to their chosen academic research topic.

ENT 5682 Structural Equation Modeling Credits: 3

This course presents structural equation modeling. It includes a review of regression, as well as the study of path analysis, including model specification, methods of estimation, recursive and non-recursive models; direct, indirect, and total effects methods of estimation; single and multi-group analyses; moderators; mediators; structural equation model specification; identification, methods of estimation, second-order factor analysis, and the assessment of casual structure. Students are expected to continue a research project started in ENT 5681.

ENT 5683 Mathematical Models For Entrepreneurship Credits: 3

The purpose of this course is to provide an introduction to mathematical models in entrepreneurship and related disciplines. Classes will focus on the use of mathematical models to characterize the nature of various entrepreneurship-related decisions in complex environments. For each topic considered (e.g., RD investment decisions in new product entry, diffusion, and marketing mix variables), students will examine select examples of scholarly articles. Presentations and discussions are designed to help students understand and critique existing models and stimulate the development of new theoretical viewpoints.

ENT 5691 Doctoral Seminar In Theoretical Foundations Of Entrepreneurship I Credits: 3

ENT 5691 is designed as a broad survey of major topics in the field of entrepreneurship. Its objective is to familiarize students with some of the primary theoretical underpinnings of the field as well as some of the common and/or promising methodological approaches to the study of entrepreneurial phenomena. Topics covered in the course include a theoretical overview, entrepreneurs, environment and organizational founding.

Prerequisites: Doctoral standing.

ENT 5692 Foundations Entrepreneurship Credits: 3

ENT 5692 is designed as a continuation of ENT 5691, providing a broad survey of major topics in the field of entrepreneurship. Its objective is to familiarize the student with some of the primary theoretical underpinnings of the field as well as some of the common and/or promising methodological approaches to the study of entrepreneurial phenomena. Topics covered in the course include: entrepreneurship's links with other disciplines, venture capital and venture capitalists, new venture strategy, new venture performance, growth processes and challenges, and entrepreneurial networks and alliances.

ENT 5693 Technology, Innovation, And Entrepreneurship Credits: 3

This seminar will explore academic literature of technology, innovation, and entrepreneurship. Specific topics include emerging technologies, evolutionary theory, building capabilities based on networks, organizational learning, technological innovation, institutional economics, network externalities, knowledge transfer, technological trajectories and path dependencies.

Prerequisites: Doctoral standing.

ENT 5694 Doctoral Seminar In Theories Of The Firm And Strategy Credits: 3

In this course, students will become familiar with and develop an in-depth understanding of the concepts, models, and paradigms that collectively form the foundation for strategic thinking. Students will develop the ability to critically integrate findings from strategic research programs. Employing an appreciation for the interdisciplinary nature of strategic marketing and management, the purpose is to develop a keen awareness of major gaps that exist in the strategic literature. Students will strengthen the skills needed to conduct original strategic marketing research that can be published in the leading academic journals.

Prerequisites: Doctoral Standing.

ENT 5699 Dissertation and Research in Entrepreneurship and Innovation Credits: 1-12

Dissertation research and writing in Entrepreneurship and Innovation Discipline.

ENT 5899 Required Graduate Enrollment Credit: 1

Finance Courses

FIN 325 Financial Management Credits: 3

This course provides an overview of the relationship between business decisions and the value of the firm, as determined by the marketplace. Students will study the composition of capital structure, capital budgeting, and cost of capital theory, including incremental analysis of investment situations.

Prerequisites: ACCTNG 210 and completion of 45 hours.

FIN 326 Financial Management 2 Credits: 3

Explores leverage and capital structure, dividend policy, raising capital, short-term financial planning, working capital management and international financial management. FIN 326 builds on the content of FIN 325. A cursory knowledge of accounting principles is assumed, as well as fluency with simple algebra and arithmetic skills.

Prerequisites: FIN 325.

FIN 340 Financial Markets and Institutions Credits: 3

This course introduces students to U.S. financial markets and institutions, explaining how they operate, how they promote economic growth and well-being, and how they malfunction in financial crises. Among the financial markets examined are those for short-term debt, mortgages, government and corporate bonds and equity. Financial institutions studied include investment banks, commercial banks and savings institutions, pension plans, mutual funds, hedge funds, and private equity funds. The course also examines the role of the Federal Reserve in the financial system and the nature and purpose of financial regulation.

Prerequisites: FIN 325.

FIN 345 Investments Credits: 3

The course develops the theoretical framework necessary for a systematic approach to portfolio management. Content includes consideration of investment objectives, measurement of risk and returns, alternative uses of invested funds, analysis of securities markets, and the techniques of security analysis. Students will have an opportunity for the creation and management of an investment portfolio.

Prerequisites: FIN 325.

FIN 350 Introduction to Risk Management and Insurance Credits: 3

This course introduces students to the principles of personal and corporate risk management. Personal risk management topics include: personal insurance planning, annuity investing and personal liability management. Corporate risk management topics include: managing corporate risk, reducing risk through hedging, and legal liability risk.

FIN 351 International Financial Management Credits: 3

The world's business activities and economics are becoming more integrated. This course provides an introduction, appreciation and understanding of how this process impacts financial decisions for global business. Students should expect to develop an integrated analytical and decision making perspective that will enable them to extend financial concepts such as capital budgeting and risk management, and instruments such as forwards, swaps, fixed income analysis, arbitrage, etc. to their international analogs.

Prerequisites: FIN 325.

FIN 369 Payment Systems Credits: 3

The payment system is central to virtually all economic transactions. The payment system also has been undergoing fundamental changes over the past two decades. Yet, the payment system is one of the least understood parts of the economic system. The purpose of this course is to examine the payment system from economic, business, and regulatory standpoints.

FIN 419 Financial Statement Analysis Credits: 3

Students will take an in-depth look at the external financial statements that are prepared by corporations, including the tools needed to organize, summarize, and understand corporate financial data for use in decision making. Ratio analysis, trend analysis, earnings forecasting, bankruptcy predictors, statistical methods important to finance, and financial data bases are among the topics that will be covered.

Prerequisites: FIN 325.

FIN 428 Commercial Bank Management Credits: 3

This course presents an overview of financial management of the interest spreads, credit risk, liquidity, and capital positions of commercial banks. Topics to be covered include analysis of bank profitability, lending functions and policy, securities investment strategies, fund attraction, regulatory examination, capital adequacy, and integrated asset/liability management. Instructional media includes cases and computerized bank management simulation.

Prerequisites: FIN 325.

FIN 435 Advanced Corporate Finance Credits: 3

The course focuses on the finance function of the firm from the managerial perspective. Topics include working capital management, capital budgeting, financial structure, merger and reorganization, capital rationing, and analysis of risk. Students will use cases and computer techniques.

Prerequisites: FIN 326.

FIN 445 Advanced Investments Credits: 3

Students take an in depth look at some of the advanced investment analysis tools used by practicing portfolio managers. This course covers the valuation of both derivative securities and fixed-income securities. There is also a strong focus on managing price risk, interest rate risk, and exchange rate risk. In addition there is an emphasis on bond portfolio management and derivative security applications.

Prerequisites: FIN 345.

FIN 451 Life & Health Insurance Credits: 3

This course focuses on insurance issues related to life and health insurance. Content includes consideration of life insurance needs, annuities, disability insurance, long-term care insurance, and personal and corporate health insurance issues.

Prerequisites: FIN 350.

FIN 452 Property and Casualty Insurance Credits: 3

This course focuses on insurance issues related to commercial property and liability insurance. Content includes consideration of issues related to managing risks such as loss of business income, employer liability, management liability, environmental liability and cyber-liability.

Prerequisites: FIN 350.

FIN 453 Risk Management Credits: 3

This course focuses on insurance issues related to managing corporate risk. Content includes consideration of issues related to managing risk such as enterprise risk management, reinsurance, corporate property and liability, and corporate uses for death and disability insurance for key employees.

Prerequisites: FIN 350.

FIN 454 Principles of Surety and Corporate Liability Credits: 3

This course focuses on insurance issues related to surety bonding and corporate liability. Content includes consideration of issues related to managing risk such as mitigating environmental liability, corporate safety programs, and surety bonding.

Prerequisites: FIN 350.

FIN 476 Introduction to Fintech Credits: 3

This course will introduce students to Fintech and provide an overview of the main areas in which it is disrupting finance. These areas include lending and equity investment (algorithmic lending, P2P lending and crowdfunding platforms); financial market infrastructure (cryptocurrencies, blockchain technology, smart contracts); portfolio management and financial advice (robo-investment); and financial trading (algorithmic trading, digital trading platforms). Students will learn how the new financial technologies work, how incumbents and new entrants might profit from the technologies, and how the technologies could affect the efficiency, accessibility, fairness, and security of the financial system.

FIN 487 Special Topics Credits: 3

Special topics in finance.

FIN 496 Internship: Finance Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

Prerequisites: Departmental consent.

FIN 497 Special Topics: Finance Credits: 1-3

Study and research in areas of special interest under individual faculty direction.

Prerequisites: Departmental consent.

FIN 5501 Economics For Administration Credits: 3

This course is designed for graduate students in the School of Business and Public Administration. Topics include the theory and determination of national income, fiscal policy, monetary theory and policy, production and cost theory, and market structure.

FIN 5502 Corporate Financial Management I Credit: 1.5

This course provides a rigorous distillation of time value of money analysis techniques, methods which form the basic quantitative approach used in corporation finance. The three main topic areas covered during the course are the principles of time value of money analysis itself, its application to the valuation of corporate bond and equity securities, and the quantitative decision making rules utilized in corporate capital budgeting analysis.

Prerequisites: ACCTNG 5501.

FIN 5509 Financial Management Credits: 3

An introduction to the role of financial management through the development of a conceptual framework appropriate for financial decision making. Generally, financial management is charged with the responsibility for obtaining and effectively utilizing the funds necessary for the operation of an enterprise. As such, the conceptual framework includes elements of financial planning (financial analysis, cash budgeting and profit planning), capital budgeting (rate of return and cost of capital), and basic considerations of alternative sources of funds.

Prerequisites: Student must be enrolled in a Bloch School graduate program.

FIN 5515 Managerial Economics Credits: 2

This course studies the relationships between the economic theory and system as a whole and the ways in which their functioning is affected by the behavior of the interdependent sectors of which they are composed. Students will explore the major factors and determinants of economic prospects relevant to profit-maximizing production and pricing decisions for the firm.

Prerequisites: admission to executive MBA program.

FIN 5532 Financial Management Credits: 3

An introduction to the role of financial management through the development of a conceptual framework appropriate for financial decision making. Generally, financial management is charged with the responsibility for obtaining and effectively utilizing the funds necessary for the operation of an enterprise. As such, the conceptual framework includes elements of financial planning (financial analysis, cash budgeting and profit planning), capital budgeting (rate of return and cost of capital), and basic considerations of alternative sources of funds.

Prerequisites: ACCTNG 5517, DSOM 5508, and FIN 5501.

FIN 5537 Enterprise Risk Management Credits: 3

Students conduct a comprehensive assessment of the physical, reputation, emotional, financial, and facilities risks associated with an organization and its events. They must also assess each risk based on its probability of occurrence and severity of consequences and make decisions about accepting, modifying, transferring, and/or eliminating risks based on those assessments.

Prerequisites: FIN 5532.

FIN 5550 Advanced Financial Management Theory And Policies Credits: 3

Advanced financial management covering topics such as working capital, financial structure, cost of capital, dividend policy and valuation. Discussions include both financial theory as well as financial policy. Includes exposure to literature central to the development of finance theory. Recommended preparation: FIN 235 or FIN 5509.

FIN 5551 International Financial Management Credits: 3

This course analyzes present and future international financial market conditions and extends the decision-making tasks of financial management into the context of problems of the international and foreign financial systems. The financial constraints of the international business environment and their effect on standard concepts of financial management are studied along with international currency flows, capital structure problems, working capital management, foreign investment, and international banking practices. Recommended preparation: FIN 235 or FIN 5509.

FIN 5552 Financial Markets and Institutions Credits: 3

This course introduces students to U.S. financial markets and institutions, explaining how they operate, how they promote economic growth and well-being, and how they malfunction in financial crises. Among the financial markets examined are those for short-term debt, mortgages, government and corporate bonds, and equity. Financial institutions studied include investment banks, commercial banks and savings institutions, pension plans, mutual funds, hedge funds, and private equity funds. The course also examines the role of the Federal Reserve in the financial system and the nature and purpose of financial regulation. Recommended preparation: FIN 325 or FIN 5509.

FIN 5553 Investment Analysis Credits: 3

Development of a theoretical framework applicable to the solution of problems related to creation and management of the investment portfolio. Consideration is given to the analysis of risk, functions of security markets, sources of information, evaluation of securities, and measurement of investment return. Recommended preparation: FIN 235 or FIN 5509.

FIN 5556 Management Of Financial Intermediaries Credits: 3

This course addresses the management operations of selected financial intermediaries including commercial banks and thrift institutions. Attention is given to asset-liability structure, the development and delivery of financial services, institutional structure, legal and regulatory factors, and the dynamics of the competitive environment. Recommended preparation: FIN 325 or FIN 5509.

FIN 5557 Derivative Securities Credits: 3

This course is designed to introduce students to the basic principles of financial risk management. The student should develop a working knowledge of issues regarding both the theoretical valuation and application of derivative securities. Applications will focus on techniques designed to manage financial risks in the corporate environment. Specifically, the course will focus on using futures, options, and swaps to hedge financial risks. Valuation issues will be explored to identify theoretical pricing fundamentals that can be applied toward valuing newly developed securities. Recommended preparation: FIN 235 or FIN 5509.

FIN 5560 Financial Modeling Credits: 3

The primary objective of this course is to introduce students to some of the fundamental quantitative methods used in investment analysis. The student should develop a working knowledge of measuring risk and return, probability theory, sampling and estimation, hypothesis testing, correlation analysis, regression and time series analysis. The course will emphasize experimental learning by applying these concepts to real data in a spreadsheet environment. Recommended preparation: FIN 235 or FIN 5509.

FIN 5561 Financial Statement Analysis Credits: 3

Students will take an in-depth look at the external financial statements that are prepared by corporations, including the tools needed to organize, summarize, and understand corporate financial data for use in decision making. Ratio analysis, trend analysis, earnings forecasting, bankruptcy predictors statistical methods important to finance, and financial data bases are among the topics that will be covered. Recommended preparation: FIN 235 or FIN 5509.

FIN 5562 Fixed Income Analysis Credits: 3

The primary objective of this course is to provide an overall view of the role of debt markets in the modern economy. The course will cover the characteristics of instruments traded in money and capital markets; determinants of and the relationships between different security prices; and international aspects of financial markets. Topics include: valuing fixed income securities, managing interest rate risk, interest rate theory, the organization of bond markets and the structure and pricing theory underlying the mortgage-related fixed income market. Recommended preparation: FIN 235 or FIN 5509.

FIN 5563 Valuation/Mergers and Acquisitions Credits: 3

The primary objective of this course is to introduce students to techniques used to value both exchange-traded and private firms. Students should apply these techniques to cases involving mergers and acquisitions, initial public offerings private firm valuation and the valuation of a publicly traded stock. Recommended preparation: FIN 235 or FIN 5509.

FIN 5564 Portfolio Management Credits: 3

The primary objective of this course is to introduce students to some of the fundamental portfolio management tools used by practicing investment professionals. The student should develop a working knowledge of issues regarding portfolio construction, asset allocation, mean-variance optimization, performance measurement, and client relationship management. Recommended preparation: FIN 235 or FIN 5509.

FIN 5565 Alternative Investments Credits: 3

The primary objective of this course is to introduce students to investing in alternative assets. The student should develop a working knowledge of various types of alternative investments and how they impact the risk-return profile of a portfolio. The course will cover investments in hedge funds, private equity, real estate, commodities, real assets, energy, and infrastructure. Recommended preparation: FIN 235 or FIN 5509.

FIN 5566 Financial Plan Development Credits: 3

Personal financial planning differs for each of us for a variety of reasons including age, family, wealth, needs, income, and personalities to name a few. Nonetheless the tax, financial, and risk environments which inspire us to set goals are similar for all of us. Financial planners must take all of these financial and nonfinancial factors into consideration as they devise a plan for their clients. Our objectives, therefore, are to study the personal financial planning process and environment, examine the questions of financial planning, learn financial planning techniques, and develop the ability to prepare integrated financial plans for our clients.

FIN 5567 Payment Systems Credits: 3

Payment systems are central to modern economies, underpinning nearly all economic exchange among consumers, businesses, and government entities. Payment systems in the U.S. have undergone fundamental changes recently. Yet, these systems are among the least studied and least understood components of our economy. The purpose of this course is to provide an in-depth knowledge of U.S. payment systems and an analytical framework for evaluating and responding to ongoing changes in the payments landscape.

FIN 5568 Organizational Finance Credits: 2

Organizational Finance covers the fundamentals of finance with an emphasis on learning how to critically think as a business leader with a financial mindset.

Prerequisites: Admission to the Executive MBA program.

FIN 5576 Fundamentals of Fintech Credits: 3

This course will introduce students to Fintech and provide an overview of the main areas in which it is disrupting finance. These areas include lending and equity investment (algorithmic lending, P2P lending and crowdfunding platforms); financial market infrastructure (cryptocurrencies, blockchain technology, smart contracts); portfolio management and financial advice (robo-investment); and financial trading (algorithmic trading, digital trading platforms). Students will learn how the new financial technologies work, how incumbents and new entrants might profit from the technologies, and how the technologies could affect the efficiency, accessibility, fairness, and security of the financial system.

Prerequisites: FIN 5532.

FIN 5580 Organizational Valuation & Financial Modeling I Credits: 2

This course will cover the concept of risk and reward and that to eliminate risk is to eliminate reward. We will delve into how management considers the entity's risk appetite in evaluating strategic alternatives, setting related objectives and developing mechanisms to manage related risks.

Prerequisites: Admission to Executive MBA program.

FIN 5582 Seminar In Finance Credits: 3

Advanced work in financial management, investment analysis, and financial markets and institutions will form the basis for the Seminar. Each topic selected will provide the opportunity for an investigative study on the part of the student. Major problems, hypotheses, and cases, together with the literature addressing the specific topic, will serve as the springboard for classroom activity. Both written and oral reports are required.

FIN 5587 Special Topics Credits: 3

Special topics in finance.

FIN 5595 Internship Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

FIN 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

FIN 5899 Required Graduate Enrollment Credit: 1

Health Administration Courses

HLTH-ADM 471 Financial Management Issues of Health and Human Services Organizations Credits: 3

An overview of the financial management problems of health and human services organizations. A broad range of topics is examined: financial statements, ratio analysis, cost accounting, reimbursement and pricing, management of working capital, budgeting and programming, capital financing, and cash management.

HLTH-ADM 473 Health and Social Equity Credits: 3

Study of the interaction between health and social factors (i.e., the social determinants of health). We will explore the links between social, economic, and health disparities, both here in the United States and throughout the world. We will evaluate efforts to reduce social, economic, and health disparities, through public policies and initiatives of health care and non-profit organizations.

Prerequisites: DSOM 211 (or STAT 235 or STAT 115 or MOTRMATH 110).

HLTH-ADM 477 Leadership and Management in Health Care Organizations Credits: 3

An overview of leadership and management in health care, reflecting the uniqueness of this sector, is provided. Concepts of interprofessional relationships and team-based care delivery are introduced. Approaches to aligning diverse perspectives and interests with organizational priorities, leading change and improvement efforts, and promoting organizational learning are discussed.

HLTH-ADM 480 The Economics of Health and Medicine Credits: 3

Study of health care markets and how they function, with a particular focus on health care markets in the U.S. We will explore economic phenomena that distinguish health care markets, such as price discrimination, adverse selection, moral hazard, and public goods. We will take an in-depth look at the U.S. markets for health insurance, hospitals, physicians, and pharmaceuticals and compare the structure of these markets to their foreign counterparts. We will study government regulations and reform efforts and their impact on health care markets.

Prerequisites: DSOM 311.

HLTH-ADM 481 Health Policy in the United States Credits: 3

Examination of the relationship between determinants of health, major current health policy issues, and health policy making in the United States. The public policy process and its effects on the organization, financing, and delivery of health care are examined in detail. The roles of key players in health policy formulation and the public policy responses to current health policy are also examined.

HLTH-ADM 5551 Leadership and Strategy in Healthcare Credits: 3

This course provides an overview of major leadership and strategic issues in healthcare organizations in the areas of: 1) leadership and organizational dynamics, 2) strategic thinking and planning, 3) population health and health policy, 4) human resources, 5) performance management, and 6) organizational ethics. The course is eligible for inclusion in the Executive MBA program.

Prerequisites: Instructor approval required.

HLTH-ADM 5552 Managing Healthcare Organizations Credits: 3

This course provides an overview of major issues and essential tools in managing healthcare organizations in the areas of: 1) legal and regulatory issues that confront a healthcare organization, 2) healthcare quality and data analysis, 3) patient safety, 4) risk management, 5) process management, 6) healthcare economics, 7) cost and comparative effectiveness, 8) fundamental principles of financial management. The course is eligible for inclusion in the Executive MBA program.

Prerequisites: Instructor approval required.

HLTH-ADM 5571 Financial Management Issues of Health and Human Services Organizations Credits: 3

This course is intended to provide an overview of the financial management problems of health and human services organizations. A broad range of topics is examined: financial statements, ratio analysis, cost accounting, reimbursement and pricing, management of working capital, budgeting and programming, capital financing, and cash management.

HLTH-ADM 5572 Quality and Safety in Health Care Credits: 3

Overview of the quality, safety, and process management concepts, approaches, and issues relevant to healthcare delivery settings, including use of analytical techniques used to identify and mitigate contributing factors and process management tools that enable healthcare organizations to achieve their quality and safety goals.

HLTH-ADM 5573 Health and Social Equity Credits: 3

Examines the complex relationship between the social and political environment and health outcomes. All policy is health policy – economic, transportation, natural and built environments, schools. This course examines how social equity shapes health behaviors and how the life odds in different communities expose the historical legacies of past injustices. Only ten percent of health disparities are explained by access to care, although health care and health insurance dominate the public conversation. Draws on guest speakers, books, journal articles, popular press, film and art; as varied as are the social determinants of health, so are media that explore those relationships.

HLTH-ADM 5577 Leadership and Management in Health Care Organizations Credits: 3

An overview of leadership and management in health care, reflecting the uniqueness of this sector, is provided. Concepts of interprofessional relationships and team-based care delivery are introduced. Approaches to aligning diverse perspectives and interests with organizational priorities, leading change and improvement efforts, and promoting organizational learning are discussed.

HLTH-ADM 5578 Data Analysis for Health Care Managers Credits: 3

Data analysis tools that are useful to health care managers are developed. Common health care data structures and coding systems are introduced using health care databases that track actual patients and providers. Methods of data analysis used in health care management decision-making are studied, including risk-adjustment, contract analysis, quality measurement, cost-effectiveness analysis, and competition analysis.

Prerequisites: PUB-ADM 5510 or equivalent

HLTH-ADM 5580 The Economics of Health and Medicine Credits: 3

We will study health care markets and how they function, with a particular focus on health care markets in the U.S. We will explore economic phenomena that distinguish health care markets, such as price discrimination, adverse selection, moral hazard, public goods, and supplier-induced demand. We will take an in-depth look at the U.S. markets for health insurance, hospitals, physicians, medical devices, and pharmaceuticals and compare the structure of these markets to their foreign counterparts. We will study government regulations and reform efforts and their impact on health care markets. Economic tools that are useful for health care managers (e.g., the analysis of risk, bargaining theory) will also be covered.

Recommended preparation: Some mathematical social science.

HLTH-ADM 5581 Health Policy in the United States Credits: 3

This course helps students develop an understanding of the determinants of health, major current health policy issues, and health policy making in the United States. The public policy process and its effects on the organization, financing, and delivery of health care are examined in detail. The roles of key players in health policy formulation and the public policy responses to current health policy are also examined.

HLTH-ADM 5586 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

HLTH-ADM 5587 Special Topics Credits: 3

This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

HLTH-ADM 5595 Internship Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

Management Courses

MGT 100 Foundations of Business Credits: 3

Provides an introduction to the functional areas of business (e.g., accounting, systems, finance, marketing, human resources, and entrepreneurship) as well as a number of contemporary business topics, including social responsibility, diversity, ethics, and globalization. Additionally, students will be exposed to various topics that facilitate a successful transition from high school to college. Examples include an overview of University and Bloch School resources, development of effective study habits, time and stress management, selection of a major and career options.

MGT 256 Legal and Regulatory Contexts of Organizations Credits: 3

An examination of the legal, regulatory, and ethical environment in which businesses operate. Students are introduced to our legal system, focusing on selected areas of business law. Not available for credit for students who have completed MGT 306.

MGT 301 Effective Business Communication Credits: 3

The instructor introduces students to the strategic nature of business communication. By the end of the course, students should be able to analyze business situations, prepare messages that fulfill the intended purpose of their communication, and meet the needs and expectations of business audiences. Students will develop the tools to deliver effective, professional written and oral communications, and will learn how to use library and electronic business research tools.

Prerequisites: DISC 200 or ENGLISH 225 or equivalent and Bloch School student with 45 hours earned.

MGT 301A Effective Business Communication for Non-Native Speakers Credits: 3

Students will learn the strategic nature of business communication with a focus on building business English language skills and understanding U.S. business terminology and culture. By the end of the course, students should be able to analyze business situations, prepare messages that fulfill the intended purpose of their communication, and meet the needs and expectations of business audiences. Students will develop the tools to deliver effective, professional written and oral communications, in addition to cultivating their English language abilities in the business environment.

Prerequisites: DISC 200 or ENGLISH 225 or equivalent and Bloch School student with 45 hours earned.

MGT 306 Legal, Ethical And Regulatory Environment Of Business Credits: 3

The course looks at legal and moral thought, with attention to ethical issues in business. Students are introduced to our common law system; selected areas of law, with attention to the inclusion of cultural and moral values; and an introduction to government regulation of business.

Prerequisites: Bloch or BIT student with sophomore standing.

MGT 320 Law Of Commercial Transactions Credits: 3

Study of major areas of law included in the Uniform Commercial Code. Topics may include sales, commercial paper, bank deposits and collections, aspects of property law, documents of title, investment securities, and secured transactions.

Prerequisites: MGT 306.

MGT 330 Understanding the Individual in the Organization Credits: 3

This course explores the micro dynamics of organizations: the individual and his/her relationship to other people, teams, and work groups. Topics will include: individual traits, behaviors, and skills for effective performance; self-assessment and professional development; staffing; motivation; individual and group dynamics; multicultural understanding and diversity; and ethical decision making.

Prerequisites: MGT 301 or MGT 301A or concurrent enrollment (for BBA and BSA students); Bloch business minor or BIT student with sophomore standing.

MGT 332 Principles of Organizational Behavior Credits: 3

A study of the principles and foundations of managing individuals, groups, and organizations. This course seeks to develop students' understanding of the concepts and approaches that constitute the fields of organizational behavior and management and how these concepts and approaches may be applied effectively in the workplace. Not available for credit for students who have completed MGT 330.

Prerequisites: MGT 301 or MGT 301A or ACCTNG 360 or concurrent enrollment (for BBA and BSA students); Bloch minor or BIT student with sophomore standing.

MGT 337 Managing Human Capital Credits: 3

Building on prior coursework, this course will provide students with advanced human resource concepts and practices as well as practical experience in how human resources should be managed in successful businesses. Student groups will work with a local organization to diagnose, analyze, and make recommendations regarding effective programs in staffing, developing, rewarding, motivating, and managing its personnel.

Prerequisites: MGT 330 or MGT 332.

MGT 355 Organizational Effectiveness and Leadership Credits: 3

Students will study the macro dynamics of organizations: broad knowledge of how organizations work and the various ethical means of impacting outcomes. Topics will include: structure, culture, and politics of organizations; human resources and linkages to organizational culture and success; organization influence and political savvy; managing change and learning in a global context; organizational governance, codes of conduct, and internal controls; the role of business in society; and various professional development issues.

Prerequisites: MGT 330 or MGT 332.

MGT 360 Groups and Teams Credits: 3

Teamwork has become increasingly popular in many organizations. Whether formally integrated into the organizational structure, or temporarily created around specific projects, teams can be an important competency of organizations. They are considered an effective performance unit, and expected to efficiently cope with the fast changes and demands of today's business environment. Attaining the full advantages from teamwork requires effective management of team processes and dynamics. This course focuses on issues in team development, internal processes, and members' behavior, as well as management skills needed to effectively lead teams in organizations.

Prerequisites: Bloch student and completion of 45 hours.

MGT 365 Managing in a Virtual Environment Credits: 3

This course builds on the fundamentals of individual and group behavior to emphasize how organizational design and management practices have been dramatically affected by the proliferation of social media and other internet technologies. Students examine cases and engage in virtual exercises to experience ethical and mindful ways to engage in the virtual environment. Virtual-appropriate variations of interaction, collaboration, conflict management, decision-making, problem-solving, and leadership are introduced. Students also examine geographic and cultural issues potentially encountered in a global virtual organization.

Prerequisites: MGT 330 or MGT 332.

MGT 367 Human Resource Analytics Credits: 3

A survey of analytical methods necessary to understand critical HR topics and make effective human capital decisions. Analytical methods in staffing, rewards, benefits, performance management, diversity, legal issues, safety, and current HR topics will be explored.

Prerequisites: MGT 337 and DSOM 211 (or STAT 235 or STAT 115 or MOTRMATH 110).

MGT 370 International Management Credits: 3

Students receive an introduction to management in an international environment, addressing the management functions and behaviors necessary to develop global vision and management skills at a strategic (macro) and interpersonal (micro) level. Cross-cultural management and competitive strategy are evaluated in the context of global changes.

Prerequisites: Bloch student and completion of 45 hours.

MGT 372 Ethics and Leadership Credits: 3

Students use a variety of frameworks and approaches to address ethics both abstractly (via case studies) and as a practical matter, as it will affect them and how they approach life in the workplace and other organizations. Students analyze (1) the role of values and ethics in decisions that individuals, managers, and organizations make on a daily basis, as well as the responsibility of each party in these decisions, as well as (2) the impact of individual, relational, and cultural differences on how individuals, managers, and organizations recognize, understand, make, and sometimes revisit ethical choices.

Prerequisites: MGT 332 or MGT 330 or concurrent enrollment.

MGT 374 Leading a Positive Workplace Credits: 3

Students will build their understanding of the dynamics of relationships, organizations, and organizational life in building and maintaining a positive workplace. Students will incorporate individual, interpersonal, organizational, and societal foci for managing at an individual and organizational level. Strengths-based leadership, values, ethics, diversity, managing within and across levels, negotiation, conflict management, and other broad areas of leading a positive workplace will be covered. Not available for credit for students who have completed MGT 355.

Prerequisites: MGT 332 or MGT 330.

MGT 375 Global Mindset for Managers Credits: 3

Students receive an in-depth look at the major geopolitical and cultural factors that have forged the international conflicts, relations, and identities that international business managers should thoroughly comprehend to effectively navigate cross-border ventures. In-depth regional and country business and cultural profiles will be investigated to provide students with multiple contrasting perspectives to their own upbringing or sense of identity (a global mindset), allowing them to better sympathize, communicate, and collaborate when working in cross-cultural business environments.

Prerequisites: MGT 370.

MGT 410 Corporate Social Responsibility Credits: 3

Students will examine the role of corporate social responsibility (CSR) in modern society. Students will learn that being able to respond to needs and values of stakeholders is a key to success in the globalized business environment. This course also offers opportunities for students to apply knowledge to practical decision-making using case studies, research projects, or other course activities.

Prerequisites: MGT 332 or MGT 330 or concurrent enrollment; MGT 301 or MGT 301A or ACCTNG 360 or concurrent enrollment.

MGT 470 International Study in Business Credits: 3

This course is designed to provide a study-abroad experience for the student. The course involves three components: study of international business through on-campus lectures and discussions; travel to a foreign country for visitations to business firms, government organizations, and cultural sites; and critique sessions of the international learning experience after travel completion.

Prerequisites: Departmental consent with special application and selection process.

MGT 471 Strategic Management Credits: 3

The study of business strategy concepts and application using case studies representing "real world" situations. The course stresses the formulation of business strategies to achieve organizational objectives using strategic analysis and models based upon external and internal assessments of the organization's environment.

Prerequisites: Junior standing and completion of ACCTNG 211; FIN 325; MGT 330 or MGT 332; MKT 324; and completion of or concurrent enrollment in DSOM 326 or DSOM 340.

MGT 487 Special Topics Credits: 3

Special topics in management.

Prerequisites: Departmental consent.

MGT 496 Internship: Management Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

Prerequisites: Departmental consent.

MGT 497 Special Topics: Management Credits: 1-3

Study and research in areas of special interest under individual faculty direction.

Prerequisites: Departmental consent.

MGT 5501 International Business Environment Credit: 1.5

The aim of this course is to provide a broad introduction of the international business environment. Students will develop understanding of different economic, cultural political and legal environments affecting international business activities. They will further explore why international trade and government interventions occur among and across countries and how world financial institution have developed historically.

MGT 5502 Leadership in Organizations Credit: 1.5

This course focuses on how organizations work and how leaders can help them work better. Its goal is to provide ideas, tools, and tactics that will help students become more effective leaders. The course is designed to challenge students conceptually through readings, discussions, and developmental assessments, and to challenge at the level of self-awareness and action through teamwork, reflective activities, role plays, case applications, and "leadership challenges".

MGT 5503 Leadership Residency Credits: 2

The leadership residency engages students in the fundamentals of business and effective leadership practice during a one-week immersive experience. Using a business simulation, students learn the fundamentals of collaborative teamwork and basic concepts in the program's leadership curriculum. Additionally, the simulation introduces students to the core management areas of financial management and decision making, providing an overview of management strategy rooted in financial modeling and analysis.

Prerequisites: Admission to Executive MBA Program.

MGT 5507 Human Capital Management Credit: 1.5

This course seeks to provide managers with knowledge, skills, and resources to effectively manage human capital in organization of all sizes. It presents an overview of the theory, research, and practices used to strategically align HR policies and practices with the organization's overall business goals. The course highlights how HR policies and practices can support business objectives in a diverse, global environment while supporting ethical principles. Within a strategic HRM framework, functional areas of staffing, training and development, performance management, total rewards (compensation and benefits), and managing employment relationships are covered.

MGT 5512 Leading and Managing People, Teams and Organizations Credits: 3

Leading and Managing People, Teams and Organizations focuses on how aspiring leaders can enhance their effectiveness by addressing the human side of enterprise. It combines an exploration of key leadership tasks (e.g. shaping vision and purpose, engaging and influencing others, and sustaining momentum) with the study of essential human resources practices including hiring, developing, motivating, and creating a positive, rewarding workplace. Students will leave with concrete tools for understanding the organizational context, managing human capital, and bringing the best out of talented people.

Prerequisites: Students must be enrolled in a Bloch School graduate program.

MGT 5514 Strategic Management in the Globalized World Credits: 3

As the world has become increasingly integrated through globalization, today's business leaders must possess an awareness of global business environments and ability to navigate them. The aim of this course is to provide a broad introduction of the international business environment and strategic management concepts, and how a firm can gain competitive advantages. Upon completion of this course, students will possess an ability to recognize the opportunities and challenges and formulate strategies in the globalized business environment.

Prerequisites: FIN 5509 or concurrent enrollment; DSOM 5511 and MKT 5504.

MGT 5516 Leading Teams Credits: 3

This course is designed to enhance the student's understanding of designing, forming, developing, leading, and evaluating high-performing teams in traditional and virtual organizations. In-class projects will facilitate students' assessment and application of their own talents to the arts of member selection, coaching, and trust building to engage team members in productive and ethical group processes to achieve successful outcomes. Cases will be used to diagnose and potentially solve team difficulties considering intra-team, organizational, and extra-organizational factors.

Prerequisites: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5517 Leading Through Influence and Persuasion Credits: 3

This course challenges students to think about power dynamics in organizations and the array of influence approaches leaders develop and use to build support for their ideas and strategies. Using reading, case studies, and self-reflection tools, this course engages students in critical thinking about business scenarios that require a variety of leader influence strategies beyond traditional "command and control" approaches. Through exploration of concepts such as mapping the terrain, building social capital, and managing across, students develop a toolkit of ethical strategies for enhancing their organizational credibility and influence.

Prerequisites: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5518 Leadership & Motivation Credits: 3

The course explores leadership as a relationship between leaders and those they are leading that enables people to work together in the service of shared goals. The course focuses on five basic tasks of leadership: (1) diagnosis-understanding what's happening; (2) shaping purpose and values; (3) enlisting and engaging people (including coaching, building high-performance cultures, motivating and inspiring); (4) sustaining momentum; (5) reflection and assessment.

Prerequisites: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5519 Conflict Management and Negotiation Strategies Credits: 3

This course explores the nature of successfully managing conflict in organizational settings, as well as the skills needed to be an effective negotiator. In this course, students will learn the difference between functional and dysfunctional conflict, how to stimulate functional conflict, various styles for managing conflict, ways to identify the desired outcomes of conflict, how to prepare for negotiations, various dispute resolution techniques, and the characteristics of effective negotiators. The course uses a variety of tools - readings, case studies, videos, and guest speakers - to engage students in real business scenarios related to managing conflict and negotiation strategies.

Prerequisites: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5523 Negotiation, Conflict Management, and Influence Skills Credits: 2

Opportunities for negotiation, conflict management, and influence are everywhere. Effective negotiators use analytical skills, interpersonal sensitivity, and communication acumen to resolve conflicts, influence others, and reach agreements that serve their interests and preserve or enhance their reputations. Students will develop deep familiarity with fundamental negotiation concepts such as BATNA, reservation price, interests, and distributive and integrative negotiation. Students will also develop their practical knowledge and skills from pre-negotiation planning to post-negotiation evaluation through intensive experiential simulations with peer review and rapid feedback, personal journals, and coaching.

Prerequisites: Admission to Executive MBA Program.

MGT 5531 Leadership, Strategy and Human Resources Credits: 2

Focuses on the leader as a catalyst in developing high-performance, market-based cultures and as a human resource strategist in marshaling the workforce. Geared to the general manager, the course presents ideas and tools for building, bonding, and linking the workforce to accomplish the organization's mission. Topics include ideas and tools for identifying, recruiting, and retaining talent; developing and coaching subordinates; appraising and rewarding performance; and delegating to balance control and risk.

Prerequisites: Admission to Executive MBA program.

MGT 5533 Leading and Managing Change Credits: 3

This course provides students with analytical skills and insights to more effectively manage and lead change, especially within those organizations characterized by complexity and/or uncertainty. Using a variety of vehicles-including case studies, articles, and speakers-the course engages students in timely, real change scenarios and associated management challenges, such as adaptation in changing markets; turnarounds in troubled businesses; integrative change in acquisitions, and process change in stable businesses.

Prerequisites: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5538 Strategic Management Credits: 3

Strategic Management sets the tone for year 2 of the Executive MBA. Students study the formulation and evaluation of strategy, including industry analysis, strategic positioning, and the boundaries of the firm. Students address the capacity of executive leadership to create and communicate a clear direction for a company's future. Additional focus areas include competition and innovation.

Prerequisites: Admission to the Executive MBA Program. Completion of Semester 1 and Semester 2 of the Executive MBA program.

MGT 5545 International Management Credits: 3

Examination of the management of contemporary international business organizations through a study of the political, economic, social and technological factors and their relationship and impact upon the administrative activities and strategies of the international firm.

MGT 5546 Seminar in International Management Credits: 3

This course focuses on the issues that business organizations face in a global economy. The instructor will introduce global strategic decisions via case studies.

Prerequisites: MGT 5545.

MGT 5547 Global Initiatives in Management Credits: 2

Global Initiatives in Management examines the complexity of management across national boundaries. The course explores the interrelationship and impact of political, economic, social, and technological factors when formulating and executing strategy internationally.

Prerequisites: Admission to the Executive MBA program

MGT 5552 International Study in Business Credits: 3

This course is designed to provide a study-abroad experience for the student. The course involves three components: study of international business through on-campus lectures and discussions; travel to a foreign country for visitations to business firms, government organizations, and cultural sites; and critique sessions of the international learning experience after travel completion.

Prerequisites: special application and selection process.

MGT 5557 Leadership And Organizations Credits: 3

Leadership and Organizations provides tools and tactics for assessing organizations' needs and constraints through multiple lenses, and assessing one's own leadership strengths and weaknesses for development and alignment with organization needs. Additionally, students will be introduced to a framework for ethical decision making, and how ethics is important to the strategic outcomes of an organization.

Prerequisites: Admission to Executive MBA Program.

MGT 5566 Attracting, Retaining, and Developing Human Capital Credits: 3

This course presents theoretical frameworks and practical applications for determining optimal person-organization fit and person-job fit within organizations. Emphasis will be placed on integrating recruitment, selection, retention, and training and development strategies and practices with overall business strategies. The importance of strategically planning and implementing staffing and development processes will be addressed as critical contributors to organizational effectiveness and sustainability. Recommended preparation: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5567 Total Rewards Management Credits: 3

Total Rewards Management presents both theory and practice for designing effective rewards systems within organizations. The development of base pay and incentives and how they can be linked to performance will be covered. Characteristics of the work environment, such as recognition and development opportunities will also be considered in terms of their contribution to the total reward system. Recommended preparation: MGT 5512 or MGT 5502 or MGT 5507 or PUB-ADM 5548.

MGT 5568 Talent Management Credits: 2

Attraction, retention, motivation, and management of the organization's human resources is critical in our knowledge-based economy. This course will address strategic issues around sourcing, acquiring, motivation, retaining, and managing workers in domestic and global enterprises from a variety of industries.

Prerequisites: Admission to Executive MBA program.

MGT 5569 Leadership Accountability and the Legal Implications Credits: 2

Highlights the accountability of leaders and the challenges they face in the rapidly changing business environment. The course studies the political, social, ethical, and global environment in which American business organizations operate and the impact on today's leaders. Topics include creating and maintaining affiliate relationships and joint ventures, as well as prohibitions in anti-competitive behavior, protection of intellectual property, operating within a regulated environment, and securities law.

Prerequisites: Admission to Executive MBA Program.

MGT 5570 MBA Capstone-Global Management Consultancy Credits: 3

An integrative global management consulting experience for a real world organization that applies analytical skills in the areas of finance, marketing, information systems, supply chain management, human resources, leadership, innovation, international, and strategy. Course deliverables include written and oral reports for the client organization. The course requires travel to visit client organization's operations.

Prerequisites: MBA students must have completed all required core courses AND be in the last year of their program. MSA, MPA, MSF, MSERE, or MSGE program students may enroll with consent of instructor. Special application and selection process.

MGT 5571 Influence, Persuasion and Change Credits: 2

Presents ideas, strategies, and tools for leading change in complex organizations. This course challenges students to think about the execution of change strategies through assessment or organizational power dynamics and appropriate influence styles for achieving results. Emphasis is placed on analyzing these attributes and skills most critical for building influence, especially in change initiatives, and on defining an ethical approach to leading, influencing, and persuading others.

Prerequisites: Admission to the Executive MBA program.

MGT 5572 MBA Capstone-The Capstone Consulting Project Credits: 3

An integrative management consulting experience for a real world organization that requires application of conceptual models and analytical skills in multiple disciplines including areas such as finance, marketing, information systems, supply chain management, human resources, leadership innovation, international, and strategy. Course deliverables include written and oral reports for the client organization. The course requires interaction with senior managers in the client organization with anticipation of in-person or virtual visits to the firm.

Prerequisites: MBA students must have completed all required core courses AND be in the last year of their program. MSA, MPA, MSF, MSERE, or MSGE program students may enroll with consent of instructor.

MGT 5581 Current Issues in Management with Technology Credits: 2

Technology is being incorporated in all aspects of management. The current issues course explores the strategic deployment of technology in operational areas like supply chain, marketing, human resources and accounting. Students are exposed to technology as a strategic tool to be incorporated in core management functions.

Prerequisites: Admission to EMBA program.

MGT 5585 Integrated Business Strategies (Capstone) Credits: 2

Integrates the disciplines of business to help the student develop a comprehensive understanding of business planning and strategy. Students will use cases and simulation to plan and test alternative business strategies in a competitive environment. The course examines the critical factors involved in strategic decision making.

Prerequisites: Admission to the MBA Program.

MGT 5587 Special Topics Credits: 3

The study of a contemporary management topic of interest.

MGT 5595 Internship Credits: 1-3

An opportunity for students to integrate their academics studies via employment with a business/organization in the community.

MGT 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

MGT 5899 Required Graduate Enrollment Credit: 1

Management Information Systems Courses

MIS 202 Computer Applications In Management Credits: 3

A comprehensive coverage of computer tools for personal productivity in a management context, including spreadsheets and databases.

Prerequisites: MATH 110 or MATH 120 or higher; or ALEKS score of 61 or higher; or ACT MATH sub-score of 28 or higher; or SAT MATH sub-score of 660 or higher.

MIS 402 Information Management Credits: 3

This course introduces students to the impact of information technologies and systems on the enterprise. Business Intelligence and decision support capabilities are explored as well.

Prerequisites: MIS 202 and junior standing Bloch student.

MIS 415 Managing the Information Systems Resource Credits: 3

All organizations today have information systems, and managing the related resources (systems personnel, software applications, databases, networks, computing hardware) is a necessary skill for many employees. This course is aimed at developing the non-technical skills that business-school graduates need to make appropriate decisions about the deployment of information systems throughout the firm.

Prerequisites: MIS 202 and junior standing Bloch student.

MIS 487 Special Topics Credits: 3

Special topics in management information systems.

Prerequisites: Departmental consent.

MIS 496 Internship: Management Information Systems Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

Prerequisites: Departmental consent.

MIS 497 Special Topics: Management Information Systems Credits: 1-3

Study and research in areas of special interest under individual faculty direction.

Prerequisites: Departmental consent.

MIS 5507 Business Analytics and Statistics Credits: 3

Business Analytics is about the science and the art of using data for making well-informed business decisions. The course covers the techniques used for acquiring and preparing data, as well as various statistical methods and procedures for mining the data to identify and infer patterns, relationships, and trends. It discusses how these methods can be used by managers for descriptive, predictive, and prescriptive purposes. Upon the successful completion of this course, the student will have the knowledge and the hands-on skills to apply business analytics techniques to various business contexts.

Prerequisites: Bloch School graduate program student.

MIS 5529 Decision Support Systems Credits: 3

Information systems to support decision makers in organizations. This course focuses on influences of cognitive biases and group think on decision makers. Identification of both potential uses of information technology to support decision makers and potential effects of information technology on the decision making processes, and may include a number of computer-oriented assignments.

Prerequisites: MIS 5507.

MIS 5540 Information Technology as a Strategic Tool Credits: 2

This course examines the critical linkage between an organization's business, cultural, and information technology (IT) strategies. In organizations today, information technology has become a key component in accomplishing strategic and operational goals. The course provides concepts and a framework for understanding and enhancing the role IT can play in innovation, change, and continuous organizational learning.

Prerequisites: Admission to the Executive MBA program.

MIS 5552 Data Base Management Credits: 3

Data administration, including theory of relational databases and projects using relational data management packages. The course looks at data modeling and information engineering, entity-relationship modeling, database design, normalization, data dictionaries, distributed databases, database servers, data quality assurance, data integrity, SQL, and may include a number of computer-oriented assignments.

Prerequisites: MIS 5507.

MIS 5554 Systems Analysis, Design And Engineering Credits: 3

This course introduces tools for documenting information system requirements and design and implementation methods; organization of software projects; system specifications, documentation and diagramming standards; programming languages and methodology; costs and schedule estimation, project management; program verification, and internal control issues.

MIS 5557 Data Management and Data Mining for Business Analytics Credits: 3

Data are the major ingredient for making quality business decisions. Students are introduced to the major steps in storing and preparing data as the raw input for decision-making. This includes an introduction to relational databases and data warehouses. Students also learn data mining techniques and statistical methods for inferring and extracting actionable insight from data. These methods help identify relationships and trends in existing cases and provide predictive power about new, unseen cases. Upon successful completion of this course, students will have an understanding of how data can be used to support fact-based decision-making across various business functions and contexts.

Prerequisites: MIS 5507, or DSOM 5509, or PUB-ADM 5510, or ACCTNG 5568, or RL-EST 5573, or FIN 5560.

MIS 5558 Management of Information Technology Credits: 3

Topics to be covered include procurement and management of computer systems, economics of hardware and software, software acquisition, RFQs, RFPs, contract terms and conditions, end-user computing, capacity planning, contribution of computing to business objectives, control, audit, and security of information technology; legal and ethical perspectives; and international issues.

MIS 5587 Special Topics Credits: 3

Special topics in management information systems.

MIS 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

MIS 5899 Required Graduate Enrollment Credit: 1

Marketing Courses

MKT 324 Principles of Marketing Credits: 3

The course focuses on the processes involved in the marketing of goods and services, including the meaning and importance of marketing terminology, the marketing mix, the marketing concept, consumerism, market segmentation, market and marketing research, and the impacts of different competitive structures on marketing decision making.

Prerequisites: Completion of 45 hours.

MKT 335 Customer Insights Credits: 3

This course draws upon findings from various disciplines including cognitive psychology, social psychology, sociology, economics, and anthropology to understand and predict buying behavior. Structured around applications in marketing strategy, topical coverage includes motivation, perception, attitude change, choice decisions and the consumption process, as well as post-purchase satisfaction.

Prerequisites: MKT 324.

MKT 348 Marketing Research Credits: 3

Marketing Research is designed to systematically introduce students to the most commonly used tools/techniques used to arrive at major business decisions from a consumer/customer perspective. The course emphasizes analysis of data using statistical models. Students will use designated software to analyze data to address real-world marketing problems pertaining to market entry decisions, new product development, product positioning, and pricing.

Prerequisites: MKT 324; and DSOM 211 (or STAT 235 or STAT 115 or MOTRMATH 110) or DSOM 309.

MKT 390 Customer Data Analytics Credits: 3

Customer Data Analytics is designed to systematically introduce students to contemporary tools/techniques pertaining to the analysis of customer data to assist with business decision-making. The course emphasizes analysis of data using statistical models. Students will use designated software to analyze a wide variety of customer data for business purposes such as assessing customer response to marketing intervention, classification, clustering (for market segmentation), etc.

Prerequisites: MKT 324 and DSOM 211 or DSOM 309.

MKT 418 Advertising and Branding Credits: 3

Students receive exposure to the planning, implementation, and evaluation of various advertising and promotion strategies. Topics covered will include communication process, brand positioning, branding strategies, creative strategies; media planning, and promotional effectiveness.

Prerequisites: MKT 324.

MKT 420 Sales Management Credits: 3

This course examines the strategic management of the boundary-spanning function of the organization, the sales force. Topics include the selling process, customer relationship management, organizing the sales effort, utilizing sales force automation technology, understanding the salesperson's role, selecting appropriate salespeople, motivating the sales force, conducting training programs, and evaluating the efficacy of individual salespeople and the overall sales function.

MKT 430 Personal Selling Credits: 3

Regardless of what career you choose, sales will be a part of your life. Sales is an extremely common first job for graduating students and more than half of business graduates hold their first job in sales. The skills you will learn in this course are especially applicable to the professional selling context, however, they are also very relevant in non-sales applications. For example, this class will provide guidance in how to effectively conduct a job interview, make a sales proposal, deal with objections, manage your managers, and much more. These skills are valuable in any job regardless of major.

MKT 442 Social Media and Mobile Marketing Credits: 3

The course builds around Database Marketing principles, whether supporting marketing at a distance without requiring a physical wholesale or retail intermediary; or supporting physical retail. Social and Mobile media principles, on-line measurement, digital marketing strategy, and tactics by on-line platform are discussed across a variety of media and devices. Students must demonstrate competence in SEO (Search Engine Optimization) and on-line analytics.

Prerequisites: MKT 324.

MKT 465 Introduction to Retailing and Pricing Credits: 3

This course presents an approach to retail and pricing management. Topics covered in the course include: retail strategy development, understanding the customer, retail information systems, market location selection, merchandise buying and handling, financial operations management, human resource management, operations management, store layout and design, laws ethics, and retail tactics.

Prerequisites: MKT 324

MKT 480 Strategic Marketing Credits: 3

Marketing 480 is the capstone course in the marketing curriculum. The intent of this course is to review and integrate the important concepts you have learned in your other marketing and general business classes into a unified whole. This class is very intensive as well as interactive.

Prerequisites: MKT 324.

MKT 487 Special Topics Credits: 3

Special topics in marketing.

MKT 496 Internship: Marketing Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

Prerequisites: Departmental consent.

MKT 497 Special Topics: Marketing Credits: 1-3

Study and research in areas of special interest under individual faculty direction.

Prerequisite: Departmental consent.

MKT 5501 Marketing Management Credit: 1.5

This course goes beyond the explanation of basic concepts of marketing. The goal is to present a strategic and integrative perspective of marketing in the contemporary digital, global and competitive marketing environment. The emphasis is on the interface between an organization's objectives, capabilities, resources and marketplace needs and opportunities. Examples of major topics to be covered are market-oriented philosophy and corresponding strategy, customer relationship management, branding and brand equity, services marketing, marketing ethics, defensive and offensive marketing strategies, product positioning, distribution and pricing strategies.

MKT 5504 Marketing Management Credits: 3

The course presents concepts of marketing, describes marketing strategy, and defines marketing tactics. Marketing law, fiduciary responsibilities, and marketing ethics for executives impacted by marketing success are identified. The goal is to present a strategic and integrative perspective of marketing in the contemporary digital, global and competitive marketing environment. The integration between an organization's objectives, capabilities, resources and marketplace needs and opportunities is described. Examples of major topics to be covered are marketing philosophies and their corresponding strategies, technology-driven customer relationship management, branding and brand equity, services marketing, product positioning, distribution and pricing strategies, and implementation of marketing tactics in.

Prerequisites: Students must be enrolled in a Bloch School graduate program.

MKT 5539 Social and Mobile Marketing Credits: 3

The course builds around Database Marketing principles, whether supporting marketing at a distance without requiring a physical wholesale or retail intermediary; or supporting physical retail. Social and Mobile media principles, on-line measurement, digital marketing strategy, and tactics by on-line platform are discussed across a variety of media and devices. Students must demonstrate competence in SEO (Search Engine Optimization) and on-line analytics. Students learn to calculate Lifetime Value, Break-Even, PL on a Campaign, and Payback period using industry accepted methodologies.

Prerequisites: MKT 5504.

MKT 5555 International Marketing Credits: 3

This course focuses on marketing problems confronting international business managers and the ways they may be analyzed and resolved.

The course content includes concepts and techniques useful in international marketing; effects of national differences on marketing practices; organization for international marketing; and strategy formulation for international markets.

Prerequisites: MKT 5504.

MKT 5560 Customer Insights and Communication Strategy Credits: 3

A review of behavioral science concepts and related academic research to help understand customer behaviors and communications targeted to them. Special emphasis is placed on applications of these concepts to problems related to strategies of product, pricing, promotion, and place or distribution.

Prerequisites: MKT 5504.

MKT 5562 Marketing Research & Data Analysis Credits: 3

This course is designed to systematically introduce you to the most commonly used tools/techniques used to arrive at major business decisions from a consumer/customer perspective. The course emphasizes analysis of data using statistical software. Students will be taught to use designated software to analyze data to address real-world marketing problems.

Prerequisites: MKT 5504 and MIS 5507.

MKT 5565 Marketing Management Credits: 2

Marketing management examines the role of marketing in driving profitable revenue growth in companies. The focus is placed on tools and approaches to analyzing and understanding customer needs- including the roles of market research and brand equity- and the development of integrated marketing plans to deliver to those needs.

Prerequisites: Admission to Executive MBA Program.

MKT 5566 Customer Data Analytics Credits: 3

This course is designed to systematically introduce you to the most commonly used tools/techniques for the analysis of customer data for managerial decision-making in a wide variety of business settings. The course emphasizes tools for predictive analytics using statistical software. Students will be taught basic concepts pertaining to regressions, choice models, classification, and segmentation techniques together with hands-on training in designated software. Recommended preparation: Graduate level course in business statistics or decision science.

Prerequisites: MKT 5504 and MIS 5507.

MKT 5575 Applied Strategic Marketing Credits: 3

This course focuses on advanced marketing skills and practical techniques for defining and meeting the needs of the chosen market. The emphasis is on key drivers of marketing effectiveness, including creating a market-oriented culture, customer-focused information systems, the relationship of various components of marketing, and the response to marketing variables. A variety of pedagogical approaches, including applied projects, may be employed.

Prerequisites: MKT 5504.

MKT 5587 Special Topics Credits: 3

Special topics in marketing.

MKT 5595 Internship Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

MKT 5597 Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

MKT 5899 Required Graduate Enrollment Credit: 1

Public Administration Courses

PUB-ADM 410 Research Methods In Public Administration Credits: 3

This introductory course focuses on quantitative empirical research design and statistical analyses in relation to public administration issues and concerns.

Prerequisites: Departmental consent.

PUB-ADM 420 Urban Environmental Policy Credits: 3

Our cities are a first line of action in our efforts to sustain our environment. Many have begun to examine and address the connection between city problems and environmental and climate change, and the disproportionate impacts that they often have on the disadvantaged, yet these initiatives address only the surface of the issue. It is essential for scientists, public administrators, environmentalists, and policy thinkers to pay greater attention to the environmental challenges of our cities. Students examine and assess the challenge of understanding, developing and implementing coherent environmental policy to address such challenges in urban communities.

PUB-ADM 421 Managing for Sustainability in an Urban Environment Credits: 3

Managing for sustainability requires an understanding of theories of organization, environmental management, and sustainability, including how to define and achieve sustainability. Students examine the complexities associated with issues of sustainability and the interrelationship between the global, the local and the personal. This includes consideration of how organizations function, the obstacles to sustainability confronted by sustainability managers, and specific management strategies and tools available to sustainability managers. It also involves the study of change models and their application by managers faced with the challenge of moving an organization from an old operational model to a more sustainable new organizational design.

PUB-ADM 422 Ethics for Nonprofit and Public Administrators Credits: 3

It is essential that organization and community leaders and managers understand the imperatives of ethical practice and ethical leader and manager behavior in nonprofit and governmental settings. Students are prepared to identify and assess the ethical implications of management and policy alternatives, to spot ethical issues before they become crises, and to competently and confidently develop and implement ethical decisions and actions in policy and practice. The ethical dimensions of democracy, political loyalty, pressure politics, interest group issues, pluralism, diversity and multi-cultural challenges, corruption and evil, honesty, the limits of ethical codes, whistle-blowing are included.

PUB-ADM 448 Leadership For Public Service Credits: 3

The two core purposes of this course are for students to learn about effective and ethical leadership, and for students to understand and develop their own capacity for leadership. The course is organized around three general themes: 1) leadership as relations with subordinates, including issues of work motivation; 2) leadership as lateral relations, including organizational politics and conflict management and resolution; and 3) leadership as influence in the organization's environment.

Prerequisites: Departmental consent.

PUB-ADM 455 Non-Profit Leadership Issues Credit: 1

Focusing on leadership issues in nonprofits, this course will explore issues in an intensive seminar format (fifteen class hours). Topics include building and renewing nonprofit boards, and the power of diversity in nonprofit organizations. Recommended for nonprofit management students.

PUB-ADM 455B Non-Profit Leadership Issues: Board-Staff Relations Credit: 1

PUB-ADM 487 Special Topics Credits: 3

Special topics in public administration.

PUB-ADM 492 Creating and Measuring Social Impact Credits: 3

Students learn alternative approaches for conceptualizing and understanding the performance, effectiveness, and impact of nonprofit organizations and the programs they operate, and employ the basic frameworks and processes by which social impact can be measured and evaluated. This includes the use of logic models and theories of change to inform the design, operation, and evaluation of programs, with specific attention to data-based analytic approaches to impact assessment.

Prerequisites: Junior or senior standing.

PUB-ADM 493 Nonprofit Fundraising and Development Credits: 3

Examines the processes and functions by which nonprofit organizations plan, organize, implement and evaluate the work of fundraising and development to secure the financial resources needed to support and sustain their programs and activities. Students gain an understanding of and practical experience in employing the basic approaches and techniques used by nonprofits to raise and deploy philanthropic resources, including annual and multi-year giving programs, major gift solicitation, planned giving initiatives, capital campaigns, and prospect research and proposal writing.

Prerequisites: Junior or senior standing.

PUB-ADM 494 Leading and Managing Nonprofit Organizations Credits: 3

Examines the processes by which nonprofit charitable organizations and associations are governed, led, and managed, with particular attention to the work of the board, executives, and managers. Students learn a strategic framework by which to sustain and enhance the performance and impact of these nonprofit organizations. Among topics of special importance are the dimensions of governance, strategy and planning that are unique to nonprofit public service organizations, including stages of organization development, the planning and business model development associated with the financial management, human resource management, board leadership, ethical decision making, and organizational effectiveness and accountability.

Prerequisites: Junior or senior standing.

PUB-ADM 495 Voluntarism, Philanthropy & The Non-Profit Sector In The U.S. Credits: 3

Nonprofit organizations are omnipresent in our lives. They provide necessary social services to all sectors of society. They are important instruments of socialization. This course investigates this under-examined sector of our society. It looks to theoretical reasons for the sector, its empirical trends, and the significant challenges that it faces.

PUB-ADM 497 Special Topics In Public Administration Credits: 1-3

Study and research in areas of special interest under individual faculty direction.

Prerequisites: Departmental consent.

PUB-ADM 497B Special Topics In Public Administration Credits: 1-3

PUB-ADM 5507 Management in Context Credits: 3

This course introduces students to management in business, public, and nonprofit organizations, with an emphasis on the political, legal, regulatory, social, and global contexts. Students will take this course at the beginning of their M.B.A. program and will learn to integrate the course content into their other courses. They will apply theories and concepts to organizational issues, legal, and ethical problems. They will be exposed to the major differences between U.S. and international approaches regarding many management issues.

Prerequisites: Students must be enrolled in a Bloch School graduate program.

PUB-ADM 5510 Research Methods in Public Administration Credits: 3

This introductory course focuses on quantitative empirical research design and statistical analyses in relation to public administration issues and concerns.

PUB-ADM 5523 Public Policy and Industry Credits: 3

Private sector organizations are subject to the public policy process and decisions from executive agencies of the government. Public policy and industry enables students to build business acumen, cultivating an understanding of how public sector decisions impact strategic objectives. Specific attention will be devoted to the impact economic policies have on private sector organizations.

Prerequisites: Admission to the Executive MBA program.

PUB-ADM 5525 Financial Accountability And Policy Development Credits: 3

Modern fiscal policy and its administrative implications to planning, budgeting, revenue administration, accounting and appraisal, and the process for assuring accountability in the development, timing, and execution of public programs.

Prerequisites: PUB-ADM 5510.

PUB-ADM 5526 The Politics of Administration Credits: 3

This course will introduce the subject of public administration from a political perspective. Special attention will be given to an examination of the administrative branch of government. More specifically, the course will focus on the demands directed to administrators from various sectors of the political system, the ways in which administrators respond to those demands, and methods available for the analysis of public policies that help us assess the impacts that flow from administrators' actions.

PUB-ADM 5528 Supervision, Performance Leadership, & Human Resource Management Credits: 3

Focuses on the public service leader as a catalyst in developing and sustaining high-performance, outcome-based cultures and as a human resource strategist in marshaling the workforce. Geared to the work of nonprofit, health care, and government executives and managers, the course addresses strategies for developing, organizing, and mobilizing the workforce to accomplish the organization's mission. Topics include recruiting, engaging and retaining talent, including volunteers; developing and coaching subordinates; appraising and rewarding performance; delegation; and legal dimensions of HR, including anti-discrimination law.

Prerequisites: PUB-ADM 5548.

PUB-ADM 5529 Social Responsibility and Social Entrepreneurship Credits: 2

Using the social enterprise concept, students learn the theory that major companies can move social responsibility from a cost center to a profit center. In this evolving landscape, social entrepreneurs are at the vanguard of creating new business models for neglected markets that corporations can emulate, partner with or acquire to take to scale. As the traditional lines blur among nonprofits, government and business, it is critical that business students understand the opportunities and challenges in this new landscape.

PUB-ADM 5530 Capstone Seminar in Public Administration Credits: 3

This course examines theories of public organizational design, structure and change, including various issues in the administration of public organizations. Questions of professional ethics and management in the public interest are also considered. This is the final course in the MPA core curriculum.

Prerequisites: PUB-ADM 5525, PUB-ADM 5526, PUB-ADM 5544, PUB-ADM 5548 (or equivalents), or concurrent enrollment. Health-services students can substitute HLTH-ADM 5571 for PUB-ADM 5525, and HLTH-ADM 5578 for PUB-ADM 5544.

PUB-ADM 5535 Urban Policy and Administration Credits: 3

An examination of contemporary problems and issues found in urban environments. This includes exploration of the historical, political, economic, and social foundations of contemporary urban problems. Students will use general knowledge of public policy processes to develop skills, strategies, and knowledge necessary to analyze urban problems and develop policy solutions. An explicitly multi-sector focus will inform urban policy analysis and solutions.

PUB-ADM 5536 Managing Urban Economic Development Credits: 3

This course explores what managers in the public, nonprofit and private sectors need to know about urban economic development. Topics include (a) theories of urban economic development, (b) varying forms of development (e.g., attraction of new industries, central business district development, neighborhood economic development), (c) policy managerial tools for stimulating development, and (d) issues of equity in economic development.

PUB-ADM 5538 Comparative Urban Administration Credits: 3

An analysis of urban administration and planning in different comparative political, economic, and cultural settings. Analytical techniques will be applied to case studies of selected urban administrative processes involving American and other cities.

PUB-ADM 5539 Urban Planning for Public Administrators Credits: 3

This course is designed to provide students in urban administration with a comprehensive overview of the planning process. Course topics include a review of planning and the problems of effective planning implementation.

PUB-ADM 5540 Local Government Management Credits: 3

An examination of the challenges encountered in the local government management function and its role. Topics covered include political and organizational structure, service delivery, finance, personnel policies, intergovernmental relations, urban development, and leadership. The course includes presentations by practicing professionals, an emphasis on the case study method, and opportunities to analyze real-world issues and prepare recommendations for addressing them.

PUB-ADM 5541 Public Policy Development and Analysis Credits: 3

Public, nonprofit, and health organizations must navigate dense systems of complementary and contradictory public policies. These policies assign value to the actions of citizens, and are designed through a process of negotiation and analysis. In this course students will develop the frameworks and analytical methods necessary to understand the process of policy creation as well as the costs and benefits associated with any given policy, including the economic foundations for policy and the impact of policy on management decisions.

PUB-ADM 5544 Program Evaluation Credits: 3

Survey of the tools and procedures for evaluating and analyzing policies and programs in the public sector, including nonprofit and human services organizations. Consideration of such topics as definition of goals, developing measures of effectiveness, evaluation research designs, benefit-cost analysis, and the special problems of rational analysis in a political environment.

Prerequisites: PUB-ADM 5510.

PUB-ADM 5546 Socially Responsible Management and Ethics Credits: 2

An introduction to the context of management in business, public, and nonprofit organizations with a specific emphasis on the political, regulatory, social, natural and global environment of management. Students gain an understanding of organizations and management that can be used in day-to-day work environments, apply theories and concepts to identify organizational issues, problems, and/or ethical considerations. Working individually and in groups, students explain in written and oral formats, and in general and specific terms, what an organization is, how it works, and how it relates to them, to other organizations, and the environment.

PUB-ADM 5548 Leadership, Change and Social Impact Credits: 3

The two core purposes of this course are for students to learn about effective and ethical leadership, and for students to understand and develop their own capacity for leadership in dynamic, complex, and multisector environments. The course is organized around three general themes: 1) leadership as relations with subordinates, including issues of work motivation; 2) leadership as lateral relations, including organizational politics and conflict management and resolution; and 3) leadership as influence in the organization's environment.

PUB-ADM 5551 Managing Nonprofit Organizations Credits: 3

Managing Nonprofit Organizations is designed to prepare students for a career in executive management in private, nonprofit/nongovernmental organizations. The course examines the overall concepts of management and strategy in the nonprofit setting, and the role of board and executive leadership in providing strategic direction for the organization. The course addresses topics of special importance in the governance and strategic management of charitable nonprofit organizations, including organization development, board leadership, strategic planning, human resource management, organizational performance and effectiveness, and marketing.

PUB-ADM 5552 Community Organizations and Public Policy Credits: 3

This course includes examination of both neighborhood organizations and organizations intended to promote other communities of interest. In relation to neighborhood organizations, topics considered include the varieties of neighborhoods, the role of neighborhood organizations in local politics, the use of neighborhoods in administrative and political decentralization, and federal policy toward neighborhood issues. In relation to other community organizations, topics considered include the basis of such organizations, their roles in public affairs and their effects on policy processes.

PUB-ADM 5553 Legal Framework & Financial Management of Nonprofit Organizations Credits: 3

Utilizing a comparative approach the course examines the legal basis and tax treatment of private, nonprofit organizations in the U.S. Related topics also considered include concepts of fund and cost accounting, budgeting processes, earned income strategies, employee compensation and benefits practices, laws and regulations affecting lobbying, competition with business and unrelated business income tax.

PUB-ADM 5554 Seminar on Social Entrepreneurship Credits: 3

Seminar on Social Entrepreneurship is a graduate-level special-topics seminar that offers students from across the university the opportunity to engage in an in-depth examination of social entrepreneurship and how it is being understood, developed and practiced in the nonprofit sector. Students will gain a broad understanding of the various conceptions, types and aspects of social entrepreneurship, learn about processes for engaging in entrepreneurial nonprofit organization development, and discuss design and implementation issues with nonprofit leaders who have implemented various forms of social entrepreneurship.

PUB-ADM 5555 Topics In Nonprofit Fundraising Credits: 1-3

In order to flexibly treat the variety of strategies and techniques of charitable fundraising, these courses will usually be offered in variable credit hour segments, covering traditional and emerging fundraising topics. Each semester, two two-credit-hour segments and two one credit-hour segments will be offered. The two credit hour courses - "Organizing for Successful Fund Raising" and "Creating and Implementing the Annual Development Plan" - cover the basics of fund raising. The one-credit hour courses allow students to explore several different issues related to fund raising such as direct marketing and planned giving. These courses are recommended for nonprofit management students.

PUB-ADM 5555A Topics in Nonprofit Fund Raising: Organizing for Successful Fund Raising Credits: 2

Organizing for successful fundraising.

PUB-ADM 5555B Topics In Nonprofit Fund Raising: Creating & Implementing Annual Development Plans Credits: 2

Creating and implementing annual development plans.

Prerequisites: PUB-ADM 5555A.

PUB-ADM 5555C Topics in Nonprofit Fund Raising: Direct Marketing & Direct Mail in Fundraising Credit: 1

Direct marketing and direct mail in fundraising.

PUB-ADM 5555D Topics In Nonprofit Fund Raising: Planned Giving and Major Gift Solicitation Credit: 1

Planned Giving and Major Gift Solicitation.

PUB-ADM 5555E Topics in Nonprofit Fund Raising: Contemporary Trends/Ethical Issues in Fund Raising Credit: 1

Contemporary trends/ethical issues in fundraising.

PUB-ADM 5555F Topics in Nonprofit Fund Raising: Prospect Research and Proposal Writing Credit: 1

Prospect research and proposal writing.

PUB-ADM 5555G Developing Campaigns and Working with Consultants Credit: 1

In this course, various fund development campaigns and strategies will be explored; students will understand the differences between construction, renovation, equipment, program development and endowment as gift objectives. The phases of a campaign will be reviewed along with background on committee structures, goal-setting, leadership, timing and gift tables. The role of fund raising counsel will be explored. Participants will have an understanding of campaigns as important, episodic exercises for nonprofit agencies.

PUB-ADM 5555H Measurement and Evaluation for Fundraising Success and Social Impact Credit: 1

Nonprofit leaders can spend an enormous amount of time and effort creating evaluation models and reporting relevant data to funders to demonstrate positive social impact. Demonstrating success of a program or initiative is the basis for ensuring that a nonprofit has been a good steward of its mission and donated funds. However, the investment in building and fulfilling evaluation models must be commensurate with the funds awarded. This course will provide an overview of the planning and development of evaluation approaches that align well with the organization's and funder's needs. The course will introduce participants to the development and use

PUB-ADM 5555X Topics in Nonprofit Fundraising Credit: 1

Special topics in nonprofit fundraising.

PUB-ADM 5556 Innovation in Nonprofit Management and Leadership Credits: 3

This course provides an opportunity for students in the nonprofit management specialization to examine "breaking" innovations in nonprofit management and leadership. Intra- and inter-sectoral collaborative strategies and total quality management are illustrative examples. Other topics will be considered as warranted. Recommended preparation: PUB-ADM 5525, PUB-ADM 5548, and at least six hours of nonprofit management coursework.

PUB-ADM 5557 Nonprofit Fundraising and Development Credits: 3

Examines the processes and functions by which nonprofit organizations plan, organize, implement and evaluate the work of fundraising and development to secure the financial resources needed to support and sustain their programs and activities. Students gain an understanding of and practical experience in employing the basic approaches and techniques used by nonprofits to raise and deploy philanthropic resources, including annual and multi-year giving programs, major gift solicitation, planned giving initiatives, capital campaigns, and prospect research and proposal writing.

PUB-ADM 5558 Ethics for Nonprofit and Public Administrators Credits: 3

It is essential that organization and community leaders and managers understand the imperatives of ethical practice and ethical leader and manager behavior in nonprofit and governmental settings. Students are prepared to identify and assess the ethical implications of management and policy alternatives, to spot ethical issues before they become crises, and to competently and confidently develop and implement ethical decisions and actions in policy and practice. The ethical dimensions of democracy, political loyalty, pressure politics, interest group issues, pluralism, diversity and multi-cultural challenges, corruption and evil, honesty, the limits of ethical codes, whistle-blowing are included.

PUB-ADM 5559 Nonprofit Organizations in Context Credits: 3

This course provides a survey of the origins, development and contemporary functioning of the private, nonprofit sector in the U.S. The course explores theories and concepts that describe the social, political, legal and economic meaning of voluntarism, philanthropy and the nonprofit sector.

PUB-ADM 5565 Topics In Urban Administration Credits: 1-3

To flexibly treat the variety of strategies, information, and techniques in urban administration and leadership, these courses will be offered in variable credit hour segments. Each semester, courses will be offered around traditional and emerging topics. An initial "basics" series will be offered on community development organizations, urban economic development and community development strategies.

PUB-ADM 5565A Community Economic Development: The Planning Context Credit: 1**PUB-ADM 5565B Community Economic Development Tools & Techniques Credit: 1****PUB-ADM 5565C Implementing Effective Community Economic Development Credit: 1****PUB-ADM 5565D Topics in Urban Administration Credits: 1-3**

To flexibly treat the variety of strategies, information, and techniques in urban administration and leadership, these courses will be offered in variable credit hour segments. Each semester, courses will be offered around traditional and emerging topics. An initial "basics" series will be offered on community development organizations, urban economic development and community development strategies.

PUB-ADM 5566 Urban Environmental Policy Credits: 3

Our cities are a first line of action in our efforts to sustain our environment. Many have begun to examine and address the connection between city problems and environmental and climate change, and the disproportionate impacts that they often have on the disadvantaged, yet these initiatives address only the surface of the issue. It is essential for scientists, public administrators, environmentalists, and policy thinkers to pay greater attention to the environmental challenges of our cities. Students examine and assess the challenge of understanding, developing and implementing coherent environmental policy to address such challenges in urban communities.

PUB-ADM 5567 Managing for Sustainability in an Urban Environment Credits: 3

Managing for sustainability requires an understanding of theories of organization, environmental management, and sustainability, including how to define and achieve sustainability. Students examine the complexities associated with issues of sustainability and the interrelationship between the global, the local and the personal. This includes consideration of how organizations function, the obstacles to sustainability confronted by sustainability managers, and specific management strategies and tools available to sustainability managers. It also involves the study of change models and their application by managers faced with the challenge of moving an organization from an old operational model to a more sustainable new organizational design.

PUB-ADM 5570 Diversity in the Workplace Credits: 3

This course explores the many issues raised by the growing diversity of backgrounds (e.g., race, gender, culture) employees bring to the workplace. The course will examine diversity issues including demographics, relevant legislation, values questions, demands on management, and effects on service delivery to clients. To better illustrate the issues, some class sessions will feature guest lecturers representing a diversity of backgrounds and work settings.

PUB-ADM 5573 Health and Social Equity Credits: 3

Examines the complex relationship between the social and political environment and health outcomes. All policy is health policy – economic, transportation, natural and built environments, schools. This course examines how social equity shapes health behaviors and how the life odds in different communities expose the historical legacies of past injustices. Only ten percent of health disparities are explained by access to care, although health care and health insurance dominate the public conversation. Draws on guest speakers, books, journal articles, popular press, film and art; as varied as are the social determinants of health, so are media that explore those relationships.

PUB-ADM 5581 Seminar In Urban Administration Credits: 3

Advanced work on special topics in urban administration. Topics will vary.

Prerequisites: PUB-ADM 5535.

PUB-ADM 5582 Developing the Social Enterprise Credits: 3

Developing the Social Enterprise is the offering of a new seminar that has been developed to provide an in-depth exploration and examination of nonprofit entrepreneurship and how it is being understood, implemented and practiced in the nonprofit sector. Developing the Social Enterprise is a graduate-level course that offers the opportunity to study in depth this oft-discussed yet often misunderstood phenomenon. Students will gain a broad understanding of the various conceptions, types and aspects of nonprofit enterprise, learn about processes for engaging in entrepreneurial nonprofit organization development, and discuss design and implementation issues with nonprofit leaders who have implemented some form of social entrepreneurship in their own organizations.

PUB-ADM 5585 Seminar In Public Affairs Credits: 3

Advanced work on special topics in public affairs.

PUB-ADM 5585A Seminar In Public Affairs Credits: 3

Advanced work on special topics in public affairs.

PUB-ADM 5585B Seminar In Public Affairs Credits: 3

Advanced work on special topics in public affairs.

PUB-ADM 5585C Seminar In Public Affairs Credits: 3

Advanced work on special topics in public affairs.

PUB-ADM 5587 Special Topics Credits: 3

Special topics in public administration.

PUB-ADM 5595 Internship Seminar Credits: 1-3

Combined classroom study and field internship. To be offered only when government agency internships approved by the Public Administration Committee are available.

Prerequisites: 18 credit hours of completed courses.

PUB-ADM 5598A Supervised Research: Nonprofit Management Credits: 1-6

PUB-ADM 5598C Supervised Research: Urban Administration Credits: 1-6

PUB-ADM 5598G Supervised Research: Unspecified Credits: 1-6

PUB-ADM 5599 Thesis Credits: 1-9

PUB-ADM 5610 Inquiry In Public Administration And Affairs Credits: 3

This course is designed to provide Ph.D. students a thorough grounding in strategies of inquiry. Issues considered include competing metatheoretical paradigms and alternative conceptions of explanation in the social and policy sciences, the implications of such alternatives for empirical research, the variety and standards of qualitative and quantitative approaches to theory and research, theory construction, and research ethics. Contemporary problems in public administration and affairs research and theory are emphasized.

Prerequisites: Doctoral student in the Interdisciplinary Ph.D. program.

PUB-ADM 5620 Literature of Public Affairs and Administration Credits: 3-6

This course grounds the student in the central ideas of the public affairs and administration literature and in the prominent themes of the discipline. The course is offered in two versions: A, in which the political science approach to public affairs and administration is emphasized; and B, in which the organizational theory and behavior approaches to public affairs and administration are emphasized. Ph.D. students whose primary discipline is public affairs and administration are ordinarily expected to complete both versions.

Prerequisites: Doctoral student in the Interdisciplinary Ph.D. program.

PUB-ADM 5620A Literature Of Public Affairs And Administration: Political Science Credits: 3-6

Literature Of Public Affairs And Administration: Political Science. Prerequisites: PUB-ADM 5525, PUB-ADM 5526, and PUB-ADM 5544.

PUB-ADM 5620B Literature Of Public Affairs And Administration:Organizational Theory & Behavior Credits: 3-6

Literature Of Public Affairs And Administration:Organizational Theory Behavior.

Prerequisites:PUB-ADM 5530 and PUB-ADM 5548.

PUB-ADM 5699 Dissertation And Research In Public Affairs And Administration Credits: 1-12

Dissertation research and writing in the Public Affairs and Administration discipline.

PUB-ADM 5899 Required Graduate Enrollment Credit: 1

Real Estate Courses

RL-EST 321 Real Estate Principles Credits: 3

The student will be introduced to the very basics of real estate from the terminology, real estate's role in the economy, legal foundations, government controls, appraisal processes, valuation processes, brokering and closing transactions, time value of money, basic management issues and lease clauses, and basic standard form purchase contracts.

RL-EST 421 Real Estate Finance Fundamentals Credits: 3

This course will provide a fundamental understanding of basic financial concepts of real estate including compounding and discounting, construction of amortization tables and after-tax yield analysis for a simple real estate investment. It also touches on the basics of title insurance, ownership issues, fixed rate versus variable rate mortgages in residential real estate, understanding housing bubbles, and trends in valuation of residential real estate. In addition, the student will complete mathematical comparisons of leasing versus owning a home.

Prerequisites: ENT 301 or FIN 325.

RL-EST 425 Principles of Real Estate Property Management Credits: 3

Explores the complexities of managing apartments, condominiums, office buildings, industrial property, and shopping centers. This course covers rental markets, development of rental schedules, leasing techniques and negotiations, repairs and maintenance, tenant relations, merchandising, selection and training of personnel, accounting and owner relations.

RL-EST 496 Internship: Real Estate Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

Prerequisites: Departmental consent.

RL-EST 497 Special Topics: Real Estate Credits: 1-3

Study and research in areas of special interest under individual faculty direction.

Prerequisites: Departmental consent.

RL-EST 5556 Entrepreneurial Real Estate Process Credits: 3

This interdisciplinary course adopts an entrepreneurial approach to the real estate process spanning concept generation, planning, research, acquisition, design, construction, finance, and investment. The course is open to students from various units across campus. Students will engage in experiential learning to sensitize them to the breadth of inquiry, critical thinking and analysis involved in contemporary real estate. Instruction focuses on creation of optimal spatial solutions for targeted users on targeted sites that are economically viable, sustainable and environmentally responsible. The course emphasizes the importance of focusing on value creation, control and capture across the full life cycle of real estate.

RL-EST 5571 Real Estate Finance Credits: 3

This course introduces students to the full spectrum of real estate finance and investment analysis. It helps students quantify the financial implications of various real estate decisions for individual properties as well as more strategic decision-making applied to real estate portfolios. Using a combination of experiential and incremental learning students develop the foundation skills necessary to support more advanced concepts and financial theory. The course explores time value of money, law, leverage, underwriting, discounted cash flow, investment analysis, and capital markets. Students also develop advanced modeling skills and learn how to apply state-of-the-art financial packages to support decisions.

Prerequisites: RL-EST 5556.

RL-EST 5573 Real Estate Feasibility and Market Analysis Credits: 3

This course helps students develop entrepreneurial, fact-based approaches to problem-solving and decision support. It incorporates experiential learning to help students deploy quantitative and qualitative approaches that incorporate the perspectives of space users, space producers, and market facilitators. Students learn how to address the goals and objectives of a particular client, while also considering the externalities and impacts such decisions have on the built environment. Students will integrate critical thinking with spatial and financial analytical methods and state-of-the-art tools to quantify market demand and to translate that demand to a spatial solution that is marketable and financially feasible.

Prerequisites: RL-EST 5556.

RL-EST 5574 Real Estate Construction and Development Credits: 3

This course explores principles and techniques of construction project management and real estate development. Adopting a holistic perspective it places the production of real estate in a broader context of product life cycles drawing on systems analysis, planning, programming, budgeting and staffing, controlling major projects. Students apply experiential learning and assume the role of a developer who marshals the resources needed to produce real estate. It explores new projects and renovation of existing space with emphasis on customizing products to fit user needs. The course sensitizes students with emphasis on creating sustainable products that are socially responsible and economically viable.

Prerequisites: RL-EST 5556.

RL-EST 5576 Real Estate Property and Portfolio Management Credits: 3

This course explores the complexities and integration of property and portfolio management which are critical to the creation, control and capture of real estate value. Students learn how to approach real estate in a more holistic manner by integrating management functions that range from individual property types to portfolios of properties. Students learn how to incorporate marketplace factors in their decisions and apply modern portfolio theory and other tools to construct and manage properties and portfolios in a socially responsible manner. Using experiential methods students learn to apply critical thinking to solve complex property and portfolio management problems.

Prerequisites: RL-EST 5571.

RL-EST 5577 Real Estate Valuation Credits: 3

This course provides students with an understanding of real estate appraisal garnered through a combination of lectures, projects and discussions. Students explore valuation theory, behavioral processes, and the unique nature of the inefficient real estate market. Through hands on exercises that constitute the experiential learning students apply best practices embedded in the three approaches to value that underpin real estate appraisal: cost, income and sales comparisons. Students also analyze the impact of macroeconomic conditions, supply/demand conditions, capital flows, and investor behavior. Students develop proprietary valuation models and apply appropriate quantitative tools and software for predicting most probable prices.

Prerequisites: RL-EST 5556.

RL-EST 5578 Legal Context of Real Estate Credits: 3

This interdisciplinary course acquaints business and law school students with legal issues in development, ownership and operation of commercial real estate. It also explores the roles of various professionals in real estate transactions. Students will learn legal concepts and terminology, and acquire familiarity with key issues and documents relating to real estate decisions and entrepreneurship, including leasing, insurance, negotiations, construction and architect's contracts, transactions, regulation, financing and bankruptcy. Students learn how to apply risk management to design and construction contracts, insurance, bonding and indemnification, as well choice of business entity, income tax planning and negotiation of joint ventures.

RL-EST 5587 Special Topics Credits: 3

Special topics in real estate.

RL-EST 5595 Internship Credits: 1-3

An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

RL-EST 5597 Real Estate: Independent Study Credits: 1-6

Independent study and research in areas of special interest under individual faculty direction.

RL-EST 5899 Required Graduate Enrollment Credit: 1

About the Bloch School

Degree Programs

The Bloch School offers the degrees of Bachelor of Business Administration (B.B.A.), Bachelor of Science in Accounting (B.S.A.), Master of Business Administration (M.B.A.), Master of Public Administration (M.P.A.), Master of Science in Accounting (M.S.A.), Master of Science in Finance (M.S.F.), and Master of Science in Entrepreneurial Real Estate (M.S.E.R.E.). Within the MBA program there are Executive M.B.A. (E.M.B.A.) and Professional M.B.A. offerings. Additionally, the Bloch School has two joint degree programs with the UMKC School of Law, the J.D./M.B.A. and the J.D./M.P.A. degrees, participates in the Interdisciplinary Ph.D. program and offers a Ph.D. in Entrepreneurship & Innovation. The Bloch School also offers business and entrepreneurship minors. The Department of Public Affairs also has a Graduate Certificate in Nonprofit Management and Innovation and a Graduate Certificate in Urban Policy Administration.

History

The University has offered business courses since 1933. In 1953, with the support and encouragement of the Kansas City community, the School of Business Administration was established. Since that time, the Bloch School has grown to a student body of 1900, and a faculty of approximately 50 professional educators. In January 1988, the School was renamed for Henry W. Bloch, co-founder of H&R Block, and moved into a newly expanded building. In 2010, the School officially changed its name to the Henry W. Bloch School of Management to reflect our differentiation as a school that integrates business management, public administration and the infusion of a global, innovative and entrepreneurial mindset. In the fall of 2013, the School opened a second building with a focus on entrepreneurship and innovation and executive education.

Vision

We are Kansas City's business school, partnering with for-profit, non-profit, and public sector stakeholders to promote inclusive prosperity.

Mission

We leverage our partnerships and connectivity to promote experiential learning, encourage career and entrepreneurial success, provide access to thought leaders, and develop talent through distinctive education experiences.

Values

Following the inspiration offered by Mr. Henry W. Bloch, our work is guided by our commitment to:

- Entrepreneurial thinking
- Civic mindedness and a community orientation
- Inclusiveness and respect for diversity
- Global awareness
- Integrity
- Working hard, persevering, and making a difference

Accreditation

The Bloch School is accredited by AACSB International - The Association to Advance Collegiate Schools of Business and by the Network of Schools of Public Policy, Affairs, and Administration (NASPAA).

Advising and Student Services

Staff in the Student Services Office, room 115 of the Bloch Heritage Hall, assist undergraduate students in planning programs and registering for courses. Freshmen and junior students must be advised each semester and advising is required for new students and students on probation. Students pursuing the M.B.A., M.P.A., M.S.A., M.S.E.R.E. and M.S.F. degrees are advised by staff in the Graduate Programs Office, room 418 Bloch Executive Hall. Advising information can be found at <https://bloch.umkc.edu/students/advising/>. Faculty of the School's six curricular departments are also available to discuss students' programs. Students in the M.P.A. and M.S.E.R.E. programs are also advised by departmental faculty.

Scholarships

The Bloch School offers numerous scholarships for students enrolled in Bloch degree programs. Information and application links are available on the Bloch School Web site at <https://bloch.umkc.edu/students/paying-for-school/>. March 1 is the deadline for the majority of these scholarships, which are awarded for the following academic year. For information on loans, grants and other financial aid, contact the UMKC Student Financial Aid and Scholarships Office.

Internships

Students who want to experience work opportunities while in school are encouraged to take their learning beyond the classroom through internships. For-credit internships typically carry one to three hours of credit. To earn academic credit, students should identify a Bloch School faculty member qualified and willing to supervise an internship, complete an internship form available on the Bloch School Web site at <https://bloch.umkc.edu/students/policies-and-forms/> and enroll in an approved internship course. Interested students should contact the Bloch Career Center for internship opportunities. International students must also apply through the International Student Affairs Office to receive approval to work off campus.

International Study Abroad

Bloch School students have the opportunity to study abroad for credit. Students may study for a week, a semester (including summer), or an academic year. Students who are interested in study abroad opportunities should contact the Bloch School Student Services Office or the UMKC Study Abroad and Global Engagement office.

Career Support

The Bloch Career Center is a full-service office working with students, alumni and employers. Their staff are committed to helping Bloch students connect with careers they care about and collaborate with Kansas City's top employers to create opportunities for Bloch School students.

Graduate Programs

Graduate Programs:

- Graduate Certificate in Business Analytics (p. 1714)
- Graduate Certificate in Nonprofit Management and Innovation (p. 1715)
- Graduate Certificate in Urban Policy and Management (p. 1716)
- Master of Business Administration
- Master of Public Administration
- Master of Science in Accounting
- Master of Science in Entrepreneurial Real Estate (p. 1726)
- Master of Science in Finance (p. 1727)

- PhD in Entrepreneurship and Innovation (p. 1729)
- Interdisciplinary Ph.D. Programs

Doctor of Philosophy

Student Learning Outcomes

The course requirements for the program are not predetermined, but rather formulated by the student in consultation with the UMKC doctoral faculty who will serve on their supervisory committee, to meet the student's individual needs and research interests, satisfy discipline-specific requirements and assure upon graduation students are able to:

- Demonstrate appropriate depth and breadth of knowledge in their disciplines.
- Use skills of interdisciplinary scholarship and research to integrate multiple perspectives.
- Work effectively in a collaborative environment.
- Effectively communicate results of their research to diverse audiences.
- Understand and value diverse approaches to problems.
- Use self-reflection for personal and professional improvement.

Program Requirements

The Bloch School participates in the Interdisciplinary Ph.D. program through the Department of Public Affairs and through the Department of Global Entrepreneurship and Innovation. The Department of Global Entrepreneurship and Innovation also offers a stand-alone Ph.D. program. Information about discipline-specific admission and program requirements may be found in the School of Graduate Studies section of this catalog. Those interested in doctoral study in entrepreneurship and innovation should visit the Department of Global Entrepreneurship and Innovation (<https://bloch.umkc.edu/about-us/academic-departments/global-entrepreneurship-and-innovation/>) website.

All Interdisciplinary Ph.D. applicants and students must first meet the general requirements of the School of Graduate Studies for admission and retention in the Interdisciplinary Ph.D. program. In addition to these general academic regulations that have been outlined in previous sections of the general catalog, disciplines may set more stringent discipline-specific requirements that take priority over the general requirements. Discipline-specific requirements for disciplines eligible to participate in the Interdisciplinary Ph.D. program are listed in alphabetical order by name of discipline. These guidelines are subject to ongoing review and revision, and the doctoral faculty reserves the right to make judicious changes in discipline-specific requirements. The student is referred to coordinators in the disciplines for the most current information.

Graduate Certificate in Business Analytics

Student Learning Outcomes

Students graduating from this program will:

- 1. Assess the ethical considerations of business analytics applications, models, and processes.
- 2. Design business analytics processes for reproducibility and replicability.
- 3. Choose the best application and modeling approach to solve a given business analytics problem
- 4. Utilize common business analytics databases.
- 5. Conduct data analyses for descriptive, predictive, and prescriptive purposes using common business analytics models and algorithms.
- 6. Construct data visualizations.
- 7. Interpret the results of data analyses and communicate those results to stakeholders.

Students in the certificate program will complete 12-credit hours across four courses; there are two required courses, and two are electives. We will offer the certificate to degree and non-degree students. For degree students, we will make the certificate available to anyone enrolled in a Bloch master's degree program, including:

- Professional Master of Business Administration (PMBA)
- Executive Master of Business Administration (EMBA)
- Master of Public Administration (MPA)
- Master of Science in Accountancy (MSA)
- Master of Science in Entrepreneurial Real Estate (MSERE)
- Master of Science in Finance (MSF)

Certificate students take the first core course as part of their degree program. For non-degree certificate students, they will take *MIS 5507 -- Business Analytics and Statistics*.

Code	Title	Credits
Select one of the following courses based on degree plan:		3
MIS 5507	Business Analytics and Statistics (PMBA and Non-Degree Students)	
DSOM 5509	Business Analytics for Strategic Decision Making (EMBA Students)	
PUB-ADM 5510	Research Methods in Public Administration (MPA Students)	
ACCTNG 5568	Data Analytics for Accounting (MSA Students)	
RL-EST 5573	Real Estate Feasibility and Market Analysis (MSERE Students)	
FIN 5560	Financial Modeling (MSF Students)	
Additional Required Coursework:		3
MIS 5557	Data Management and Data Mining for Business Analytics	
Elective Coursework (choose two of the following):		6
MKT 5562	Marketing Research & Data Analysis	
MKT 5587	Special Topics (Customer Data Analytics)	
PUB-ADM 5544	Program Evaluation ((MPA Students))	
HLTH-ADM 5578	Data Analysis for Health Care Managers (MPA Students)	
MIS 5529	Decision Support Systems	
MIS 5552	Data Base Management	
Total Credits		12

Graduate Certificate in Nonprofit Management and Innovation

Student Learning Outcomes

Students graduating from this program will:

- Lead and manage nonprofit organizations and programs effectively and in entrepreneurial and innovative ways.
- Engage in sophisticated decision making to effectively address the long term needs and interests of communities, organizations, and their stakeholders.
- Effectively engage, interact, and communicate, verbally and in writing, with diverse constituencies and audience.

Graduate Certificate in Nonprofit Management and Innovation

The Department of Public Affairs offers a 15 credit hour professional Graduate Certificate in Nonprofit Management and Innovation. This certificate may be earned alone or in combination with another graduate degree at UMKC and is especially appropriate for those who aspire to a successful career leading and managing nonprofit and community-based organizations.

Admission requirements are the same as those required for admission to the department's regular M.P.A. program. Students in other graduate programs at UMKC and are interested in pursuing this certificate should contact the Bloch School Graduate Programs Office (<https://bloch.umkc.edu/students/advising/>).

Curriculum for the Nonprofit Management and Innovation Certificate:

Code	Title	Credits
Required Courses:		12
PUB-ADM 5548	Leadership, Change and Social Impact	
PUB-ADM 5551	Managing Nonprofit Organizations	
PUB-ADM 5553	Legal Framework & Financial Management of Nonprofit Organizations	
PUB-ADM 5559	Nonprofit Organizations in Context	
Select at least one of the following:		3
PUB-ADM 5554	Seminar on Social Entrepreneurship	
PUB-ADM 5556	Innovation in Nonprofit Management and Leadership	
PUB-ADM 5557	Nonprofit Fundraising and Development	
PUB-ADM 5582	Developing the Social Enterprise	
Total Credits		15

Graduate Certificate in Urban Policy Administration

Student Learning Outcomes

Students graduating from this program will:

- Lead and manage nonprofit and governmental urban organizations and programs that exist to meet the needs of their urban communities effectively and in entrepreneurial and innovative ways.
- Engage in sophisticated decision making to effectively address the long term needs and interests of communities, organizations, and their stakeholders.
- Engage, interact, and effectively communicate, verbally and in writing, with diverse constituencies and audiences.
- Analyze and evaluate urban problems, policies and policy options and evaluate the feasibility of potential policy solutions.

Graduate Certificate in Urban Policy and Management

The Department of Public Affairs offers a 12 credit hour professional Graduate Certificate in Urban Policy and Management. This certificate may be earned alone or in combination with another graduate degree at UMKC and is especially appropriate for those who aspire to a successful career leading and managing local and regional government or community-based nonprofit organizations.

Admission requirements are the same as those required for admission to the department's regular M.P.A. program. Students in other graduate programs at UMKC who are interested in pursuing this certificate should contact the Bloch School Graduate Programs Office (<https://bloch.umkc.edu/students/advising/>).

Curriculum for the Urban Policy and Management Certificate:

Code	Title	Credits
Required Courses:		
PUB-ADM 5526	The Politics of Administration	3
PUB-ADM 5535	Urban Policy and Administration	3
PUB-ADM 5539	Urban Planning for Public Administrators	3
Select at least one of the following:		3
PUB-ADM 5536	Managing Urban Economic Development	
PUB-ADM 5540	Local Government Management	
PUB-ADM 5552	Community Organizations and Public Policy	
PUB-ADM 5554	Seminar on Social Entrepreneurship	
Total Credits		12

Graduate Policies and Procedures

Admission Requirements

Admission to Bloch School graduate programs is based on evaluation of qualifications including, but not limited to, cumulative undergraduate grade point average, career/educational goals, work experience and exam scores. Individual program application and admission requirements can be viewed at:

Professional MBA: <https://bloch.umkc.edu/graduate-program/pmba/admissions/>

Master of Public Administration: <https://bloch.umkc.edu/graduate-program/mpa/admissions/>

Master of Science in Accounting: <https://bloch.umkc.edu/graduate-program/msa/>

Master of Science in Entrepreneurial Real Estate: <https://bloch.umkc.edu/graduate-program/msere/msere-admissions/>

Master of Science in Finance: <https://bloch.umkc.edu/graduate-program/msf/>

Applicants to the Executive M.B.A. (E.M.B.A.) program are considered for admission based on educational record and career history, quality and length of professional and managerial experience, strength of personal interview and one written essay, two references and support of employer. A GMAT or GRE score is not required for applications to the executive programs, but may be requested by faculty. Detailed admissions information can be found at <https://bloch.umkc.edu/emba/admissions/>.

Most classes are offered on weekday evenings. Selected courses may be offered in an intensive weekend format. E.M.B.A. courses are offered on weekends (Friday/Saturday).

Retention and Graduation Requirements for Graduate Students

All students enrolled in any of the Bloch School graduate programs (M.B.A., E.M.B.A., M.S.F., M.S.E.R.E., M.S.A., M.P.A., and certificates) must maintain a minimum 3.0 grade point average (GPA) in all courses for which graduate credit is given. Students with GPAs that fall below the minimum 3.0 are placed on probation and are allowed two successive semesters (including the summer semester, if enrolled) to restore their GPAs to the required 3.0 level. While on probation, graduates must achieve a 3.0 term GPA in order to enroll for the ensuing term. If a student's term GPA is below a 3.0 or, if after two successive semesters, the cumulative GPA is below a 3.0, the student will be dismissed from the Bloch School. Good standing is achieved only if the GPA is 3.0 or above. No course with a grade below B- (2.7), in any 300- or 400-level course, or below C (2.0) in any 5000-level course or above, will count toward any advanced degree program; however, the grade will be included in the calculation of the student's GPA. Eighty percent of the credits for the degree must be passed with a grade of B (3.0) or better.

M.B.A., M.S.A., M.S.F., M.S.E.R.E., and certificate students must file an official program of study with the Graduate Programs Office when reaching the 50% completion point in their degree programs. For the M.P.A. program, this must occur once a student has reached 18 hours. This form constitutes a contract and must be signed by the student, faculty advisor and department chair. Any changes to the program must be approved on a new form by the same three individuals. Students are responsible for ensuring their program of study falls within the program guidelines.

All students must file an application for graduation by the announced campus deadline during the student's last semester (students are encouraged to submit earlier if possible). This application and the program of study must be filed by the announced deadline in order to obtain the degree.

Transfer Credit

Students may petition to transfer up to 6 hours of graduate credit into their program. Coursework must be from an accredited institution, with a grade of B or better, and appropriate to the student's program. Also, the coursework must have been taken within seven years of completion of all requirements for the Bloch School degree. Credit must not be more than seven years old at the time of graduation. Evaluation of transfer credit is done by faculty and requires documentation provided by the student.

Course Repeat Policy

Whenever students repeat a graduate-credit course, they must submit a course repeat form to the Graduate Programs Office no later than the fourth week of the term. Students seeking graduate degrees are limited to repeating no more than 20 percent of the credits applicable toward a graduate degree. If approved by the school or department or Interdisciplinary Ph.D. supervisory committee, students may repeat a course once to improve their GPA or satisfy the program requirements. The second grade received will be used to calculate the GPA that will be used in satisfying degree requirements.

Independent Study

Students are limited to no more than six hours of independent study/internship and no more than three hours of any one practicum, including the small business practicum. For the M.P.A. program, students are limited to a total of six hours, of which three credit hours can be an internship. Interested students should consult with their advisor or staff in the Graduate Programs Office.

Master of Business Administration

Student Learning Outcomes

Students graduating from this program will:

- Define, analyze, and evaluate business decisions in a global setting through an integrated analysis using tools found in the major business disciplines.
- Effectively demonstrate critical thinking skills in inference, analysis, and evaluation.
- Demonstrate the ability to work in teams.
- Conceptualize a complex issue into a coherent written statement and/or oral presentation.
- Demonstrate mastery of fundamental quantitative tools by successfully using those tools to interpret and evaluate quantitative information and synthesize that information with relevant non-quantitative information in order to arrive at a business decision.

Admission Requirements

Applicants to the P.M.B.A program are considered for admission based on their undergraduate cumulative grade point averages, resumes, goal statements, and other criteria established by the faculty. Some candidates may be eligible for admission without the GMAT exam. For current admission requirements visit <https://bloch.umkc.edu/graduate-program/pmmba/admissions/>.

Program Requirements

The Bloch School offers a Professional (part-time) master of business administration (PMBA (<http://bloch.umkc.edu/pmmba/>)), and an executive master of business administration (EMBA (https://bloch3.umkc.edu/emba/?_ga=2.233800350.1228283700.1556543215-1313670546.1459347259)).

The Professional M.B.A. Curriculum

The P.M.B.A. degree is a 39 credit hour program. The curriculum is comprised of two distinct stages: core classes and elective classes.

The program has the following unique features that are combined to develop graduates that are broadly educated, socially responsible, and knowledgeable managers.

1. A 27 credit hour core curriculum that provides an integrative business foundation for decision-making.
2. A 12 credit hour elective component that allows students the flexibility to design a program that uniquely fits their needs.
3. Students who have earned a bachelor's degree in business or accounting and/or have relevant work experience may waive up to six credit hours of the core related to these experiences. The specific courses waived will be determined in consultation with the managing director of graduate programs. This could reduce the core to 21 credit hours and the M.B.A. degree to a 33 credit hour program.
4. An M.B.A. program of study must include 39 credit hours with a minimum of 33 hours of that course work completed at UMKC. Students approved for a reduced M.B.A. core must show 33 hours on their program of study; 27 of those hours must be completed at UMKC. Transfer credit will be considered in accordance with the guidelines in the Master's Degrees Academic Regulations section of the catalog.

The M.B.A. Core (27 credit hours)

The MBA degree consists of a 27 credit hour core. The core must be taken by all students enrolled in the program and is designed to provide graduates with a critical business foundation. Core courses include the following:

Code	Title	Credits
ACCTNG 5503	Financial Accounting for Decision Making	3
DSOM 5511	Global Supply Chain and Operations Management	3
ENT 5508	Corporate Entrepreneurship and Innovation: Meeting the Management Challenge	3
FIN 5509	Financial Management	3
MGT 5512	Leading and Managing People, Teams and Organizations	3
MGT 5514	Strategic Management in the Globalized World	3
MIS 5507	Business Analytics and Statistics	3
MKT 5504	Marketing Management	3
PUB-ADM 5507	Management in Context	3
Total Credits		27

Electives (12 hours)

The M.B.A. program allows students the flexibility of using 12 credit hours to meet their unique needs. Students should ensure that prerequisites are taken in the proper sequence. Not all classes are offered each semester. Students can select from the following elective options, grouped by discipline.

Accounting

Students with prior preparation in accounting may be eligible to take other courses. Please consult with the M.B.A. program advisor for additional information.

Code	Title	Credits
ACCTNG 5557	Introduction To Income Taxation	3
ACCTNG 5570	Fraud Examination	3

Decision Science Operations Management:

Code	Title	Credits
DSOM 5540	Service Operations Management	3
DSOM 5543	Project Management	3
DSOM 5544	Global Supply Chain and Logistics Management	3
DSOM 5545	Strategic Sourcing & Supplier Relationship Management	3

Entrepreneurship and Innovation

Code	Title	Credits
ENT 5525	Entrepreneurship: Managing Creativity And Innovation	3
ENT 5529	Entrepreneurship Scholars	3
ENT 5531	New Product Development	3
ENT 5533	Technology Management	3
ENT 5535	Small Business Management And Entrepreneurship	3
ENT 5545	Entrepreneurship And New Venture Creation	3

ENT 5552	Entrepreneurial Marketing	3
ENT 5563	Social Entrepreneurship	3
ENT 5585	Entrepreneurial Finance and Venture Capital Investment	3
ENT 5587	Special Topics	3

Finance

Code	Title	Credits
FIN 5550	Advanced Financial Management Theory And Policies	3
FIN 5552	Financial Markets and Institutions	3
FIN 5553	Investment Analysis	3
FIN 5556	Management Of Financial Intermediaries	3
FIN 5557	Derivative Securities	3
FIN 5560	Financial Modeling	3
FIN 5561	Financial Statement Analysis	3
FIN 5562	Fixed Income Analysis	3
FIN 5563	Valuation/Mergers and Acquisitions	3
FIN 5564	Portfolio Management	3
FIN 5565	Alternative Investments	3
FIN 5567	Payment Systems	3
FIN 5576	Fundamentals of Fintech	3

Health Administration

Code	Title	Credits
HLTH-ADM 5571	Financial Management Issues of Health and Human Services Organizations	3
HLTH-ADM 5572	Quality and Safety in Health Care	3
HLTH-ADM 5573	Health and Social Equity	3
HLTH-ADM 5577	Leadership and Management in Health Care Organizations	3
HLTH-ADM 5578	Data Analysis for Health Care Managers	3
HLTH-ADM 5580	The Economics of Health and Medicine	3
HLTH-ADM 5581	Health Policy in the United States	3

Management

Code	Title	Credits
MGT 5516	Leading Teams	3
MGT 5517	Leading Through Influence and Persuasion	3
MGT 5518	Leadership & Motivation	3
MGT 5519	Conflict Management and Negotiation Strategies	3
MGT 5533	Leading and Managing Change	3
MGT 5545	International Management	3
MGT 5552	International Study in Business	3
MGT 5566	Attracting, Retaining, and Developing Human Capital	3
MGT 5567	Total Rewards Management	3

Management of Information Systems

Code	Title	Credits
MIS 5529	Decision Support Systems	3
MIS 5552	Data Base Management	3

Marketing

Code	Title	Credits
MKT 5539	Social and Mobile Marketing	3
MKT 5555	International Marketing	3
MKT 5560	Customer Insights and Communication Strategy	3
MKT 5562	Marketing Research & Data Analysis	3

MKT 5566	Customer Data Analytics	3
MKT 5575	Applied Strategic Marketing	3

Public Administration

Code	Title	Credits
PUB-ADM 5525	Financial Accountability And Policy Development	3
PUB-ADM 5526	The Politics of Administration	3
PUB-ADM 5528	Supervision, Performance Leadership, & Human Resource Management	3
PUB-ADM 5535	Urban Policy and Administration	3
PUB-ADM 5536	Managing Urban Economic Development	3
PUB-ADM 5539	Urban Planning for Public Administrators	3
PUB-ADM 5541	Public Policy Development and Analysis	3
PUB-ADM 5544	Program Evaluation	3
PUB-ADM 5548	Leadership, Change and Social Impact	3
PUB-ADM 5551	Managing Nonprofit Organizations	3
PUB-ADM 5552	Community Organizations and Public Policy	3
PUB-ADM 5553	Legal Framework & Financial Management of Nonprofit Organizations	3
PUB-ADM 5554	Seminar on Social Entrepreneurship	3
PUB-ADM 5556	Innovation in Nonprofit Management and Leadership	3
PUB-ADM 5573	Health and Social Equity	3

Real Estate

Code	Title	Credits
RL-EST 5556	Entrepreneurial Real Estate Process	3
RL-EST 5571	Real Estate Finance	3
RL-EST 5573	Real Estate Feasibility and Market Analysis	3
RL-EST 5574	Real Estate Construction and Development	3
RL-EST 5576	Real Estate Property and Portfolio Management	3
RL-EST 5577	Real Estate Valuation	3
RL-EST 5578	Legal Context of Real Estate	3

Combined J.D./M.B.A. Program

The Bloch School and UMKC School of Law offer the combined J.D. and M.B.A. program. Students must satisfy the admission and degree requirements for the J.D. program as well as for the P.M.B.A. program. For further information, contact the School of Law or consult the Bloch School JD/MBA webpage (<https://bloch.umkc.edu/graduate-program/pmba/jd-mba-joint-program/>).

Executive M.B.A. Program

Student Learning Outcomes

Graduates of the Bloch School's E.M.B.A. program will gain the business knowledge skills needed to excel as executives, entrepreneurs, and leaders. The E.M.B.A. graduate will:

- Apply strategic frameworks to complex business issues and identify viable options and forward-looking strategies, through the integrated analysis of multiple functional perspectives - e.g. marketing, product development/service delivery, finance, operations, and human capital.
- Demonstrate enhanced understanding of complex public sector systems, processes and leaders, and identify and define the various forces that shape and impact business policy.
- Demonstrate the skills needed to generate creative solutions that address unmet needs and wants, evaluate the relative attractiveness of competing solutions, and organize to exploit opportunities in the marketplace.
- Utilize a knowledge framework to 1) critically think about and assess the impact and linkage of global influences, issues, trends, and decisions in business models; and 2) demonstrate insight and agility in operating within a global business environment.
- Demonstrate the communication and interpersonal skills needed for effective collaboration and creative problem-solving, as well as the versatility to add value in a variety of team roles - leader, expert, facilitator, etc.
- Demonstrate the ability to 1) diagnose complex business situations, recognizing key issues, tensions and dilemmas; and 2) articulate decisions and action plans that reflect comprehensive understanding of the human, political and cultural context as well as nuanced ways of building influence and support.

The Bloch Executive M.B.A. (E.M.B.A.) is a highly-selective degree program for experienced professionals. The program offers a comprehensive integrated curriculum, field experiences, and four residencies. It is distinguished by an emphasis on cohort-learning, teamwork, hands-on projects, leadership coaching and development, and learning activities that contribute substantial value to participants, employers, and the broader community.

Students are admitted each year to a new E.M.B.A. cohort through a special application process. Students begin coursework in mid-August, and program completion requires 21 months.

The program is composed of 16 semester-long, graduate-level courses and four week-long immersion residencies that are focused on leadership, innovation, public policy, and the global marketplace. A variety of teaching formats are employed, including case studies, group projects, simulations and role playing, fieldwork, interactive discussions, and renowned guest lecturers. Daylong classes meet three days per month (one Friday/ Saturday and one additional Saturday). Classes do not meet in June and July. To ensure that all students are up to speed on academic and business basics, the program starts with required orientation and an introduction to key subject areas, such as finance, accounting, and statistics.

Admissions Requirements

The E.M.B.A. is designed for experienced professionals who possess an undergraduate degree from an accredited university and a minimum of 8 years of work experience with growing responsibilities for managing people, projects, and/or budgets. Admissions decisions are based on a combination of a solid academic record, demonstrated professional achievement, and evidence of a strong commitment to learning and to career and professional development. Further information on the Bloch E.M.B.A. program is available at (816) 235-6071 or at the program's web site <https://bloch.umkc.edu/emba/>.

The Curriculum

Semester 1

- **Leadership Residency** introduces students to fundamentals of business, organizational behavior, leadership, and teamwork.
- **Financial Reporting Systems** introduces generally accepted accounting principles and concepts along with the preparation and analysis of financial statements.
- **Leadership and Organizations** focuses on how organizations work and how leaders can set direction, marshal resources, and build support to move initiatives forward.
- **Negotiation, Conflict Management, and Influence Skills**

Semester 2

- **Marketing Management** examines the role of marketing in driving profitable revenue growth in companies.
- **Organizational Finance** gives students a thorough introduction to financial management that blends appropriate amounts of relevant theory with practical application.
- **Business Analytics for Decision Making** investigates the use of detailed sample data for purposes of estimating, predicting, forecasting, and explaining correlations among varied observations.
- **Public Policy and Industry** provides intensive exposure to the impact policy has on private sector performance. The course includes the required 4 day *Washington, D.C. Residency* to expand student understandings of the role of social leadership in the development of business policies, practices and processes.

Semester 3

- **Product and Service Innovation** gives students a grounded understanding of how to identify and evaluate business opportunities. Students engage in a set of business cases assembled to illuminate key concepts in Innovation.
- **Talent Management**
- **Strategic Management** examines the principles essential for the formulation and evaluation of strategy including industry analysis, strategic positioning, and the boundaries of the firm. The course also addresses the capacity of executive leadership to innovate and to create new or added values, as well as their responsibility for developing and communicating a clear vision and direction for a company's future.
- **Elective or Advanced Topics in Finance** builds on the previous finance course in the program and delves deeper into topics such as valuation, enterprise risk management, securities and investments, regulatory frameworks, and corporate governance.

Semester 4

- **Global Initiatives in Management** explores key, contemporary international business issues for leaders and for organizations in today's global economy and includes a required, 11 day, international residency experience in a major business center abroad.
- **Strategy and New Venture Creation** is the EMBA capstone experience. Students must integrate learning from the previous course work to develop a business plan for a new venture.
- **Current issues in Management with Technology** examines how technology impacts management, and exposes students to how technological agility is critical to organization success.
- **Elective or Operations Management**

Master of Public Administration

Student Learning Outcomes

Students graduating from this program will:

- Lead and manage in public governance
- Participate in and contribute to the public policy process
- Analyze, synthesize, think critically, solve problems and make decisions
- Articulate and apply a public service perspective
- Communicate and interact productively with a diverse and changing workforce and citizenry
- Lead in entrepreneurial and innovative ways
- Lead and manage in the nonprofit sector
- Lead and manage in the health sector
- Lead and manage in the urban sector

Admission Requirements

Applicants to the Master of Public Administration (M.P.A.) program are considered for admission on the basis of undergraduate cumulative grade point average, resume, personal statement, and Graduate Record Examination (GRE) scores. However, the requirement to complete the GRE is waived for some applicants. For current admission requirements visit <https://bloch.umkc.edu/graduate-program/mpa/admissions/>.

Program Educational Goals

The Master of Public Administration program prepares entrepreneurial and innovative public service leaders and executives to be effective and successful in an increasingly complex and dynamic world. Public service offers a career filled with excitement, challenge and significance. Career opportunities are numerous, ranging from employment in local, state, national and international governmental and quasi-governmental agencies to employment in health care and nonprofit and nongovernmental organizations. Never has there been a time of greater opportunity for public service leaders and executives who can apply their knowledge and skills to the most important of leadership and management challenges confronting their organizations and communities. The Master of Public Administration (M.P.A.) degree and related certificate programs in Nonprofit Management and Innovation and Urban Policy and Management are offered through the Department of Public Affairs.

Graduates of the Henry W. Bloch School of Management M.P.A. program have the knowledge and skills necessary to effectively and ethically lead and manage dynamic public service organizations. Specifically, M.P.A. graduates are prepared to:

- Engage in sophisticated decision making, grounded in disciplined analytical and critical thought, to effectively address the long term needs and interests of communities, organizations and their stakeholders.
- Understand the process as well as content dimensions of problem analysis and resolution and make effective use of state-of-the-art administrative and management practices and methods, including the effective use of technology.
- Communicate effectively, verbally and in writing.
- Exhibit competence in understanding and addressing the ethical dimensions of public service leadership and management.
- Understand the wide variation that exists in the principles, cultures, and practices of organizations and communities from different parts of the world, and the implications of this variation for effective public service leadership.
- Understand the value of diversity and inclusion and exhibit competence in ethical, effective, culturally competent leadership and management.
- Demonstrate self-confidence and capacity to deal with dynamic, complex, and ambiguous community problems and issues.
- Have the capacity to work effectively in collaboration with others through teams, alliances, and networks to achieve results.

Program Requirements

The M.P.A. degree will be awarded on successful completion of 33-36 semester hours, consisting of 21 hours of required core courses, 12 hours in a selected emphasis area (general program option available) and 3 hours of internship.

An M.P.A. program of study must include 33 credit hours with a minimum of 27 hours of that course work completed at UMKC. Degree candidates required to complete an internship requirement will have a 36 hour program of study where a minimum of 30 hours must be completed at UMKC. Transfer credit will be considered in accordance with the guidelines in the Master's Degrees Academic Regulations section of the catalog.

Degree candidates must complete an academic portfolio meeting the criteria enumerated by the program.

Emphasis Areas

Students seeking the master of public administration degree may choose to specialize in three emphasis areas (12 hours required):

- Health Services Administration
- Nonprofit Management
- Urban Policy and Management

A student may also tailor a general or specific program in order to meet individual talents, needs or job requirements. Such a program must be developed in consultation with and approved by a faculty adviser. Each course is worth three credits unless otherwise noted.

Curriculum

The following courses are required for each student pursuing the nonprofit management and urban administration emphasis areas:

Code	Title	Credits
PUB-ADM 5510	Research Methods in Public Administration	3
PUB-ADM 5525	Financial Accountability And Policy Development	3
PUB-ADM 5526	The Politics of Administration	3
PUB-ADM 5528	Supervision, Performance Leadership, & Human Resource Management	3
or MGT 5512	Leading and Managing People, Teams and Organizations	
PUB-ADM 5541	Public Policy Development and Analysis	3
PUB-ADM 5544	Program Evaluation	3
PUB-ADM 5548	Leadership, Change and Social Impact	3
Total Credits		21

Nonprofit Management Emphasis

Code	Title	Credits
Required:		9
PUB-ADM 5551	Managing Nonprofit Organizations	
PUB-ADM 5553	Legal Framework & Financial Management of Nonprofit Organizations	
PUB-ADM 5559	Nonprofit Organizations in Context	
Select 3 hours from the following:		3
PUB-ADM 5552	Community Organizations and Public Policy	
PUB-ADM 5554	Seminar on Social Entrepreneurship	
PUB-ADM 5556	Innovation in Nonprofit Management and Leadership	
PUB-ADM 5582	Developing the Social Enterprise	
HLTH-ADM 5571	Financial Management Issues of Health and Human Services Organizations	
Total Credits		12

Urban Policy and Management Emphasis

Code	Title	Credits
Required		
PUB-ADM 5535	Urban Policy and Administration	3
PUB-ADM 5539	Urban Planning for Public Administrators	3
Electives		
Select six hours from the following:		6
PUB-ADM 5536	Managing Urban Economic Development	
PUB-ADM 5540	Local Government Management	
PUB-ADM 5552	Community Organizations and Public Policy	
PUB-ADM 5554	Seminar on Social Entrepreneurship	
PUB-ADM 5565	Topics In Urban Administration	
PUB-ADM 5581	Seminar In Urban Administration	
PUB-ADM 5598C	Supervised Research: Urban Administration (1-3 hours)	
Total Credits		12

¹

Students choosing the urban policy and management emphasis are allowed no more than three hours of internship to fulfill the emphasis area. Additional internship hours will count as electives.

Students selecting the health services administration emphasis have the following core requirements:

Code	Title	Credits
PUB-ADM 5510	Research Methods in Public Administration	3
PUB-ADM 5526	The Politics of Administration	3
PUB-ADM 5528 or MGT 5512	Supervision, Performance Leadership, & Human Resource Management Leading and Managing People, Teams and Organizations	3
PUB-ADM 5548	Leadership, Change and Social Impact	3
HLTH-ADM 5580 or PUB-ADM 5541	The Economics of Health and Medicine Public Policy Development and Analysis	3
HLTH-ADM 5571 or PUB-ADM 5525	Financial Management Issues of Health and Human Services Organizations Financial Accountability And Policy Development	3
HLTH-ADM 5578 or PUB-ADM 5544	Data Analysis for Health Care Managers Program Evaluation	3
Total Credits		21

Note: Students should ensure that prerequisites are taken in the proper sequence.

Health Services Administration Emphasis

Code	Title	Credits
Required		
HLTH-ADM 5571 or HLTH-ADM 5580	Financial Management Issues of Health and Human Services Organizations ¹ The Economics of Health and Medicine	3
HLTH-ADM 5581	Health Policy in the United States (Electives)	3
Electives		
Choose six hours from the following:		6
HLTH-ADM 5572	Quality and Safety in Health Care (Electives)	
HLTH-ADM 5573	Health and Social Equity	
HLTH-ADM 5577	Leadership and Management in Health Care Organizations	
HLTH-ADM 5578	Data Analysis for Health Care Managers ¹	
HLTH-ADM 5586	Independent Study	
HLTH-ADM 5587	Special Topics	
HLTH-ADM 5580 or HLTH-ADM 5571	The Economics of Health and Medicine ¹ Financial Management Issues of Health and Human Services Organizations	
Total Credits		12

¹ Students cannot count more than one HLTH-ADM course in both the core and the emphasis area.

Internship Requirement

An internship is required for any M.P.A. student who does not have prior work experience in public, nonprofit or health administration. Students with relevant work experience can be waived from the internship requirement which would result in a 33 hour degree program consisting of 21 hours of core courses and 12 hours in an emphasis area.

Course Replacement for Completion of Related Undergraduate or Graduate Work

Individual courses may be waived if a student presents evidence of significant relevant undergraduate or graduate study, but other graduate courses must be substituted or transferred (with approval of faculty advisor and within allowable limits) to meet the minimum hours requirement.

Note: Students who repeat courses may not count the repeated course toward their degree. Please ensure that prerequisites are taken in the proper sequence.

M.P.A. Workshop Series (noncredit)

The M.P.A. Workshop Series includes short workshops, programs, and noncredit seminars that are designed to enrich the breadth and depth of M.P.A. students' learning experiences and career success. These events address a wide array of topics, ranging from guest lectures on significant civic and public service issues, presented by prominent civic and community leaders, to programs, workshops and development programs in areas such as career planning and professional development, trends and applications associated with emerging technologies and software applications, and trends in professional practice.

All students in the M.P.A. program are required to participate in a minimum of 4 separate Workshop Series events, for a total of at least 10 clock hours, during the course of their degree program. Students may attend as many events as they would like, and many Workshop Series events are open to alumni and the general public.

Examples of Workshop Series programs include:

- Excellence in Professional Writing
- Applications of GIS Technologies in Public Service Decision Making
- Career Development and Job Search Strategies
- Strategies for Navigating Politics in the Civic Environment

Students may also earn credit toward the 4 M.P.A. Workshop Series requirement through leadership involvement in community public service activities, if approved in advance by their M.P.A. degree program adviser.

The B.A. (Urban Affairs)/M.P.A. Program

Students obtaining a B.A. in Urban Affairs in the College of Arts and Sciences may pursue early admission to the master's degree program in public administration and obtain a master's degree in three to four additional semesters. The program allows students to utilize some of the M.P.A. courses to satisfy urban affairs requirements, thereby reducing the number of courses needed to complete both degrees. Contact the Bloch School Student Services Office for more information on this program option.

The B.B.A./M.P.A. Program

Students completing the bachelor of business administration may complete their M.P.A. degree in three to four additional semesters at UMKC if they meet entrance requirements for the public administration graduate program. For more information about this option, contact the Bloch School Student Services Office.

Combined J.D./M.P.A. Program

The Bloch School and the UMKC School of Law offer a combined J.D. and M.P.A. program. Students must satisfy the admission and degree requirements for each school and program. Students *fully admitted* to the School of Law are exempt from the GRE requirement for admission to the M.P.A. program. For further information, contact the School of Law or consult the Bloch School Web site at <https://bloch.umkc.edu/graduate-program/mpa/joint-degree-options/> (<https://bloch.umkc.edu/graduate-program/mpa/joint-degree-options/.html>).

Master of Science in Accounting

Student Learning Outcomes

Students graduating from this program will:

- Use professional judgment to evaluate and analyze data to provide appropriate information for stakeholder decision making (Technical Accounting Knowledge).
- Be able to assess solutions for structured and unstructured business problems and issues (Critical Thinking).
- Be able to evaluate ethical issues utilizing a professional code of conduct (Awareness of Ethics).
- Be able to communicate professionally both orally and in writing (Communication Skills).

Admission Requirements

Applicants to the Master of Science in Accounting (M.S.A.) program are considered for admission based on their undergraduate cumulative grade point averages, resumes, goal statements, and other criteria established by the faculty. Some candidates may be eligible for admission without the GMAT exam. For current admission requirements visit <https://bloch.umkc.edu/graduate-program/msa/msa-admissions/>.

The Curriculum

The Master of Science in Accounting (M.S.A.) program encompasses advanced analysis in a variety of areas. The formal M.S.A. degree requires completion of a minimum of 30 credit hours. Applicants whose undergraduate work was outside of business and accounting will first seek admission at the undergraduate level to complete up to 12 hours of foundation coursework. Students may be exempt from course requirements based on prior coursework and grades earned, with exemptions determined at the time of initial advising and enrollment. Foundation and degree requirements are designed to allow students to meet the requirements to sit for the Unified Certified Public Accountant (CPA) exam in Missouri. Students planning to complete the CPA exam in other states may need additional coursework. Those wishing to prepare for other professional exams may be able to meet requirements by careful course selection within the program. **Note:** Students who repeat courses that have been waived from their program may not count the repeated course for credit toward their degree.

An M.S.A. program of study must include 30 credit hours with a minimum of 24 hours of that course work completed at UMKC. Transfer credit will be considered in accordance with the guidelines in the Master's Degrees Academic Regulations section of the catalog.

Undergraduate Foundation Coursework

Code	Title	Credits
ACCTNG 306	Introduction to the Accounting Profession and Procedures	3
ACCTNG 307	Cost Management	3
ACCTNG 310	Intermediate Accounting I	3
ACCTNG 350	Accounting Systems And Controls	3
Total Credits		12

M.S.A. Coursework

Minimum of 30 credit hours beyond Foundation Coursework.

Code	Title	Credits
Required if not taken elsewhere:		
ACCTNG 5557	Introduction To Income Taxation (unless waived by ACCTNG 412 or equivalent)	3
ACCTNG 5560	Introduction To Auditing And Accounting Systems (unless waived by ACCTNG 405 or equivalent)	3
Required courses:		
ACCTNG 5568	Data Analytics for Accounting	3
ACCTNG 5576	Tax Research, Procedure And Practice	3
ACCTNG 5578	Current Problems In Accounting	3
Electives to arrive at 30 hours		15-21

12 hours may be selected from other Bloch School disciplines.

Master of Science in Entrepreneurial Real Estate

Student Learning Outcomes

Students graduating from this program will:

- Apply current knowledge of real estate fundamentals to solve a variety of real-world problems and be able to incorporate new knowledge as the industry advances (Real Estate Industry Knowledge).
- Draw on their knowledge of real estate markets to manage the development, feasibility, finance, investment, management, transaction, and valuation decisions (Application of Real Estate Knowledge).
- Draw on design-thinking to identify, synthesize, and apply appropriate analytics and technological skills to develop recommendations and make decisions for a range of complex real estate problems (Analytics and Design-Thinking).
- Incorporate business practices from related fields to make informed decisions related to real estate brokerage, development, finance, investment, leasing, management, and valuation (Key Business, Legal and Interdisciplinary Concepts).
- Evaluate the direct and indirect impacts of real estate decisions and demonstrate how to reconcile differences among alternatives to discharge their social responsibility in an economically viable, sustainable manner (Ethics, and Sustainable Practices).
- Be able to communicate professionally, both orally and in writing, as well as determine the appropriate communications to increase effectiveness for various audiences and stakeholders (Communication Skills).

Admission Requirements

Applicants to the Master of Science in Entrepreneurial Real Estate (M.S.E.R.E.) program are considered for admission based on their undergraduate cumulative grade point averages, resumes, goal statements, and other criteria established by the faculty. Some candidates may be eligible for admission without the GMAT exam. For current admission requirements visit <https://bloch.umkc.edu/graduate-program/msere/msere-admissions/>.

Program Requirements

The master of science in entrepreneurial real estate is designed for students interested in all aspects of real estate who have decided their career paths require an advanced level of knowledge. The Lewis White Real Estate Center works in partnership with the Bloch School of Management's Regnier Institute for Entrepreneurship and Innovation which provides a global and entrepreneurial focus to the program.

The program fulfills a vital need for graduate real estate education not offered by any university in the region. Enabling real estate entrepreneurs to keep up with today's ever-changing environment, the program addresses real estate trends such as the global shift in attitude towards eco-friendly developments, reducing carbon footprints and the expansion of green technology in new construction. The knowledge gained will allow participants

to make real estate decisions that require mastery of complex, interdisciplinary skills and an ability to manage teams of professionals with expertise in various fields.

Curriculum

The master of science in entrepreneurial real estate is a 30-credit hour program. Students who are not experienced in real estate or are not working will be encouraged to complete a real estate internship during the summer semester. Students who meet certain standards in terms of academic background and experience may also be able to complete the program on a one-year basis. Some students may also opt to pursue the degree on a part-time basis which may extend their program to two years.

The full-time program cycle begins each fall. To complete the program along with their cohorts, students are required to take two graduate level real estate courses each semester. In addition to the seven required real estate courses (21 credit hours), students will also complete 9 elective credit hours of elective. These electives may also be focused on a narrower set of courses that allow students to pursue individualized areas of focus that will help advance their careers in their chosen area of specialization. Working with advisers, all students will have an approved program of study.

An M.S.E.R.E. program of study must include 30 credit hours with a minimum of 24 hours of that course work completed at UMKC. Transfer credit will be considered in accordance with the guidelines in the Master's Degrees Academic Regulations section of the catalog.

The following courses are required:

Code	Title	Credits
RL-EST 5556	Entrepreneurial Real Estate Process	3
RL-EST 5571	Real Estate Finance	3
RL-EST 5573	Real Estate Feasibility and Market Analysis	3
RL-EST 5574	Real Estate Construction and Development	3
RL-EST 5576	Real Estate Property and Portfolio Management	3
RL-EST 5577	Real Estate Valuation	3
RL-EST 5578	Legal Context of Real Estate	3
Approved electives		9
Total Credits		30

Approved electives can come from any Bloch School discipline (ACCTNG, DSOM, ENT, FIN, MGT, MIS, MKT), Law School (special permission may be needed and options may be limited), Engineering (prerequisites and limitations may apply) and Urban Planning & Design. Students may also work with their advisor to seek approval of other courses.

Master of Science in Finance

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate their ability to analyze financial data by successfully completing a financial statement analysis project.
- Demonstrate their ability to use financial modeling techniques by successfully employing those techniques to reach financial decisions on a case.
- Demonstrate their understanding of how to utilize various asset classes to achieve portfolio objectives including risk management by completing a class project.
- Demonstrate their ability to value business entities (both public and private) by successfully analyzing case information to arrive at an appropriate fair value for a business entity.

Admission Requirements

Applicants to the M.S.F. program are considered for admission based on their undergraduate cumulative grade point averages, resumes, goal statements, and other criteria established by the faculty. Some candidates may be eligible for admission without the GMAT exam. For current admission requirements visit <https://bloch.umkc.edu/graduate-program/msf/admissions/>.

The master of science in finance (M.S.F.) is for students and executives seeking specialized training in finance in preparation for financial certifications such as the Chartered Financial Analyst (CFA), as well as for acquiring career advancement skills in a variety of financial fields.

Our nationally and globally diverse faculty is comprised of experienced educators and recognized scholars who combine theory with practice to provide a balanced learning experience.

The Curriculum

The M.S.F. is a 30 hour program and courses are offered in fall, spring and summer semesters. Students entering the program must meet prerequisites in accounting, finance and statistics. Most courses are offered in the evening and students can pursue the degree part-time or full-time.

The Master of Science in Finance consists of the following three main parts:

1. Core classes required of all M.S.F. students (12 hours)
2. Interest area classes which provide subject matter depth (9 hours)
3. Designated electives (9 hours)

Total hours (30 hours)

An M.S.F. program of study must include 30 credit hours with a minimum of 24 hours of that course work completed at UMKC. Transfer credit will be considered in accordance with the guidelines in the Master's Degrees Academic Regulations section of the catalog. A petition to substitute a higher-level class will be considered for students who have completed college-level course work comparable to required M.S.F. classes.

The core curriculum for all tracks includes the following courses:

Code	Title	Credits
FIN 5552	Global Financial Markets and Institutions	3
FIN 5553	Investment Analysis	3
FIN 5560	Financial Modeling	3
FIN 5561	Financial Statement Analysis	3
Total Credits		12

Interest areas provide students with additional depth in a particular subject area. Some interest areas are designed to prepare students for professional certification exams such as the CFA and CFP. The course requirements for interest areas are detailed below.

Corporate Finance Interest Area

Code	Title	Credits
FIN 5550	Advanced Financial Management Theory And Policies	3
FIN 5563	Valuation/Mergers and Acquisitions	3
Finance Elective		3
Total Credits		9

Financial Analyst Interest Area

Code	Title	Credits
Required Track Courses		
FIN 5557	Derivative Securities	3
FIN 5562	Fixed Income Analysis	3
FIN 5563	Valuation/Mergers and Acquisitions	3
Required Elective Courses		
FIN 5564	Portfolio Management	3
FIN 5565	Alternative Investments	3
Total Credits		15

Financial Services Management Interest Area

Code	Title	Credits
FIN 5556	Management Of Financial Intermediaries	3
FIN 5557	Derivative Securities	3
FIN 5562	Fixed Income Analysis	3
or FIN 5567	Payment Systems	
FIN 5567	Payment Systems	3
FIN 5576	Fundamentals of Fintech	3
Total Credits		15

Flexible Design Interest Area

Pick three FIN designated courses to fill in the track portion of your program. For the designated elective section of the program, at least two courses must have the FIN designation.

Designated Electives

Twelve hours are required and at least 6 hours must be from Finance. Designated electives may include but are not limited to:

Code	Title	Credits
FIN 5550	Advanced Financial Management Theory And Policies	3
FIN 5556	Management Of Financial Intermediaries	3
FIN 5557	Derivative Securities	3
FIN 5562	Fixed Income Analysis	3
FIN 5563	Valuation/Mergers and Acquisitions	3
FIN 5564	Portfolio Management	3
FIN 5565	Alternative Investments	3
FIN 5567	Payment Systems	3
FIN 5576	Fundamentals of Fintech	3
FIN 5582	Seminar In Finance	3
FIN 5587	Special Topics	3
FIN 5595	Internship	1-3
ENT 5585	Entrepreneurial Finance and Venture Capital Investment	3
MGT 5552	International Study in Business	3

Selected courses in economics, management information systems, mathematics, law, real estate or other graduate programs can be approved by a finance faculty member.

Ph.D. in Entrepreneurship and Innovation

This program is not accepting applications for new students for the 2020-2021 academic year.

PROGRAM OVERVIEW

The Regnier Institute for Entrepreneurship and Innovation at the University of Missouri-Kansas City delivers exceptional entrepreneurship education and research programs. Faculty members in Entrepreneurship and Innovation at IEI are productive scholars who regularly publish in top-tier academic journals in entrepreneurship and related fields. We are committed to building one of the best doctoral programs in the country and training the next generation of entrepreneurship professors.

Students will complete two sequences of courses, one dealing with existing research in the areas of entrepreneurship and innovation and a second dealing with research methodologies. Through these courses, students will develop a solid grounding in the entrepreneurship and innovation literature. In addition, students will develop the research skills needed to (1) identify compelling research questions, (2) use theory to identify possible answers to those research question, (3) frame research projects to explore the validity of those answers, and (4) analyze the data generated by that research project using the statistical tools and techniques necessary for publication in leading management journals. All students in the program will take 6 hours of courses per semester for the first two years and 3 to 6 hours of courses per semester afterwards while working as research assistants for designated faculty and conducting dissertation research.

Student Learning Outcomes

Students graduating from this program will:

- SLO 1: Evaluate Theoretical and Empirical Contribution: For any given study published in the entrepreneurship and innovation literature, students should evaluate the strength of the paper's theoretical contribution, and evaluate the usefulness of the paper's empirical contribution in terms of statistical conclusion validity and causal inference. KPM: At the program level, we measure this SLO as whether the student completed all first-year coursework with a passing grade. Course-level rubrics are the purview of the instructing faculty. As a program, whether the student successfully passes all first-year coursework is evidence of making satisfactory progress towards the PhD degree.
- SLO 2: Deduce and Determine a Literature Gap and Empirical Strategy. Given a set of studies and a related dataset, students should deduce a valuable theoretical gap within that literature, and using a provided dataset, be able to determine and execute an appropriate statistical test of a hypothesis derived from the identified theoretical gap. KPM: We measure this SLO as whether the student successfully completed his or her second-year coursework, and whether the student successfully passes his or her comprehensive exam. There is, by design, no formalized rubric for grading the comprehensive exam. The standard for passing the exam is whether a majority of the doctoral faculty in the Department would grant a "revise and resubmit" decision on the submitted paper. The "revise and resubmit" standard is explicitly the standard that the student would find as

a researcher submitting papers to academic journals. The real-world nature of the grading process exposes the student to the subjective standard he or she will face as tenure-track faculty.

- SLO 3: Derive an Original Research Question and Theoretical Contribution. Working independently, students should derive an original research question in the entrepreneurship and innovation literature, be able connect that question to a delineable theoretical contribution to an entrepreneurship conversation, and design an appropriate empirical strategy to evaluate that research question. KPM: We measure this SLO as whether the student successfully defends his or her dissertation proposal at the end of the third-year in the program. Defining the originality of a research question and its potential contribution is at the discretion of the student's dissertation committee Chair.
- SLO 4: Persuasively Argue the Validity of Original Research. Students should persuasively argue and defend the validity—the usefulness of the research question and supporting statistical conclusion validity—of his or her original research. KPM: We measure this SLO as whether the student successfully defends his or her dissertation research at the end of the fourth year of the program. There is, by design, no set rubric for this evaluation. To be successful as tenure-track faculty, the student should be able to defend his or her research to a diverse audience of scholars who may or may not have familiarity with the student's research question.

PROGRAM STRUCTURE

Total credits required for graduation; 45 credit hours

Total residency requirements, if any: 42 credit hours

Code	Title	Credits
Required Theory Courses (12 credit hours):		
ENT 5691	Doctoral Seminar In Theoretical Foundations Of Entrepreneurship I	3
ENT 5692	Foundations Entrepreneurship	3
ENT 5693	Technology, Innovation, And Entrepreneurship	3
ENT 5694	Doctoral Seminar In Theories Of The Firm And Strategy	3
Required Methodology Courses (15 credit hours):		
ENT 5587	Special Topics	6
ENT 5681	Multivariate Statistical Methods-II	3
ENT 5682	Structural Equation Modeling	3
ENT 5683	Mathematical Models For Entrepreneurship	3
ENT 5699	Dissertation and Research in Entrepreneurship and Innovation	1-12

Required Elective Courses (6 credit hours):

Students will select two electives in consultation with their advisor. In all cases, the timing and composition of electives will be chosen with the approval of the student's advisor so that these courses will support the doctoral candidate's research focus.

Comprehensive Exams

Students are expected to take their comprehensive exams after the completion of their course requirements. Exams are administered by the RIEI faculty. However, a second failure will result in termination from the program.

Comprehensive examinations in the co-discipline may also be required either as part of major comprehensive exams or as separate exams.

Dissertation

In addition to the course work, research papers, and comprehensive exams, each Ph.D. candidate must successfully complete a dissertation in Entrepreneurship. The dissertation must be an original and independent piece of work.

Each dissertation is supervised by a five-member dissertation committee. The proposal must be approved by the dissertation committee before the end of the student's third year in the program. After the dissertation has been written to the satisfaction of the dissertation committee, the student presents the dissertation to the faculty and other Ph.D. students, and the student must defend the dissertation in a final oral examination by the committee. All dissertation requirements must be completed by the end of the sixth year in the program.

Teaching effectiveness training

All first-year students are required to participate in UMKC's teaching effectiveness training program. International students must pass a SPEAK test as part of the training. Teaching assistants assigned to teach core courses will receive additional guidance from faculty course coordinators. Each student will have the opportunity to independently teach at least two classes before graduating.

Financial support

We offer full tuition waivers and very competitive stipends to a limited number of students who are in the Stand-Alone Ph.D. program or the Interdisciplinary Ph.D. program with Entrepreneurship as the Coordinating Discipline. In addition, students are encouraged to compete for fellowships offered through the UMKC School of Graduate Studies.

Annual Evaluation

A student must complete a formal evaluation by the supervisory committee every year during the summer. Students are expected to maintain a minimum cumulative grade point average (GPA) of 3.3. Unsatisfactory performance on any of the requirements can lead to termination from the program.

Special Programs and Centers

Bloch Executive Education Center

Bloch School (<http://www.umkc.edu/virtualtour/bloch.asp>)

Bloch Executive Education Center

5108 Cherry Street, #417

(816) 235-6071

<https://bloch.umkc.edu/executive-education/>

Bloch Executive Education programs are designed to engage business, government, and non-profit leaders in applied learning. The Center offers customized programs, seminars, certificates and international programs that support innovation and leadership development in the U.S. and around the world. Custom programs are designed in concert with clients to support enterprise-wide initiatives and strategies. International programs serve to expose public and private international executives and scholars to the U.S. educational system as well as business operations. Management seminars are available to emerging leaders and senior executives based on personal and professional competency needs. Our nationally-recognized faculty provokes thought and challenges perspectives through relevant curricula that feature innovative thought, research insights, and business best practices.

Cookingham Institute of Urban Affairs

Bloch School

5110 Cherry Street, #305

(816) 235-2894

<http://bloch.umkc.edu/cookingham/>

The mission of the L.P. Cookingham Institute is to improve understanding of the sustainability of urban regions through research, educational programming, and community engagement. The Cookingham Institute also seeks to engage the UMKC community on issues related to urban and regional sustainability and to promote interdisciplinary research on urban topics. The Cookingham Institute is the means by which the Bloch School of Management supports research and teaching directed at improving our understanding of the factors affecting the fiscal and social sustainability of urban regions. The Greater Kansas City region provides an important context for our work, but the Institute is focused on producing knowledge relevant to urban regions across the country. In keeping with the Bloch School's commitment to research and education on entrepreneurship and innovation, a special focus of the Institute is on understanding innovation in the public sector.

Lewis White Real Estate Center

Bloch School (<http://www.umkc.edu/virtualtour/bloch.asp>)

5110 Cherry Street, #312

(816) 235-6288/5188

<http://www.umkc.edu/whitecenter/>

The Lewis White Real Estate Center (White Center) engages in teaching, research, and service activities. On the teaching front, working through the Department of Global Entrepreneurship and Innovation, the White Center is the primary champion of the Master of Science in Entrepreneurial Real Estate, as well as the undergraduate emphasis, and individual courses in Real Estate. The White Center's support for real estate activities cuts across campus through its commitment to interdisciplinary education. In addition to its educational activities, the White Center helps support academic research to help advance the body of knowledge and support real estate faculty. It also conducts and supports applied research to help advance best practices on the professional front. Consistent with UMKC, Bloch and Department missions, the White Center also engages in meaningful community and professional service activities, and supports service to the broader real estate academy.

Midwest Center for Nonprofit Leadership

Bloch School

5110 Cherry Street

(816) 235-2305

<https://bloch.umkc.edu/mcnl/>

The Midwest Center for Nonprofit Leadership (MCNL) is the education, research and community service center of the Department of Public Affairs in the Henry W. Bloch School of Management whose mission is to strengthen the performance and effectiveness of nonprofit public service organizations and their leaders. The Center is dedicated to building healthier communities through nonprofit leadership, and it does so through

high quality community-oriented education, research and facilitation programs and services. The Midwest Center provides an extensive array of programs for the education, professional development and personal renewal of nonprofit organization leaders and managers, including programs on nonprofit boards and governance, ethical and effective leadership and management, financial management, and social entrepreneurship. It is especially dedicated to meeting the needs of the many small and medium-sized community-based organizations and agencies serving the Kansas City metropolitan region. The Center also operates a Nonprofit Resource Center that is open to students and all members of the community.

Regnier Institute for Entrepreneurship and Innovation

Bloch School (<http://www.umkc.edu/virtualtour/bloch.asp>)

5108 Cherry Street, BEH 329

Kansas City, MO 64110-2499

P. (816) 235-6200

F. (816)-235-6529

<https://bloch.umkc.edu/entrepreneurship/>

The mission of the Regnier Institute for Entrepreneurship and Innovation at the Henry W. Bloch School of Management is to inspire and nurture entrepreneurs and innovators through transformational education and research. Our vision is to be a global leader in creating and disseminating knowledge to advance entrepreneurship and innovation. We encourage entrepreneurship, not just among business students, but among all students, and welcome those from any UMKC discipline who want to learn how to spark ideas and create new products and businesses.

The Institute and the Department of Entrepreneurship and Innovation offers entrepreneurship and innovation education at every educational level. Institute faculty and staff develop, deliver, and administer the Bloch School's Entrepreneurship programs at all levels, including two doctoral degree programs, M.B.A. and Executive M.B.A. programs, a specialized Masters degree in Entrepreneurial Real Estate, an undergraduate program, and our renowned Entrepreneurship Scholars Program. Our entrepreneurship programs focus on building an entrepreneurial mindset that can be used to create a new business, create value in an existing organization, solve social problems, or live a more entrepreneurial life. Our courses and programs are taught by an accomplished and influential cross-disciplinary faculty recognized for their research and teaching accomplishments.

Student Organizations

Student Organizations

Alpha Kappa Psi

Alpha Kappa Psi is the oldest and largest co-educational professional business fraternity with more than 200 chapters internationally. They are open to all majors that are interested in business and becoming one of tomorrow's leaders. With professional and personal development, leadership, networking and entrepreneurial opportunities, they can help you enhance your resume, distinguish yourself from your peers, and teach you skills that employers want.

Beta Alpha Psi

UMKC's Epsilon Delta chapter of Beta Alpha Psi, the national scholastic and professional accounting organization, provides opportunities for self-development and association among student members, practicing accountants and accounting faculty. Activities include technical programs presented by professionals, tutoring, taxpayer assistance, off-campus activities and social events.

Bloch School Student Association

The Bloch School Student Association (BSSA) is a board of directors to represent the student body on various campus and school administrative committees and sponsors a number of activities and events.

Delta Sigma Pi

Delta Sigma Pi, the nation's largest and most diverse professional business fraternity, is open to students interested in all fields of business. Through professional speakers and seminars, developmental workshops and interactive social events with business leaders, faculty members and prominent alumni, the fraternity provides students an excellent opportunity to explore the business environment while still concentrating on academics.

Enactus

Enactus is an international organization that connects student, academic and business leaders through entrepreneurial-based projects empowering people to transform opportunities into real, sustainable progress for themselves and their communities. Enactus is one of the largest organizations in the world, with 1,700 teams across 36 countries. Students in UMKC Enactus use entrepreneurial processes to solve needs within communities around the world. UMKC Enactus uses Human Centered Design to understand needs before creating sustainable solutions. At the end of every year UMKC Enactus presents their outcomes to a panel of judges at the Enactus USA National Competition. The goal of the competition is to select the team that has had the largest impact in their community. UMKC Enactus is one of the largest and most successful teams in the country, finishing strongly at national competition, and even receiving international recognition. www.umkcenactus.org (<http://www.umkcenactus.org>)

Financial Management Association

The Financial Management Association UMKC Student Chapter (FMA-UMKC) is affiliated with the Financial Management Association International (FMA), a premier global leader in developing and disseminating knowledge about financial decision making for academics, practitioners and students. We are leaders in providing financial literacy related to financial decision-making and encouraging as well as developing college students' financial interests through investment competitions, community projects, an active speaker program, corporate tours, a business career fair and newsletters. Also, we aspire to excellence as an organization.

Institute of Management Accountants Student Chapter

The Institute of Management Accountants is one of the largest accounting organizations in the world, but don't let the name fool you. This organization caters to all business majors seeking a career in public or private organizations in the role of management, finance, accounting or economics in an effort to bridge the gap between students and professionals. The student chapter is affiliated with national IMA and the local KC professional chapter to prepare students for a career in business and encourage pursuit of the Certified Management Accountant (CMA) exam based on accounting, finance and economics topics. The group is open to all majors and provides access to IMA scholarships/awards, an Honors Society, IMA leadership conference travel, plant tours, networking with professionals in the community and development of recognized professional competencies for career success.

International Business Club

The International Business Club (IBC) seeks to provide an opportunity for academic and structured collaboration of the world of international business for UMKC students in Business Administration and Commerce; to foster a familiarity of the opportunities, benefits, obstacles, and challenges of business abroad through discussion, analysis, practice, and research; to increase opportunities for its members through internships and job placement both abroad and at home; and to collaborate and contribute to the University of Missouri-Kansas City, the Bloch School, and the community through service and professionalism.

Public Administration Student Association

The Public Administration Student Association (PASA) is made up of M.P.A. and I.Ph.D. students who are interested in networking and socializing with students, faculty and professionals outside the classroom to enrich their experience at UMKC. PASA's purpose is to engage students academically, professionally, and socially in the study and practice of public administration.

Undergraduate Programs

Undergraduate Programs:

- Bachelor of Business Administration
- Bachelor of Science in Accounting
- Business Administration Minor
- Entrepreneurship Minor

Bachelor of Business Administration

Emphasis Areas:

- Analytics and Business Intelligence Emphasis (p. 1733)
- Entrepreneurship and Innovation Emphasis (p. 1740)
- Finance Emphasis (p. 1746)
- Health Administration Emphasis (p. 1753)
- Management Emphasis (p. 1759)
- Marketing Emphasis (p. 1766)
- Nonprofit Management Emphasis (p. 1772)
- Real Estate Emphasis (p. 1779)
- Supply Chain Management Emphasis (p. 1786)

Bachelor of Business Administration: Analytics and Business Intelligence Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a

Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- be able to design business analytics processes for reproducibility and replicability;
- be able to choose the best application and modeling approach to solve a given business analytics problem;
- be able to interpret the results of data analyses and communicate those results to stakeholders.

Admission Requirements

First-time college students are eligible to be admitted to the Bloch School if they meet regular UMKC entrance requirements. Those transferring from other institutions must have 2.5 cumulative and University of Missouri (UM) GPAs. Intra-university transfers can enter Bloch School programs with a 2.25 UM GPA. All students are required to maintain a 2.25 cumulative University of Missouri GPA while enrolled in this program.

Program Requirements

The Bloch School requires a minimum of 120 credit hours to earn the Bachelor of Business Administration (B.B.A.) degree. This total includes coursework in the following areas: General Education, Basic Skills, General Electives, Business Core, Emphasis Area, and Interest Area. All students pursuing the B.B.A. degree must select an emphasis area and a complementary interest area.

See the Bloch School Undergraduate Policies and Procedures section (link to <http://catalog.umkc.edu/colleges-schools/henry-w-bloch-management/undergraduate-programs/undergraduate-policies-procedures/>) for additional information.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Basic Skills Coursework

Code	Title	Credits
ACCTNG 210	Introduction To Financial Accounting (Includes Lab)	3
ACCTNG 211	Introduction To Managerial Accounting	3
DSOM 211	Business Analytics I	3
or STAT 235	Elementary Statistics	
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
MGT 256	Legal and Regulatory Contexts of Organizations	3
MIS 202	Computer Applications In Management	3
Total Credits		24

Major Requirements

Prior to enrolling in any course, students must ensure they have completed the necessary prerequisites.

Code	Title	Credits
International Requirement		
Select one from: ^{1,2}		3
MGT 370	International Management	
MGT 470	International Study in Business	
Other classes approved by Management Department		
Total Credits		3

¹ With approval from the Management Department, this can include international business-related course work transferred from other institutions, study abroad opportunities and emphasis-specific international classes.

² Students pursuing the Management emphasis or Organizational Leadership interest area may count the MGT 370 or MGT 470 course completed for the International requirement toward the emphasis area/interest area.

Code	Title	Credits
Core B.B.A. Curriculum		
DSOM 311	Business Analytics II	3
DSOM 340	Supply Chain and Operations Management	3
ENT 315	Entrepreneurial Mindset and Opportunity Recognition	3
FIN 325	Financial Management	3
MGT 301	Effective Business Communication	3
or MGT 301A	Effective Business Communication for Non-Native Speakers	
MGT 332	Principles of Organizational Behavior	3
MGT 471	Strategic Management	3
MIS 402	Information Management	3
MKT 324	Principles of Marketing	3
Analytics and Business Intelligence Emphasis Area Coursework		
ACCTNG 487	Special Topics	3
DSOM 487	Special Topics	3
MGT 367	Human Resource Analytics	3
or DSOM 346	Service Industry Analytics	
MKT 390	Customer Data Analytics	3
or DSOM 443	Project Management	
Interest Area (see below)		9
Total Credits		48

General Electives

Code	Title	Credits
General Electives ¹		15

¹ A maximum of two hours of PE activity is accepted as elective credit. Applied or military science and vocational courses may not be taken for elective credit.

Minimum GPA: 2.25 (UM and in-major)

Total Credit Hours: 120

Interest Areas (choose one interest area below)

Banking and Financial Services Interest Area

Code	Title	Credits
Select three courses from the following:		9
FIN 350	Introduction to Risk Management and Insurance	
FIN 369	Payment Systems	
FIN 428	Commercial Bank Management	
FIN 476	Introduction to Fintech	
Total Credits		9

Corporate Accounting Interest Area

Code	Title	Credits
ACCTNG 306	Introduction to the Accounting Profession and Procedures	3
ACCTNG 307	Cost Management	3
ACCTNG 412	Introduction to Income Taxation	3
or ACCTNG 470	Fraud Examination	
Total Credits		9

Corporate Finance and Investments Interest Area

Code	Title	Credits
FIN 350	Introduction to Risk Management and Insurance	3
or ACCTNG 307	Cost Management	

or ACCTNG 412	Introduction to Income Taxation	
FIN 419	Financial Statement Analysis	3
FIN 445	Advanced Investments	3
or FIN 476	Introduction to Fintech	
Total Credits		9

Financial Management Interest Area

Code	Title	Credits
FIN 326	Financial Management 2	3
FIN 340	Financial Markets and Institutions	3
FIN 345	Investments	3
or ACCTNG 307	Cost Management	
Total Credits		9

Healthcare Management Interest Area

Code	Title	Credits
HLTH-ADM 471	Financial Management Issues of Health and Human Services Organizations	3
HLTH-ADM 477	Leadership and Management in Health Care Organizations	3
HLTH-ADM 481	Health Policy in the United States	3
Total Credits		9

Innovation and Design Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 327	Designing the Business Model	3
ENT 364	Entrepreneurial Management and Innovation	3
or ENT 461	Social Entrepreneurship	
Total Credits		9

Organizational Leadership Interest Area

Code	Title	Credits
MGT 337	Managing Human Capital	3
MGT 360	Groups and Teams	3
or ENT 326	Creativity, Innovation, and Problem Solving	
or DSOM 443	Project Management	
or MGT 372	Ethics and Leadership	
or MGT 374	Leading a Positive Workplace	
or MGT 410	Corporate Social Responsibility	
or MIS 415	Managing the Information Systems Resource	
MGT 370	International Management	3
or MGT 375	Global Mindset for Managers	
or MGT 470	International Study in Business	
Total Credits		9

Real Estate Interest Area

Code	Title	Credits
RL-EST 321	Real Estate Principles	3
RL-EST 421	Real Estate Finance Fundamentals	3
RL-EST 425	Principles of Real Estate Property Management	3
Total Credits		9

Sales and Business Development Interest Area

Code	Title	Credits
MKT 335	Customer Insights	3
or MKT 390	Customer Data Analytics	

MKT 420	Sales Management	3
MKT 430	Personal Selling	3
Total Credits		9

Startup Interest Area

Code	Title	Credits
ENT 327	Designing the Business Model	3
ENT 329	Entrepreneurship Scholars	3
ENT 361	New Product Development	3
Total Credits		9

Technology, Innovation, and Management Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 341	Technology Entrepreneurship	3
ENT 361	New Product Development	3
Total Credits		9

Graduation Requirements

The BBA degree will be awarded on satisfaction of the following:

1. Completion of the degree requirements and a minimum of 120 credit hours.
2. Achievement of a 2.25 GPA; satisfactory academic standing is based on:
 - a. Cumulative GPA of 2.25 for all University of Missouri courses; and
 - b. GPA of 2.25 for all required junior-and senior-level in-major courses completed at UM schools.
3. Completion of 50% of junior/senior in-major courses at UMKC.
4. Completion of HEIghten, and other assessment exercises assigned by the Bloch faculty.
5. Completion of the Constitution requirement.
6. Filing of a required application for graduation at the beginning of the senior year.

Students are responsible for ensuring their course of study falls within program guidelines.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map**Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:**

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 110 ^{CC}		3 ENGLISH 225 ^{CC}	3
MATH 110 ^{CC}		3 COMM-ST 110 or 277 ^{CC}	3
GEFSE 101 ^{CC}		3 GECRT-AH 101	3
GECRT-SS 101		3 GECRT-SC 101	3
MGT 100 (or other general elective) ^{CC}		3 MIS 202 ^{CC}	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ACCTNG 210 ^{CC}		3 ACCTNG 211 ^{CC}	3
ECON 201 or 202 ^{CC}		3 ECON 201 or 202 ^{CC}	3
GECUE 201		3 DSOM 211 ^{CC}	3
GECDV 201		3 MGT 256	3
HISTORY 101, 102, or POL-SCI 210		3 ENT 315	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
DSOM 311		3 MGT 370 or 470	3
DSOM 340 ^{CC}		3 FIN 325 ^{CC}	3
MGT 332 ^{CC}		3 Analytics & Business Intelligence Emphasis Course	3
MGT 301 or 301A		3 3XX/4XX Interest Area Course	3
MKT 324 ^{CC}		3 General Elective	3
		15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
MIS 402		3 MGT 471	3
Analytics & Business Intelligence Emphasis Course		3 Analytics & Business Intelligence Emphasis Course	3
Analytics & Business Intelligence Emphasis Course		3 3XX/4XX Interest Area Course	3
3XX/4XX Interest Area Course		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.

- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs.

Advising Contact Information

Bloch School of Management Student Services

115 Bloch Heritage Hall

816-235-2215

blochadvising@umkc.edu

<https://bloch.umkc.edu/students/advising/>

Bachelor of Business Administration: Entrepreneurship and Innovation Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- be able to define and evaluate the needs, problems, and demands of a market;
- be able to identify the role of risk and reward in entrepreneurship and innovation;
- be able to evaluate business models and validate their components.

Admission Requirements

First-time college students are eligible to be admitted to the Bloch School if they meet regular UMKC entrance requirements. Those transferring from other institutions must have 2.5 cumulative and University of Missouri (UM) GPAs. Intra-university transfers can enter Bloch School programs with a 2.25 UM GPA. All students are required to maintain a 2.25 cumulative University of Missouri GPA while enrolled in this program.

Program Requirements

The Bloch School requires a minimum of 120 credit hours to earn the Bachelor of Business Administration (B.B.A.) degree. This total includes coursework in the following areas: General Education, Basic Skills, General Electives, Business Core, Emphasis Area, and Interest Area. All students pursuing the B.B.A. degree must select an emphasis area and a complementary interest area.

See the Bloch School Undergraduate Policies and Procedures section (link to <http://catalog.umkc.edu/colleges-schools/henry-w-bloch-management/undergraduate-programs/undergraduate-policies-procedures/>) for additional information.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Basic Skills Coursework

Code	Title	Credits
ACCTNG 210	Introduction To Financial Accounting (Includes Lab)	3
ACCTNG 211	Introduction To Managerial Accounting	3
DSOM 211	Business Analytics I	3
or STAT 235	Elementary Statistics	
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	

ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
MGT 256	Legal and Regulatory Contexts of Organizations	3
MIS 202	Computer Applications In Management	3
Total Credits		24

Major Requirements

Prior to enrolling in any course, students must ensure they have completed the necessary prerequisites.

Code	Title	Credits
International Requirement		
Select one from: ^{1, 2}		3
MGT 370	International Management	
MGT 470	International Study in Business	
Other classes approved by Management Department		
Total Credits		3

¹ With approval from the Management Department, this can include international business-related course work transferred from other institutions, study abroad opportunities and emphasis-specific international classes.

² Students pursuing the Management emphasis or Organizational Leadership interest area may count the MGT 370 or MGT 470 course completed for the International requirement toward the emphasis area/interest area.

Code	Title	Credits
Core B.B.A. Curriculum		
DSOM 311	Business Analytics II	3
DSOM 340	Supply Chain and Operations Management	3
ENT 315	Entrepreneurial Mindset and Opportunity Recognition	3
FIN 325	Financial Management	3
MGT 301	Effective Business Communication	3
or MGT 301A	Effective Business Communication for Non-Native Speakers	
MGT 332	Principles of Organizational Behavior	3
MGT 471	Strategic Management	3
MIS 402	Information Management	3
MKT 324	Principles of Marketing	3
Entrepreneurship and Innovation Emphasis Area Coursework		
ENT 327	Designing the Business Model	3
ENT 361	New Product Development	3
or ENT 364	Entrepreneurial Management and Innovation	
ENT 412	Entrepreneurial Finance	3
ENT 462	Entrepreneurial Experience	3
or ENT 329	Entrepreneurship Scholars	
Interest Area (see below)		9
Total Credits		48

General Electives

Code	Title	Credits
General Electives ¹		15

¹ A maximum of two hours of PE activity is accepted as elective credit. Applied or military science and vocational courses may not be taken for elective credit.

Minimum GPA: 2.25 (UM and in-major)

Total Credit Hours: 120

Interest Areas (choose one interest area below)**Analytics and Business Intelligence Interest Area**

Code	Title	Credits
MGT 367	Human Resource Analytics	3
or DSOM 346	Service Industry Analytics	
MKT 390	Customer Data Analytics	3
or DSOM 443	Project Management	
DSOM 487	Special Topics	3
or ACCTNG 487	Special Topics	
Total Credits		9

Banking and Financial Services Interest Area

Code	Title	Credits
Select three courses from the following:		9
FIN 350	Introduction to Risk Management and Insurance	
FIN 369	Payment Systems	
FIN 428	Commercial Bank Management	
FIN 476	Introduction to Fintech	
Total Credits		9

Corporate Accounting Interest Area

Code	Title	Credits
ACCTNG 306	Introduction to the Accounting Profession and Procedures	3
ACCTNG 307	Cost Management	3
ACCTNG 412	Introduction to Income Taxation	3
or ACCTNG 470	Fraud Examination	
Total Credits		9

Corporate Finance and Investments Interest Area

Code	Title	Credits
FIN 350	Introduction to Risk Management and Insurance	3
or ACCTNG 307	Cost Management	
or ACCTNG 412	Introduction to Income Taxation	
FIN 419	Financial Statement Analysis	3
FIN 445	Advanced Investments	3
or FIN 476	Introduction to Fintech	
Total Credits		9

Financial Management Interest Area

Code	Title	Credits
FIN 326	Financial Management 2	3
FIN 340	Financial Markets and Institutions	3
FIN 345	Investments	3
or ACCTNG 307	Cost Management	
Total Credits		9

Healthcare Management Interest Area

Code	Title	Credits
HLTH-ADM 471	Financial Management Issues of Health and Human Services Organizations	3
HLTH-ADM 477	Leadership and Management in Health Care Organizations	3
HLTH-ADM 481	Health Policy in the United States	3
Total Credits		9

Market Research and Analytics Interest Area

Code	Title	Credits
DSOM 487	Special Topics	3
or ACCTNG 487	Special Topics	
MKT 390	Customer Data Analytics	3
MKT 430	Personal Selling	3
Total Credits		9

Organizational Leadership Interest Area

Code	Title	Credits
MGT 337	Managing Human Capital	3
MGT 360	Groups and Teams	3
or ENT 326	Creativity, Innovation, and Problem Solving	
or DSOM 443	Project Management	
or MGT 372	Ethics and Leadership	
or MGT 374	Leading a Positive Workplace	
or MGT 410	Corporate Social Responsibility	
or MIS 415	Managing the Information Systems Resource	
MGT 370	International Management	3
or MGT 375	Global Mindset for Managers	
or MGT 470	International Study in Business	
Total Credits		9

Real Estate Interest Area

Code	Title	Credits
RL-EST 321	Real Estate Principles	3
RL-EST 421	Real Estate Finance Fundamentals	3
RL-EST 425	Principles of Real Estate Property Management	3
Total Credits		9

Sales and Business Development Interest Area

Code	Title	Credits
MKT 335	Customer Insights	3
or MKT 390	Customer Data Analytics	
MKT 420	Sales Management	3
MKT 430	Personal Selling	3
Total Credits		9

Graduation Requirements

The BBA degree will be awarded on satisfaction of the following:

1. Completion of the degree requirements and a minimum of 120 credit hours.
2. Achievement of a 2.25 GPA; satisfactory academic standing is based on:
 - a. Cumulative GPA of 2.25 for all University of Missouri courses; and
 - b. GPA of 2.25 for all required junior-and senior-level in-major courses completed at UM schools.
3. Completion of 50% of junior/senior in-major courses at UMKC.
4. Completion of HEIghten, and other assessment exercises assigned by the Bloch faculty.
5. Completion of the Constitution requirement.
6. Filing of a required application for graduation at the beginning of the senior year.

Students are responsible for ensuring their course of study falls within program guidelines.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses

are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 110 ^{CC}		3 ENGLISH 225 ^{CC}	3
MATH 110 ^{CC}		3 COMM-ST 110 or 277 ^{CC}	3
GEFSE 101		3 GECRT-AH 101	3
GECRT-SS 101		3 GECRT-SC 101	3
MGT 100 (or other general elective) ^{CC}		3 MIS 202 ^{CC}	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ACCTNG 210 ^{CC}		3 ACCTNG 211 ^{CC}	3
ECON 201 or 202 ^{CC}		3 ECON 201 or 202 ^{CC}	3
GECDV 201		3 DSOM 211 ^{CC}	3
GECUE 201		3 ENT 315 ^{CC}	3
HISTORY 101, 102, or POL-SCI 210		3 MGT 256	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
DSOM 311		3 ENT 412 ^{CC}	3
ENT 327 ^{CC}		3 FIN 325	3
MGT 301 or 301A		3 MGT 370 or 470	3
MGT 332 ^{CC}		3 3XX/4XX Interest Area Course	3
MKT 324 ^{CC}		3 General Elective	3
		15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
ENT 364 or 361		3 DSOM 340	3
MIS 402		3 ENT 462 or 329	3
3XX/4XX Interest Area Course		3 MGT 471	3
General Elective		3 3XX/4XX Interest Area Course	3
General Elective		3 General Elective	3
		15	15

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs.

Advising Contact Information

Bloch School of Management Student Services

115 Bloch Heritage Hall

816-235-2215

blochadvising@umkc.edu

<https://bloch.umkc.edu/students/advising/>

Bachelor of Business Administration: Finance Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- be able to synthesize course material via experiential learning by constructing models using financial data in a spreadsheet environment;
- be able to investigate corporate financial decisions utilizing capital budgeting techniques;
- be able to evaluate the business strategies of different types of organizations using financial statements.

Admission Requirements

First-time college students are eligible to be admitted to the Bloch School if they meet regular UMKC entrance requirements. Those transferring from other institutions must have 2.5 cumulative and University of Missouri (UM) GPAs. Intra-university transfers can enter Bloch School programs with a 2.25 UM GPA. All students are required to maintain a 2.25 cumulative University of Missouri GPA while enrolled in this program.

Program Requirements

The Bloch School requires a minimum of 120 credit hours to earn the Bachelor of Business Administration (B.B.A.) degree. This total includes coursework in the following areas: General Education, Basic Skills, General Electives, Business Core, Emphasis Area, and Interest Area. All students pursuing the B.B.A. degree must select an emphasis area and a complementary interest area.

See the Bloch School Undergraduate Policies and Procedures section (link to <http://catalog.umkc.edu/colleges-schools/henry-w-bloch-management/undergraduate-programs/undergraduate-policies-procedures/>) for additional information.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Basic Skills Coursework

Code	Title	Credits
ACCTNG 210	Introduction To Financial Accounting (Includes Lab)	3
ACCTNG 211	Introduction To Managerial Accounting	3
DSOM 211	Business Analytics I	3
or STAT 235	Elementary Statistics	
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
MGT 256	Legal and Regulatory Contexts of Organizations	3
MIS 202	Computer Applications In Management	3
Total Credits		24

Major Requirements

Prior to enrolling in any course, students must ensure they have completed the necessary prerequisites.

Code	Title	Credits
International Requirement		
Select one from: ^{1, 2}		3
MGT 370	International Management	
MGT 470	International Study in Business	
Other classes approved by Management Department		
Total Credits		3

¹ With approval from the Management Department, this can include international business-related course work transferred from other institutions, study abroad opportunities and emphasis-specific international classes.

² Students pursuing the Management emphasis or Organizational Leadership interest area may count the MGT 370 or MGT 470 course completed for the International requirement toward the emphasis area/interest area.

Code	Title	Credits
Core B.B.A. Curriculum		
DSOM 311	Business Analytics II	3
DSOM 340	Supply Chain and Operations Management	3
ENT 315	Entrepreneurial Mindset and Opportunity Recognition	3
FIN 325	Financial Management	3
MGT 301	Effective Business Communication	3
or MGT 301A	Effective Business Communication for Non-Native Speakers	
MGT 332	Principles of Organizational Behavior	3
MGT 471	Strategic Management	3
MIS 402	Information Management	3
MKT 324	Principles of Marketing	3
Finance Emphasis Area Coursework		
FIN 326	Financial Management 2	3
FIN 340	Financial Markets and Institutions	3

FIN 345	Investments	3
FIN 435	Advanced Corporate Finance	3
Interest Area		9
Total Credits		48

General Electives

Code	Title	Credits
General Electives ¹		15

¹ A maximum of two hours of PE activity is accepted as elective credit. Applied or military science and vocational courses may not be taken for elective credit.

Minimum GPA: 2.25 (UM and in-major)

Total Credit Hours: 120

Interest Areas (choose one interest area below)

Analytics and Business Intelligence Interest Area

Code	Title	Credits
MGT 367	Human Resource Analytics	3
or DSOM 346	Service Industry Analytics	
MKT 390	Customer Data Analytics	3
or DSOM 443	Project Management	
DSOM 487	Special Topics	3
or ACCTNG 487	Special Topics	
Total Credits		9

Banking and Financial Services Interest Area

Code	Title	Credits
Select three courses from the following:		9
FIN 350	Introduction to Risk Management and Insurance	
FIN 369	Payment Systems	
FIN 428	Commercial Bank Management	
FIN 476	Introduction to Fintech	
Total Credits		9

Corporate Accounting Interest Area

Code	Title	Credits
ACCTNG 306	Introduction to the Accounting Profession and Procedures	3
ACCTNG 307	Cost Management	3
ACCTNG 412	Introduction to Income Taxation	3
or ACCTNG 470	Fraud Examination	
Total Credits		9

Corporate Finance and Investments Interest Area

Code	Title	Credits
FIN 350	Introduction to Risk Management and Insurance	3
or ACCTNG 307	Cost Management	
or ACCTNG 412	Introduction to Income Taxation	
FIN 419	Financial Statement Analysis	3
FIN 445	Advanced Investments	3
or FIN 476	Introduction to Fintech	
Total Credits		9

Healthcare Management Interest Area

Code	Title	Credits
HLTH-ADM 471	Financial Management Issues of Health and Human Services Organizations	3
HLTH-ADM 477	Leadership and Management in Health Care Organizations	3
HLTH-ADM 481	Health Policy in the United States	3
Total Credits		9

Innovation and Design Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 327	Designing the Business Model	3
ENT 364 or ENT 461	Entrepreneurial Management and Innovation Social Entrepreneurship	3
Total Credits		9

Market Research and Analytics Interest Area

Code	Title	Credits
DSOM 487 or ACCTNG 487	Special Topics Special Topics	3
MKT 390	Customer Data Analytics	3
MKT 430	Personal Selling	3
Total Credits		9

Organizational Leadership Interest Area

Code	Title	Credits
MGT 337	Managing Human Capital	3
MGT 360 or ENT 326 or DSOM 443 or MGT 372 or MGT 374 or MGT 410 or MIS 415	Groups and Teams Creativity, Innovation, and Problem Solving Project Management Ethics and Leadership Leading a Positive Workplace Corporate Social Responsibility Managing the Information Systems Resource	3
MGT 370 or MGT 375 or MGT 470	International Management Global Mindset for Managers International Study in Business	3
Total Credits		9

Real Estate Interest Area

Code	Title	Credits
RL-EST 321	Real Estate Principles	3
RL-EST 421	Real Estate Finance Fundamentals	3
RL-EST 425	Principles of Real Estate Property Management	3
Total Credits		9

Sales and Business Development Interest Area

Code	Title	Credits
MKT 335 or MKT 390	Customer Insights Customer Data Analytics	3
MKT 420	Sales Management	3
MKT 430	Personal Selling	3
Total Credits		9

Startup Interest Area

Code	Title	Credits
ENT 327	Designing the Business Model	3
ENT 329	Entrepreneurship Scholars	3
ENT 361	New Product Development	3
Total Credits		9

Technology, Innovation, and Management Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 341	Technology Entrepreneurship	3
ENT 361	New Product Development	3
Total Credits		9

Graduation Requirements

The BBA degree will be awarded on satisfaction of the following:

1. Completion of the degree requirements and a minimum of 120 credit hours.
2. Achievement of a 2.25 GPA; satisfactory academic standing is based on:
 - a. Cumulative GPA of 2.25 for all University of Missouri courses; and
 - b. GPA of 2.25 for all required junior-and senior-level in-major courses completed at UM schools.
3. Completion of 50% of junior/senior in-major courses at UMKC.
4. Completion of HEIghten, and other assessment exercises assigned by the Bloch faculty.
5. Completion of the Constitution requirement.
6. Filing of a required application for graduation at the beginning of the senior year.

Students are responsible for ensuring their course of study falls within program guidelines.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 110 ^{CC}		3 ENGLISH 225 ^{CC}	3
MATH 110 ^{CC}		3 COMM-ST 110 or 277 ^{CC}	3
GEFSE 101		3 GECRT-AH 101	3
GECRT-SS 101		3 GECRT-SC 101	3
MGT 100 (or other general elective) ^{CC}		3 MIS 202 ^{CC}	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ACCTNG 210 ^{CC}		3 ACCTNG 211 ^{CC}	3
ECON 201 or 202 ^{CC}		3 ECON 201 or 202 ^{CC}	3
GECDV 201		3 DSOM 211 ^{CC}	3
GECUE 201		3 MGT 301 or 301A	3
HISTORY 101, 102, or POL-SCI 210		3 MGT 256	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
DSOM 311		3 FIN 326 ^{CC}	3
ENT 315		3 FIN 345 ^{CC}	3
FIN 325 ^{CC}		3 MGT 370 or 470	3
MGT 332 ^{CC}		3 MKT 324 ^{CC}	3
General Elective		3 3XX/4XX Interest Area Course	3
		15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
FIN 340		3 DSOM 340	3
MIS 402		3 FIN 435	3
3XX/4XX Interest Area Course		3 MGT 471	3
General Elective		3 3XX/4XX Interest Area Course	3
General Elective		3 General Elective	3
		15	15

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs.

Advising Contact Information

Bloch School of Management Student Services

115 Bloch Heritage Hall

816-235-2215

blochadvising@umkc.edu

<https://bloch.umkc.edu/students/advising/>

Bachelor of Business Administration: Health Administration Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- be able to analyze and synthesize diverse stakeholder perspectives in health services;
- be able to articulate and communicate health policy positions to key decision makers;
- be able to apply the frameworks of economic decision-making to the health landscape;
- be able to perform basic economic analysis using models and applied mathematics.

Admission Requirements

First-time college students are eligible to be admitted to the Bloch School if they meet regular UMKC entrance requirements. Those transferring from other institutions must have 2.5 cumulative and University of Missouri (UM) GPAs. Intra-university transfers can enter Bloch School programs with a 2.25 UM GPA. All students are required to maintain a 2.25 cumulative University of Missouri GPA while enrolled in this program.

Program Requirements

The Bloch School requires a minimum of 120 credit hours to earn the Bachelor of Business Administration (B.B.A.) degree. This total includes coursework in the following areas: General Education, Basic Skills, General Electives, Business Core, Emphasis Area, and Interest Area. All students pursuing the B.B.A. degree must select an emphasis area and a complementary interest area.

See the Bloch School Undergraduate Policies and Procedures section (link to <http://catalog.umkc.edu/colleges-schools/henry-w-bloch-management/undergraduate-programs/undergraduate-policies-procedures/>) for additional information.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		

ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Basic Skills Coursework

Code	Title	Credits
ACCTNG 210	Introduction To Financial Accounting (Includes Lab)	3
ACCTNG 211	Introduction To Managerial Accounting	3
DSOM 211	Business Analytics I	3
or STAT 235	Elementary Statistics	
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
MGT 256	Legal and Regulatory Contexts of Organizations	3
MIS 202	Computer Applications In Management	3
Total Credits		24

Major Requirements

Prior to enrolling in any course, students must ensure they have completed the necessary prerequisites.

Code	Title	Credits
International Requirement		
Select one from: ^{1,2}		3
MGT 370	International Management	
MGT 470	International Study in Business	
Other classes approved by Management Department		
Total Credits		3

¹ With approval from the Management Department, this can include international business-related course work transferred from other institutions, study abroad opportunities and emphasis-specific international classes.

² Students pursuing the Management emphasis or Organizational Leadership interest area may count the MGT 370 or MGT 470 course completed for the International requirement toward the emphasis area/interest area.

Code	Title	Credits
Core B.B.A. Curriculum		
DSOM 311	Business Analytics II	3
DSOM 340	Supply Chain and Operations Management	3
ENT 315	Entrepreneurial Mindset and Opportunity Recognition	3
FIN 325	Financial Management	3
MGT 301	Effective Business Communication	3
or MGT 301A	Effective Business Communication for Non-Native Speakers	
MGT 332	Principles of Organizational Behavior	3
MGT 471	Strategic Management	3
MIS 402	Information Management	3
MKT 324	Principles of Marketing	3
Health Administration Emphasis Area Coursework		
HLTH-ADM 471	Financial Management Issues of Health and Human Services Organizations	3
HLTH-ADM 477	Leadership and Management in Health Care Organizations	3
HLTH-ADM 480	The Economics of Health and Medicine	3
HLTH-ADM 481	Health Policy in the United States	3
Interest Area		9
Total Credits		48

General Electives

Code	Title	Credits
General Electives ¹		15

¹ A maximum of two hours of PE activity is accepted as elective credit. Applied or military science and vocational courses may not be taken for elective credit.

Minimum GPA: 2.25 (UM and in-major)

Total Credit Hours: 120

Interest Areas (choose one interest area below)

Analytics and Business Intelligence Interest Area

Code	Title	Credits
MGT 367	Human Resource Analytics	3
or DSOM 346	Service Industry Analytics	
MKT 390	Customer Data Analytics	3
or DSOM 443	Project Management	
DSOM 487	Special Topics	3

or ACCTNG 487

Special Topics

Total Credits	9
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Banking and Financial Services Interest Area

Code	Title	Credits
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Select three courses from the following:	9
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FIN 350	Introduction to Risk Management and Insurance	
FIN 369	Payment Systems	
FIN 428	Commercial Bank Management	
FIN 476	Introduction to Fintech	

Total Credits	9
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Corporate Accounting Interest Area

Code	Title	Credits
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ACCTNG 306	Introduction to the Accounting Profession and Procedures	3
ACCTNG 307	Cost Management	3
ACCTNG 412	Introduction to Income Taxation	3
or ACCTNG 470	Fraud Examination	

Total Credits	9
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Corporate Finance and Investments Interest Area

Code	Title	Credits
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FIN 350	Introduction to Risk Management and Insurance	3
or ACCTNG 307	Cost Management	
or ACCTNG 412	Introduction to Income Taxation	
FIN 419	Financial Statement Analysis	3
FIN 445	Advanced Investments	3
or FIN 476	Introduction to Fintech	

Total Credits	9
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Financial Management Interest Area

Code	Title	Credits
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FIN 326	Financial Management 2	3
FIN 340	Financial Markets and Institutions	3
FIN 345	Investments	3
or ACCTNG 307	Cost Management	

Total Credits	9
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Innovation and Design Interest Area

Code	Title	Credits
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ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 327	Designing the Business Model	3
ENT 364	Entrepreneurial Management and Innovation	3
or ENT 461	Social Entrepreneurship	

Total Credits	9
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Market Research and Analytics Interest Area

Code	Title	Credits
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DSOM 487	Special Topics	3
or ACCTNG 487	Special Topics	
MKT 390	Customer Data Analytics	3
MKT 430	Personal Selling	3

Total Credits	9
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Organizational Leadership Interest Area

Code	Title	Credits
MGT 337	Managing Human Capital	3
MGT 360	Groups and Teams	3
or ENT 326	Creativity, Innovation, and Problem Solving	
or DSOM 443	Project Management	
or MGT 372	Ethics and Leadership	
or MGT 374	Leading a Positive Workplace	
or MGT 410	Corporate Social Responsibility	
or MIS 415	Managing the Information Systems Resource	
MGT 370	International Management	3
or MGT 375	Global Mindset for Managers	
or MGT 470	International Study in Business	
Total Credits		9

Real Estate Interest Area

Code	Title	Credits
RL-EST 321	Real Estate Principles	3
RL-EST 421	Real Estate Finance Fundamentals	3
RL-EST 425	Principles of Real Estate Property Management	3
Total Credits		9

Sales and Business Development Interest Area

Code	Title	Credits
MKT 335	Customer Insights	3
or MKT 390	Customer Data Analytics	
MKT 420	Sales Management	3
MKT 430	Personal Selling	3
Total Credits		9

Startup Interest Area

Code	Title	Credits
ENT 327	Designing the Business Model	3
ENT 329	Entrepreneurship Scholars	3
ENT 361	New Product Development	3
Total Credits		9

Technology, Innovation, and Management Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 341	Technology Entrepreneurship	3
ENT 361	New Product Development	3
Total Credits		9

Graduation Requirements

The BBA degree will be awarded on satisfaction of the following:

1. Completion of the degree requirements and a minimum of 120 credit hours.
2. Achievement of a 2.25 GPA; satisfactory academic standing is based on:
 - a. Cumulative GPA of 2.25 for all University of Missouri courses; and
 - b. GPA of 2.25 for all required junior-and senior-level in-major courses completed at UM schools.
3. Completion of 50% of junior/senior in-major courses at UMKC.
4. Completion of HEIghten, and other assessment exercises assigned by the Bloch faculty.

5. Completion of the Constitution requirement.
6. Filing of a required application for graduation at the beginning of the senior year.

Students are responsible for ensuring their course of study falls within program guidelines.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 110 ^{CC}		3 ENGLISH 225 ^{CC}	3
MATH 110 ^{CC}		3 COMM-ST 110 or 277 ^{CC}	3
GEFSE 101		3 GECRT-AH 101	3
GECRT-SS 101		3 GECRT-SC 101	3
MGT 100 (or other general elective) ^{CC}		3 MIS 202 ^{CC}	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ACCTNG 210 ^{CC}		3 ACCTNG 211 ^{CC}	3
DSOM 211 ^{CC}		3 DSOM 311 ^{CC}	3
ECON 201 or 202 ^{CC}		3 ECON 201 or 202 ^{CC}	3
GECDV 201		3 MGT 256	3
HISTORY 101, 102, or POL-SCI 210		3 GECUE 201	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
HLTH-ADM 481		3 HLTH-ADM 477	3

FIN 325 ^{CC}	3	HLTH-ADM 480	3
MGT 301 or 301A	3	MKT 324 ^{CC}	3
MGT 332 ^{CC}	3	3XX/4XX Interest Area Course	3
General Elective	3	General Elective	3
	15		15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
ENT 315		3 DSOM 340	3
HLTH-ADM 471		3 MGT 471	3
MIS 402		3 MGT 370 or 470	3
3XX/4XX Interest Area Course		3 3XX/4XX Interest Area Course	3
General Elective		3 General Elective	3
	15		15

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs.

Advising Contact Information

Bloch School of Management Student Services

115 Bloch Heritage Hall

816-235-2215

blochadvising@umkc.edu

<https://bloch.umkc.edu/students/advising/>

Bachelor of Business Administration: Management Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- be able to assess and implement effective business leadership and organizational behavior processes;
- be able to understand the functions of effective human resource management;
- be able to design and assess organizational strategy and plan execution.

Admission Requirements

First-time college students are eligible to be admitted to the Bloch School if they meet regular UMKC entrance requirements. Those transferring from other institutions must have 2.5 cumulative and University of Missouri (UM) GPAs. Intra-university transfers can enter Bloch School programs with a 2.25 UM GPA. All students are required to maintain a 2.25 cumulative University of Missouri GPA while enrolled in this program.

Program Requirements

The Bloch School requires a minimum of 120 credit hours to earn the Bachelor of Business Administration (B.B.A.) degree. This total includes coursework in the following areas: General Education, Basic Skills, General Electives, Business Core, Emphasis Area, and Interest Area. All students pursuing the B.B.A. degree must select an emphasis area and a complementary interest area.

See the Bloch School Undergraduate Policies and Procedures section (link to <http://catalog.umkc.edu/colleges-schools/henry-w-bloch-management/undergraduate-programs/undergraduate-policies-procedures/>) for additional information.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	

HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Basic Skills Coursework

Code	Title	Credits
ACCTNG 210	Introduction To Financial Accounting (Includes Lab)	3
ACCTNG 211	Introduction To Managerial Accounting	3
DSOM 211	Business Analytics I	3
or STAT 235	Elementary Statistics	
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
MGT 256	Legal and Regulatory Contexts of Organizations	3
MIS 202	Computer Applications In Management	3
Total Credits		24

Major Requirements

Prior to enrolling in any course, students must ensure they have completed the necessary prerequisites.

Code	Title	Credits
International Requirement		
Select one from: ^{1, 2}		3
MGT 370	International Management	
MGT 470	International Study in Business	
Other classes approved by Management Department		
Total Credits		3

¹ With approval from the Management Department, this can include international business-related course work transferred from other institutions, study abroad opportunities and emphasis-specific international classes.

² Students pursuing the Management emphasis or Organizational Leadership interest area may count the MGT 370 or MGT 470 course completed for the International requirement toward the emphasis area/interest area.

Code	Title	Credits
Core B.B.A. Curriculum		
DSOM 311	Business Analytics II	3
DSOM 340	Supply Chain and Operations Management	3
ENT 315	Entrepreneurial Mindset and Opportunity Recognition	3
FIN 325	Financial Management	3
MGT 301	Effective Business Communication	3
or MGT 301A	Effective Business Communication for Non-Native Speakers	
MGT 332	Principles of Organizational Behavior	3
MGT 471	Strategic Management	3

MIS 402	Information Management	3
MKT 324	Principles of Marketing	3
Management Emphasis Area Coursework		
MGT 337	Managing Human Capital	3
MGT 370	International Management	3
or MGT 375	Global Mindset for Managers	
or MGT 470	International Study in Business	
MGT 372	Ethics and Leadership	3
or MGT 410	Corporate Social Responsibility	
MGT 360	Groups and Teams	3
or MGT 374	Leading a Positive Workplace	
or MIS 415	Managing the Information Systems Resource	
or DSOM 443	Project Management	
or ENT 326	Creativity, Innovation, and Problem Solving	
Interest Area (see below)		9
Total Credits		48

General Electives

Code	Title	Credits
General Electives ¹		15

¹ A maximum of two hours of PE activity is accepted as elective credit. Applied or military science and vocational courses may not be taken for elective credit.

Minimum GPA: 2.25 (UM and in-major)

Total Credit Hours: 120

Interest Areas (choose one interest area below)

Analytics and Business Intelligence Interest Area

Code	Title	Credits
MGT 367	Human Resource Analytics	3
or DSOM 346	Service Industry Analytics	
MKT 390	Customer Data Analytics	3
or DSOM 443	Project Management	
DSOM 487	Special Topics	3
or ACCTNG 487	Special Topics	
Total Credits		9

Banking and Financial Services Interest Area

Code	Title	Credits
Select three courses from the following:		9
FIN 350	Introduction to Risk Management and Insurance	
FIN 369	Payment Systems	
FIN 428	Commercial Bank Management	
FIN 476	Introduction to Fintech	
Total Credits		9

Corporate Accounting Interest Area

Code	Title	Credits
ACCTNG 306	Introduction to the Accounting Profession and Procedures	3
ACCTNG 307	Cost Management	3
ACCTNG 412	Introduction to Income Taxation	3

or ACCTNG 470	Fraud Examination	
Total Credits		9

Corporate Finance and Investments Interest Area

Code	Title	Credits
FIN 350	Introduction to Risk Management and Insurance	3
or ACCTNG 307	Cost Management	
or ACCTNG 412	Introduction to Income Taxation	
FIN 419	Financial Statement Analysis	3
FIN 445	Advanced Investments	3
or FIN 476	Introduction to Fintech	
Total Credits		9

Financial Management Interest Area

Code	Title	Credits
FIN 326	Financial Management 2	3
FIN 340	Financial Markets and Institutions	3
FIN 345	Investments	3
or ACCTNG 307	Cost Management	
Total Credits		9

Healthcare Management Interest Area

Code	Title	Credits
HLTH-ADM 471	Financial Management Issues of Health and Human Services Organizations	3
HLTH-ADM 477	Leadership and Management in Health Care Organizations	3
HLTH-ADM 481	Health Policy in the United States	3
Total Credits		9

Innovation and Design Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 327	Designing the Business Model	3
ENT 364	Entrepreneurial Management and Innovation	3
or ENT 461	Social Entrepreneurship	
Total Credits		9

Market Research and Analytics Interest Area

Code	Title	Credits
DSOM 487	Special Topics	3
or ACCTNG 487	Special Topics	
MKT 390	Customer Data Analytics	3
MKT 430	Personal Selling	3
Total Credits		9

Real Estate Interest Area

Code	Title	Credits
RL-EST 321	Real Estate Principles	3
RL-EST 421	Real Estate Finance Fundamentals	3
RL-EST 425	Principles of Real Estate Property Management	3
Total Credits		9

Sales and Business Development Interest Area

Code	Title	Credits
MKT 335	Customer Insights	3
or MKT 390	Customer Data Analytics	

MKT 420	Sales Management	3
MKT 430	Personal Selling	3
Total Credits		9

Startup Interest Area

Code	Title	Credits
ENT 327	Designing the Business Model	3
ENT 329	Entrepreneurship Scholars	3
ENT 361	New Product Development	3
Total Credits		9

Technology, Innovation, and Management Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 341	Technology Entrepreneurship	3
ENT 361	New Product Development	3
Total Credits		9

Graduation Requirements

The BBA degree will be awarded on satisfaction of the following:

1. Completion of the degree requirements and a minimum of 120 credit hours.
2. Achievement of a 2.25 GPA; satisfactory academic standing is based on:
 - a. Cumulative GPA of 2.25 for all University of Missouri courses; and
 - b. GPA of 2.25 for all required junior-and senior-level in-major courses completed at UM schools.
3. Completion of 50% of junior/senior in-major courses at UMKC.
4. Completion of HEIghten, and other assessment exercises assigned by the Bloch faculty.
5. Completion of the Constitution requirement.
6. Filing of a required application for graduation at the beginning of the senior year.

Students are responsible for ensuring their course of study falls within program guidelines.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map**Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:**

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 110 ^{CC}		3 ENGLISH 225 ^{CC}	3
MATH 110 ^{CC}		3 COMM-ST 110 or 277 ^{CC}	3
GEFSE 101		3 GECRT-AH 101	3
GECRT-SS 101		3 GECRT-SC 101	3
MGT 100 (or other general elective) ^{CC}		3 MIS 202 ^{CC}	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ACCTNG 210 ^{CC}		3 ACCTNG 211 ^{CC}	3
ECON 201 or 202 ^{CC}		3 ECON 201 or 202 ^{CC}	3
GECDV 201		3 DSOM 211 ^{CC}	3
GECUE 201		3 MGT 256	3
HISTORY 101, 102, or POL-SCI 210		3 MGT 301 or 301A ^{CC}	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
DSOM 311		3 FIN 325	3
ENT 315		3 MGT 370 or 470	3
MGT 332 ^{CC}		3 MGT 337 ^{CC}	3
MKT 324 ^{CC}		3 MGT 410 (or other Management emphasis course)	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
MGT 372 (or other Management emphasis class if MGT 410 completed)		3 DSOM 340	3
MIS 402		3 MGT 471	3
3XX/4XX Interest Area Course		3 3XX/4XX Interest Area Course	3
3XX/4XX Interest Area Course		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.

- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs.

Advising Contact Information

Bloch School of Management Student Services

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blochadvising@umkc.edu

<https://bloch.umkc.edu/students/advising/>

Bachelor of Business Administration: Marketing Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- be able to understand and describe fundamental concepts and strategies pertaining to product, pricing, promotions, distribution, customer behavior, marketing research, and sales;
- be able to demonstrate critical thinking skills by employing appropriate tools/techniques to solve marketing-related problems;
- be able to effectively communicate marketing-related business problems and solutions through individual and/or team-based written project reports and oral presentations.

Admission Requirements

First-time college students are eligible to be admitted to the Bloch School if they meet regular UMKC entrance requirements. Those transferring from other institutions must have 2.5 cumulative and University of Missouri (UM) GPAs. Intra-university transfers can enter Bloch School programs with a 2.25 UM GPA. All students are required to maintain a 2.25 cumulative University of Missouri GPA while enrolled in this program.

Program Requirements

The Bloch School requires a minimum of 120 credit hours to earn the Bachelor of Business Administration (B.B.A.) degree. This total includes coursework in the following areas: General Education, Basic Skills, General Electives, Business Core, Emphasis Area, and Interest Area. All students pursuing the B.B.A. degree must select an emphasis area and a complementary interest area.

See the Bloch School Undergraduate Policies and Procedures section (link to <http://catalog.umkc.edu/colleges-schools/henry-w-bloch-management/undergraduate-programs/undergraduate-policies-procedures/>) for additional information.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Basic Skills Coursework

Code	Title	Credits
ACCTNG 210	Introduction To Financial Accounting (Includes Lab)	3
ACCTNG 211	Introduction To Managerial Accounting	3
DSOM 211	Business Analytics I	3
or STAT 235	Elementary Statistics	
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	

ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
MGT 256	Legal and Regulatory Contexts of Organizations	3
MIS 202	Computer Applications In Management	3
Total Credits		24

Major Requirements

Prior to enrolling in any course, students must ensure they have completed the necessary prerequisites.

Code	Title	Credits
International Requirement		
Select one from: ^{1, 2}		3
MGT 370	International Management	
MGT 470	International Study in Business	
Other classes approved by Management Department		
Total Credits		3

¹ With approval from the Management Department, this can include international business-related course work transferred from other institutions, study abroad opportunities and emphasis-specific international classes.

² Students pursuing the Management emphasis or Organizational Leadership interest area may count the MGT 370 or MGT 470 course completed for the International requirement toward the emphasis area/interest area.

Code	Title	Credits
Core B.B.A. Curriculum		
DSOM 311	Business Analytics II	3
DSOM 340	Supply Chain and Operations Management	3
ENT 315	Entrepreneurial Mindset and Opportunity Recognition	3
FIN 325	Financial Management	3
MGT 301	Effective Business Communication	3
or MGT 301A	Effective Business Communication for Non-Native Speakers	
MGT 332	Principles of Organizational Behavior	3
MGT 471	Strategic Management	3
MIS 402	Information Management	3
MKT 324	Principles of Marketing	3
Marketing Emphasis Coursework		
MKT 335	Customer Insights	3
MKT 348	Marketing Research	3
MKT 442	Social Media and Mobile Marketing	3
MKT 480	Strategic Marketing	3
Interest Area (see below)		9
Total Credits		48

General Electives

Code	Title	Credits
General Electives ¹		15

¹ A maximum of two hours of PE activity is accepted as elective credit. Applied or military science and vocational courses may not be taken for elective credit.

Minimum GPA: 2.25 (UM and in-major)

Total Credit Hours: 120

Interest Areas (choose one interest area below)**Analytics and Business Intelligence Interest Area**

Code	Title	Credits
MGT 367	Human Resource Analytics	3
or DSOM 346	Service Industry Analytics	
MKT 390	Customer Data Analytics	3
or DSOM 443	Project Management	
DSOM 487	Special Topics	3
or ACCTNG 487	Special Topics	
Total Credits		9

Banking and Financial Services Interest Area

Code	Title	Credits
Select three courses from the following:		9
FIN 350	Introduction to Risk Management and Insurance	
FIN 369	Payment Systems	
FIN 428	Commercial Bank Management	
FIN 476	Introduction to Fintech	
Total Credits		9

Corporate Accounting Interest Area

Code	Title	Credits
ACCTNG 306	Introduction to the Accounting Profession and Procedures	3
ACCTNG 307	Cost Management	3
ACCTNG 412	Introduction to Income Taxation	3
or ACCTNG 470	Fraud Examination	
Total Credits		9

Corporate Finance and Investments Interest Area

Code	Title	Credits
FIN 350	Introduction to Risk Management and Insurance	3
or ACCTNG 307	Cost Management	
or ACCTNG 412	Introduction to Income Taxation	
FIN 419	Financial Statement Analysis	3
FIN 445	Advanced Investments	3
or FIN 476	Introduction to Fintech	
Total Credits		9

Financial Management Interest Area

Code	Title	Credits
FIN 326	Financial Management 2	3
FIN 340	Financial Markets and Institutions	3
FIN 345	Investments	3
or ACCTNG 307	Cost Management	
Total Credits		9

Healthcare Management Interest Area

Code	Title	Credits
HLTH-ADM 471	Financial Management Issues of Health and Human Services Organizations	3
HLTH-ADM 477	Leadership and Management in Health Care Organizations	3
HLTH-ADM 481	Health Policy in the United States	3
Total Credits		9

Innovation and Design Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 327	Designing the Business Model	3
ENT 364 or ENT 461	Entrepreneurial Management and Innovation Social Entrepreneurship	3
Total Credits		9

Market Research and Analytics Interest Area

Code	Title	Credits
DSOM 487 or ACCTNG 487	Special Topics Special Topics	3
MKT 390	Customer Data Analytics	3
MKT 430	Personal Selling	3
Total Credits		9

Organizational Leadership Interest Area

Code	Title	Credits
MGT 337	Managing Human Capital	3
MGT 360 or ENT 326 or DSOM 443 or MGT 372 or MGT 374 or MGT 410 or MIS 415	Groups and Teams Creativity, Innovation, and Problem Solving Project Management Ethics and Leadership Leading a Positive Workplace Corporate Social Responsibility Managing the Information Systems Resource	3
MGT 370 or MGT 375 or MGT 470	International Management Global Mindset for Managers International Study in Business	3
Total Credits		9

Real Estate Interest Area

Code	Title	Credits
RL-EST 321	Real Estate Principles	3
RL-EST 421	Real Estate Finance Fundamentals	3
RL-EST 425	Principles of Real Estate Property Management	3
Total Credits		9

Startup Interest Area

Code	Title	Credits
ENT 327	Designing the Business Model	3
ENT 329	Entrepreneurship Scholars	3
ENT 361	New Product Development	3
Total Credits		9

Technology, Innovation, and Management Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 341	Technology Entrepreneurship	3
ENT 361	New Product Development	3
Total Credits		9

Graduation Requirements

The BBA degree will be awarded on satisfaction of the following:

1. Completion of the degree requirements and a minimum of 120 credit hours.
2. Achievement of a 2.25 GPA; satisfactory academic standing is based on:
 - a. Cumulative GPA of 2.25 for all University of Missouri courses; and
 - b. GPA of 2.25 for all required junior-and senior-level in-major courses completed at UM schools.
3. Completion of 50% of junior/senior in-major courses at UMKC.
4. Completion of HEIghten, and other assessment exercises assigned by the Bloch faculty.
5. Completion of the Constitution requirement.
6. Filing of a required application for graduation at the beginning of the senior year.

Students are responsible for ensuring their course of study falls within program guidelines.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 110 ^{CC}	3	ENGLISH 225 ^{CC}	3
MATH 110 ^{CC}	3	COMM-ST 110 or 277 ^{CC}	3
GEFSE 101	3	GEART-AH 101	3
GEART-SS 101	3	GEART-SC 101	3
MGT 100 (or other general elective) ^{CC}	3	MIS 202 ^{CC}	3
	15		15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ACCTNG 210 ^{CC}	3	ACCTNG 211 ^{CC}	3
ECON 201 or 202 ^{CC}	3	ECON 201 or 202 ^{CC}	3
GECDV 201	3	DSOM 211 ^{CC}	3
GECEU 201	3	MGT 256	3

HISTORY 101, 102, or POL-SCI 210	3	MKT 324 ^{CC}	3		
	15		15		
Third Year					
Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
DSOM 311	3	ENT 315	3	MKT 442	3
MGT 301 or 301A ^{CC}	3	MGT 370 or 470	3		
MGT 332 ^{CC}	3	MKT 348 ^{CC}	3		
MKT 335 ^{CC}	3	General Elective	3		
General Elective	3	General Elective	3		
	15		15		3
Fourth Year					
Fall Semester	Credits	Spring Semester	Credits		
FIN 325 ^{CC}	3	DSOM 340	3		
MIS 402	3	MGT 471	3		
MKT 480 ^{CC}	3	3XX/4XX Interest Area Course	3		
3XX/4XX Interest Area Course	3	3XX/4XX Interest Area Course	3		
		General Elective	3		
	12		15		

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. (*Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.*)
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs.

Advising Contact Information

Bloch School of Management Student Services

115 Bloch Heritage Hall

816-235-2215

blochadvising@umkc.edu

<https://bloch.umkc.edu/students/advising/>

Bachelor of Business Administration: Nonprofit Management Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- be able to lead and manage nonprofit organizations and programs effectively and in entrepreneurial and innovative ways;
- be able to engage in sophisticated decision making to effectively address the long term needs and interests of communities, organizations, and their stakeholders;
- be able to effectively engage, interact, and communicate, verbally and in writing, with diverse constituencies and audience.

Admission Requirements

First-time college students are eligible to be admitted to the Bloch School if they meet regular UMKC entrance requirements. Those transferring from other institutions must have 2.5 cumulative and University of Missouri (UM) GPAs. Intra-university transfers can enter Bloch School programs with a 2.25 UM GPA. All students are required to maintain a 2.25 cumulative University of Missouri GPA while enrolled in this program.

Program Requirements

The Bloch School requires a minimum of 120 credit hours to earn the Bachelor of Business Administration (B.B.A.) degree. This total includes coursework in the following areas: General Education, Basic Skills, General Electives, Business Core, Emphasis Area, and Interest Area. All students pursuing the B.B.A. degree must select an emphasis area and a complementary interest area.

See the Bloch School Undergraduate Policies and Procedures section (link to <http://catalog.umkc.edu/colleges-schools/henry-w-bloch-management/undergraduate-programs/undergraduate-policies-procedures/>) for additional information.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Basic Skills Coursework

Code	Title	Credits
ACCTNG 210	Introduction To Financial Accounting (Includes Lab)	3
ACCTNG 211	Introduction To Managerial Accounting	3
DSOM 211	Business Analytics I	3
or STAT 235	Elementary Statistics	
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
MGT 256	Legal and Regulatory Contexts of Organizations	3
MIS 202	Computer Applications In Management	3
Total Credits		24

Major Requirements

Prior to enrolling in any course, students must ensure they have completed the necessary prerequisites.

Code	Title	Credits
International Requirement		
Select one from: ^{1,2}		3
MGT 370	International Management	
MGT 470	International Study in Business	
Other classes approved by Management Department		
Total Credits		3

¹ With approval from the Management Department, this can include international business-related course work transferred from other institutions, study abroad opportunities and emphasis-specific international classes.

² Students pursuing the Management emphasis or Organizational Leadership interest area may count the MGT 370 or MGT 470 course completed for the International requirement toward the emphasis area/interest area.

Code	Title	Credits
Core B.B.A. Curriculum		
DSOM 311	Business Analytics II	3
DSOM 340	Supply Chain and Operations Management	3
ENT 315	Entrepreneurial Mindset and Opportunity Recognition	3
FIN 325	Financial Management	3
MGT 301	Effective Business Communication	3
or MGT 301A	Effective Business Communication for Non-Native Speakers	
MGT 332	Principles of Organizational Behavior	3
MGT 471	Strategic Management	3
MIS 402	Information Management	3
MKT 324	Principles of Marketing	3
Nonprofit Management Emphasis Area Coursework		
PUB-ADM 492	Creating and Measuring Social Impact	3
PUB-ADM 493	Nonprofit Fundraising and Development	3
PUB-ADM 494	Leading and Managing Nonprofit Organizations	3
PUB-ADM 495	Voluntarism, Philanthropy & The Non-Profit Sector In The U.S.	3
Interest Area (see below)		9
Total Credits		48

General Electives

Code	Title	Credits
General Electives ¹		15

¹ A maximum of two hours of PE activity is accepted as elective credit. Applied or military science and vocational courses may not be taken for elective credit.

Minimum GPA: 2.25 (UM and in-major)

Total Credit Hours: 120

Interest Areas (choose one interest area below)

Analytics and Business Intelligence Interest Area

Code	Title	Credits
MGT 367	Human Resource Analytics	3
or DSOM 346	Service Industry Analytics	
MKT 390	Customer Data Analytics	3
or DSOM 443	Project Management	
DSOM 487	Special Topics	3
or ACCTNG 487	Special Topics	
Total Credits		9

Banking and Financial Services Interest Area

Code	Title	Credits
Select three courses from the following:		9
FIN 350	Introduction to Risk Management and Insurance	
FIN 369	Payment Systems	
FIN 428	Commercial Bank Management	
FIN 476	Introduction to Fintech	
Total Credits		9

Corporate Accounting Interest Area

Code	Title	Credits
ACCTNG 306	Introduction to the Accounting Profession and Procedures	3
ACCTNG 307	Cost Management	3

ACCTNG 412	Introduction to Income Taxation	3
or ACCTNG 470	Fraud Examination	
Total Credits		9

Corporate Finance and Investments Interest Area

Code	Title	Credits
FIN 350	Introduction to Risk Management and Insurance	3
or ACCTNG 307	Cost Management	
or ACCTNG 412	Introduction to Income Taxation	
FIN 419	Financial Statement Analysis	3
FIN 445	Advanced Investments	3
or FIN 476	Introduction to Fintech	
Total Credits		9

Financial Management Interest Area

Code	Title	Credits
FIN 326	Financial Management 2	3
FIN 340	Financial Markets and Institutions	3
FIN 345	Investments	3
or ACCTNG 307	Cost Management	
Total Credits		9

Healthcare Management Interest Area

Code	Title	Credits
HLTH-ADM 471	Financial Management Issues of Health and Human Services Organizations	3
HLTH-ADM 477	Leadership and Management in Health Care Organizations	3
HLTH-ADM 481	Health Policy in the United States	3
Total Credits		9

Innovation and Design Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 327	Designing the Business Model	3
ENT 364	Entrepreneurial Management and Innovation	3
or ENT 461	Social Entrepreneurship	
Total Credits		9

Market Research and Analytics Interest Area

Code	Title	Credits
DSOM 487	Special Topics	3
or ACCTNG 487	Special Topics	
MKT 390	Customer Data Analytics	3
MKT 430	Personal Selling	3
Total Credits		9

Organizational Leadership Interest Area

Code	Title	Credits
MGT 337	Managing Human Capital	3
MGT 360	Groups and Teams	3
or ENT 326	Creativity, Innovation, and Problem Solving	
or DSOM 443	Project Management	
or MGT 372	Ethics and Leadership	
or MGT 374	Leading a Positive Workplace	
or MGT 410	Corporate Social Responsibility	
or MIS 415	Managing the Information Systems Resource	

MGT 370	International Management	3
or MGT 375	Global Mindset for Managers	
or MGT 470	International Study in Business	
Total Credits		9

Real Estate Interest Area

Code	Title	Credits
RL-EST 321	Real Estate Principles	3
RL-EST 421	Real Estate Finance Fundamentals	3
RL-EST 425	Principles of Real Estate Property Management	3
Total Credits		9

Sales and Business Development Interest Area

Code	Title	Credits
MKT 335	Customer Insights	3
or MKT 390	Customer Data Analytics	
MKT 420	Sales Management	3
MKT 430	Personal Selling	3
Total Credits		9

Startup Interest Area

Code	Title	Credits
ENT 327	Designing the Business Model	3
ENT 329	Entrepreneurship Scholars	3
ENT 361	New Product Development	3
Total Credits		9

Technology, Innovation, and Management Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 341	Technology Entrepreneurship	3
ENT 361	New Product Development	3
Total Credits		9

Graduation Requirements

The BBA degree will be awarded on satisfaction of the following:

1. Completion of the degree requirements and a minimum of 120 credit hours.
2. Achievement of a 2.25 GPA; satisfactory academic standing is based on:
 - a. Cumulative GPA of 2.25 for all University of Missouri courses; and
 - b. GPA of 2.25 for all required junior-and senior-level in-major courses completed at UM schools.
3. Completion of 50% of junior/senior in-major courses at UMKC.
4. Completion of HELghten, and other assessment exercises assigned by the Bloch faculty.
5. Completion of the Constitution requirement.
6. Filing of a required application for graduation at the beginning of the senior year.

Students are responsible for ensuring their course of study falls within program guidelines.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

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UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 110 ^{CC}	3	ENGLISH 225 ^{CC}	3
MATH 110 ^{CC}	3	COMM-ST 110 or 277 ^{CC}	3
GEFSE 101	3	GECRT-AH 101	3
GECRT-SS 101	3	GECRT-SC 101	3
MGT 100 (or other general elective) ^{CC}	3	MIS 202 ^{CC}	3
	15		15

Second Year

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
ACCTNG 210 ^{CC}	3	ACCTNG 211 ^{CC}	3	PUB-ADM 493 ^{CC}	3
ECON 201 or 202 ^{CC}	3	ECON 201 or 202 ^{CC}	3		
GECDV 201	3	DSOM 211 ^{CC}	3		
GECUE 201	3	MGT 301 or 301A	3		
HISTORY 101, 102, or POL-SCI 210	3	MGT 256	3		
	15		15		3

Third Year

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
DSOM 311	3	FIN 325 ^{CC}	3	PUB-ADM 495 ^{CC}	3
ENT 315	3	MGT 370 or 470	3		
MGT 332 ^{CC}	3	MKT 324 ^{CC}	3		
General Elective	3	PUB-ADM 492 ^{CC}	3		
		General Elective	3		
	12		15		3

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
MIS 402	3	DSOM 340	3
PUB-ADM 494	3	MGT 471	3

3XX/4XX Interest Area Course	3 3XX/4XX Interest Area Course	3
3XX/4XX Interest Area Course	3 General Elective	3
General Elective	3	
	15	12

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs.

Advising Contact Information

Bloch School of Management Student Services

115 Bloch Heritage Hall

816-235-2215

blochadvising@umkc.edu

<https://bloch.umkc.edu/students/advising/>

Bachelor of Business Administration: Real Estate Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- be able to demonstrate technical competence in various real estate calculations and modeling;
- be able to devise solutions for unstructured real estate problems;
- be able to use cohesive and logical reasoning patterns for evaluating real estate information, material and data.

Admission Requirements

First-time college students are eligible to be admitted to the Bloch School if they meet regular UMKC entrance requirements. Those transferring from other institutions must have 2.5 cumulative and University of Missouri (UM) GPAs. Intra-university transfers can enter Bloch School programs with a 2.25 UM GPA. All students are required to maintain a 2.25 cumulative University of Missouri GPA while enrolled in this program.

Program Requirements

The Bloch School requires a minimum of 120 credit hours to earn the Bachelor of Business Administration (B.B.A.) degree. This total includes coursework in the following areas: General Education, Basic Skills, General Electives, Business Core, Emphasis Area, and Interest Area. All students pursuing the B.B.A. degree must select an emphasis area and a complementary interest area.

See the Bloch School Undergraduate Policies and Procedures section (link to <http://catalog.umkc.edu/colleges-schools/henry-w-bloch-management/undergraduate-programs/undergraduate-policies-procedures/>) for additional information.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.

- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Basic Skills Coursework

Code	Title	Credits
ACCTNG 210	Introduction To Financial Accounting (Includes Lab)	3
ACCTNG 211	Introduction To Managerial Accounting	3
DSOM 211	Business Analytics I	3
or STAT 235	Elementary Statistics	
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
MGT 256	Legal and Regulatory Contexts of Organizations	3
MIS 202	Computer Applications In Management	3
Total Credits		24

Major Requirements

Prior to enrolling in any course, students must ensure they have completed the necessary prerequisites.

Code	Title	Credits
International Requirement		
Select one from: ^{1,2}		3
MGT 370	International Management	
MGT 470	International Study in Business	
Other classes approved by Management Department		
Total Credits		3

¹ With approval from the Management Department, this can include international business-related course work transferred from other institutions, study abroad opportunities and emphasis-specific international classes.

² Students pursuing the Management emphasis or Organizational Leadership interest area may count the MGT 370 or MGT 470 course completed for the International requirement toward the emphasis area/interest area.

Code	Title	Credits
Core B.B.A. Curriculum		
DSOM 311	Business Analytics II	3
DSOM 340	Supply Chain and Operations Management	3
ENT 315	Entrepreneurial Mindset and Opportunity Recognition	3
FIN 325	Financial Management	3
MGT 301	Effective Business Communication	3
or MGT 301A	Effective Business Communication for Non-Native Speakers	
MGT 332	Principles of Organizational Behavior	3
MGT 471	Strategic Management	3
MIS 402	Information Management	3
MKT 324	Principles of Marketing	3
Real Estate Emphasis Coursework		
RL-EST 321	Real Estate Principles	3
RL-EST 421	Real Estate Finance Fundamentals	3
RL-EST 425	Principles of Real Estate Property Management	3
FIN 340	Financial Markets and Institutions	3
or FIN 326	Financial Management 2	

or MKT 430

Personal Selling

Interest Area (see below)	9
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Total Credits	48
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General Electives

Code	Title	Credits
General Electives ¹		15

¹ A maximum of two hours of PE activity is accepted as elective credit. Applied or military science and vocational courses may not be taken for elective credit.

Minimum GPA: 2.25 (UM and in-major)

Total Credit Hours: 120

Interest Areas (choose one interest area below)

Analytics and Business Intelligence Interest Area

Code	Title	Credits
MGT 367	Human Resource Analytics	3
or DSOM 346	Service Industry Analytics	
MKT 390	Customer Data Analytics	3
or DSOM 443	Project Management	
DSOM 487	Special Topics	3
or ACCTNG 487	Special Topics	
Total Credits		9

Banking and Financial Services Interest Area

Code	Title	Credits
Select three courses from the following:		9
FIN 350	Introduction to Risk Management and Insurance	
FIN 369	Payment Systems	
FIN 428	Commercial Bank Management	
FIN 476	Introduction to Fintech	
Total Credits		9

Corporate Accounting Interest Area

Code	Title	Credits
ACCTNG 306	Introduction to the Accounting Profession and Procedures	3
ACCTNG 307	Cost Management	3
ACCTNG 412	Introduction to Income Taxation	3
or ACCTNG 470	Fraud Examination	
Total Credits		9

Corporate Finance and Investments Interest Area

Code	Title	Credits
FIN 350	Introduction to Risk Management and Insurance	3
or ACCTNG 307	Cost Management	
or ACCTNG 412	Introduction to Income Taxation	
FIN 419	Financial Statement Analysis	3
FIN 445	Advanced Investments	3
or FIN 476	Introduction to Fintech	
Total Credits		9

Healthcare Management Interest Area

Code	Title	Credits
HLTH-ADM 471	Financial Management Issues of Health and Human Services Organizations	3
HLTH-ADM 477	Leadership and Management in Health Care Organizations	3
HLTH-ADM 481	Health Policy in the United States	3
Total Credits		9

Innovation and Design Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 327	Designing the Business Model	3
ENT 364	Entrepreneurial Management and Innovation	3
or ENT 461	Social Entrepreneurship	
Total Credits		9

Market Research and Analytics Interest Area

Code	Title	Credits
DSOM 487	Special Topics	3
or ACCTNG 487	Special Topics	
MKT 390	Customer Data Analytics	3
MKT 430	Personal Selling	3
Total Credits		9

Organizational Leadership Interest Area

Code	Title	Credits
MGT 337	Managing Human Capital	3
MGT 360	Groups and Teams	3
or ENT 326	Creativity, Innovation, and Problem Solving	
or DSOM 443	Project Management	
or MGT 372	Ethics and Leadership	
or MGT 374	Leading a Positive Workplace	
or MGT 410	Corporate Social Responsibility	
or MIS 415	Managing the Information Systems Resource	
MGT 370	International Management	3
or MGT 375	Global Mindset for Managers	
or MGT 470	International Study in Business	
Total Credits		9

Sales and Business Development Interest Area

Code	Title	Credits
MKT 335	Customer Insights	3
or MKT 390	Customer Data Analytics	
MKT 420	Sales Management	3
MKT 430	Personal Selling	3
Total Credits		9

Startup Interest Area

Code	Title	Credits
ENT 327	Designing the Business Model	3
ENT 329	Entrepreneurship Scholars	3
ENT 361	New Product Development	3
Total Credits		9

Technology, Innovation, and Management Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 341	Technology Entrepreneurship	3
ENT 361	New Product Development	3
Total Credits		9

Graduation Requirements

The BBA degree will be awarded on satisfaction of the following:

1. Completion of the degree requirements and a minimum of 120 credit hours.
2. Achievement of a 2.25 GPA; satisfactory academic standing is based on:
 - a. Cumulative GPA of 2.25 for all University of Missouri courses; and
 - b. GPA of 2.25 for all required junior-and senior-level in-major courses completed at UM schools.
3. Completion of 50% of junior/senior in-major courses at UMKC.
4. Completion of HEIghten, and other assessment exercises assigned by the Bloch faculty.
5. Completion of the Constitution requirement.
6. Filing of a required application for graduation at the beginning of the senior year.

Students are responsible for ensuring their course of study falls within program guidelines.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map**Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:**

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 110 ^{CC}		3 ENGLISH 225 ^{CC}	3
MATH 110 ^{CC}		3 COMM-ST 110 or 277 ^{CC}	3
GEFSE 101		3 GECRT-AH 101	3
GECRT-SS 101		3 GECRT-SC 101	3

MGT 100 (or other general elective) ^{CC}	3	MIS 202 ^{CC}	3
	15		15
Second Year			
Fall Semester	Credits	Spring Semester	Credits
ACCTNG 210 ^{CC}		3 ACCTNG 211 ^{CC}	3
ECON 201 or 202 ^{CC}		3 ECON 201 or 202 ^{CC}	3
GECDV 201		3 DSOM 211 ^{CC}	3
GECUE 201		3 MGT 301 or 301A	3
HISTORY 101, 102, or POL-SCI 210		3 MGT 256	3
	15		15
Third Year			
Fall Semester	Credits	Spring Semester	Credits
DSOM 311		3 FIN 325 ^{CC}	3
ENT 315 ^{CC}		3 MGT 370 or 470	3
MGT 332 ^{CC}		3 RL-EST 425 ^{CC}	3
MKT 324 ^{CC}		3 General Elective	3
RL-EST 321 ^{CC}		3 General Elective	3
	15		15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
MIS 402		3 DSOM 340	3
RL-EST 421		3 MGT 471	3
FIN 326, 340, or MKT 430		3 3XX/4XX Interst Area Elective	3
3XX/4XX Interst Area Elective		3 3XX/4XX Interst Area Elective	3
General Elective		3 General Elective	3
	15		15

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs.

Advising Contact Information

Bloch School of Management Student Services

115 Bloch Heritage Hall

816-235-2215

blochadvising@umkc.edu

<https://bloch.umkc.edu/students/advising/>

Bachelor of Business Administration: Supply Chain Management Emphasis

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- be able to conceptualize a multi-echelon supply chain to add value for upstream suppliers and downstream customers;
- be able to interpret contracts, solicitation and specification methods, and purchase-supply analysis for between and within supply chain linkages;
- be able to integrate quality management, process improvement methodologies, quantitative spend analysis and total cost of ownership metrics into supply chain decisions.

Admission Requirements

First-time college students are eligible to be admitted to the Bloch School if they meet regular UMKC entrance requirements. Those transferring from other institutions must have 2.5 cumulative and University of Missouri (UM) GPAs. Intra-university transfers can enter Bloch School programs with a 2.25 UM GPA. All students are required to maintain a 2.25 cumulative University of Missouri GPA while enrolled in this program.

Program Requirements

The Bloch School requires a minimum of 120 credit hours to earn the Bachelor of Business Administration (B.B.A.) degree. This total includes coursework in the following areas: General Education, Basic Skills, General Electives, Business Core, Emphasis Area, and Interest Area. All students pursuing the B.B.A. degree must select an emphasis area and a complementary interest area.

See the Bloch School Undergraduate Policies and Procedures section (link to <http://catalog.umkc.edu/colleges-schools/henry-w-bloch-management/undergraduate-programs/undergraduate-policies-procedures/>) for additional information.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	

Math Pathway (satisfied in major requirements below)	
Critical Thinking in Arts & Humanities (GECRT-AH)	3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)	3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)	3
Culture & Diversity Course (GECDV)	3
Civic & Urban Engagement Course (GECUE)	3
Total Credits	27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Basic Skills Coursework

Code	Title	Credits
ACCTNG 210	Introduction To Financial Accounting (Includes Lab)	3
ACCTNG 211	Introduction To Managerial Accounting	3
DSOM 211	Business Analytics I	3
or STAT 235	Elementary Statistics	
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
MATH 110	Precalculus Algebra (satisfies Math Pathway)	3
MGT 256	Legal and Regulatory Contexts of Organizations	3
MIS 202	Computer Applications In Management	3
Total Credits		24

Major Requirements

Prior to enrolling in any course, students must ensure they have completed the necessary prerequisites.

Code	Title	Credits
International Requirement		
Select one from: ^{1, 2}		3
MGT 370	International Management	

MGT 470	International Study in Business	
Other classes approved by Management Department		
Total Credits		3

- ¹ With approval from the Management Department, this can include international business-related course work transferred from other institutions, study abroad opportunities and emphasis-specific international classes.
- ² Students pursuing the Management emphasis or Organizational Leadership interest area may count the MGT 370 or MGT 470 course completed for the International requirement toward the emphasis area/interest area.

Code	Title	Credits
Core B.B.A. Curriculum		
DSOM 311	Business Analytics II	3
DSOM 340	Supply Chain and Operations Management	3
ENT 315	Entrepreneurial Mindset and Opportunity Recognition	3
FIN 325	Financial Management	3
MGT 301	Effective Business Communication	3
or MGT 301A	Effective Business Communication for Non-Native Speakers	
MGT 332	Principles of Organizational Behavior	3
MGT 471	Strategic Management	3
MIS 402	Information Management	3
MKT 324	Principles of Marketing	3
Supply Chain Management Emphasis Coursework		
DSOM 431	Quality Management and Process Improvement	3
DSOM 432	Spending Analytics, Contracts, and Risk Management	3
DSOM 442	Logistics, Transportation, Warehousing, and Distribution	3
DSOM 445	Strategic Sourcing and Supplier Relationship Management	3
Interest Area (see below)		9
Total Credits		48

General Electives

Code	Title	Credits
General Electives ¹		15

- ¹ A maximum of two hours of PE activity is accepted as elective credit. Applied or military science and vocational courses may not be taken for elective credit.

Minimum GPA: 2.25 (UM and in-major)

Total Credit Hours: 120

Interest Areas (choose one interest area below)

Analytics and Business Intelligence Interest Area

Code	Title	Credits
MGT 367	Human Resource Analytics	3
or DSOM 346	Service Industry Analytics	
MKT 390	Customer Data Analytics	3
or DSOM 443	Project Management	
DSOM 487	Special Topics	3
or ACCTNG 487	Special Topics	
Total Credits		9

Banking and Financial Services Interest Area

Code	Title	Credits
Select three courses from the following:		9
FIN 350	Introduction to Risk Management and Insurance	
FIN 369	Payment Systems	

FIN 428	Commercial Bank Management	
FIN 476	Introduction to Fintech	
Total Credits		9

Corporate Accounting Interest Area

Code	Title	Credits
ACCTNG 306	Introduction to the Accounting Profession and Procedures	3
ACCTNG 307	Cost Management	3
ACCTNG 412	Introduction to Income Taxation	3
or ACCTNG 470	Fraud Examination	
Total Credits		9

Corporate Finance and Investments Interest Area

Code	Title	Credits
FIN 350	Introduction to Risk Management and Insurance	3
or ACCTNG 307	Cost Management	
or ACCTNG 412	Introduction to Income Taxation	
FIN 419	Financial Statement Analysis	3
FIN 445	Advanced Investments	3
or FIN 476	Introduction to Fintech	
Total Credits		9

Financial Management Interest Area

Code	Title	Credits
FIN 326	Financial Management 2	3
FIN 340	Financial Markets and Institutions	3
FIN 345	Investments	3
or ACCTNG 307	Cost Management	
Total Credits		9

Healthcare Management Interest Area

Code	Title	Credits
HLTH-ADM 471	Financial Management Issues of Health and Human Services Organizations	3
HLTH-ADM 477	Leadership and Management in Health Care Organizations	3
HLTH-ADM 481	Health Policy in the United States	3
Total Credits		9

Innovation and Design Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 327	Designing the Business Model	3
ENT 364	Entrepreneurial Management and Innovation	3
or ENT 461	Social Entrepreneurship	
Total Credits		9

Market Research and Analytics Interest Area

Code	Title	Credits
DSOM 487	Special Topics	3
or ACCTNG 487	Special Topics	
MKT 390	Customer Data Analytics	3
MKT 430	Personal Selling	3
Total Credits		9

Organizational Leadership Interest Area

Code	Title	Credits
MGT 337	Managing Human Capital	3
MGT 360	Groups and Teams	3
or ENT 326	Creativity, Innovation, and Problem Solving	
or DSOM 443	Project Management	
or MGT 372	Ethics and Leadership	
or MGT 374	Leading a Positive Workplace	
or MGT 410	Corporate Social Responsibility	
or MIS 415	Managing the Information Systems Resource	
MGT 370	International Management	3
or MGT 375	Global Mindset for Managers	
or MGT 470	International Study in Business	
Total Credits		9

Real Estate Interest Area

Code	Title	Credits
RL-EST 321	Real Estate Principles	3
RL-EST 421	Real Estate Finance Fundamentals	3
RL-EST 425	Principles of Real Estate Property Management	3
Total Credits		9

Sales and Business Development Interest Area

Code	Title	Credits
MKT 335	Customer Insights	3
or MKT 390	Customer Data Analytics	
MKT 420	Sales Management	3
MKT 430	Personal Selling	3
Total Credits		9

Startup Interest Area

Code	Title	Credits
ENT 327	Designing the Business Model	3
ENT 329	Entrepreneurship Scholars	3
ENT 361	New Product Development	3
Total Credits		9

Technology, Innovation, and Management Interest Area

Code	Title	Credits
ENT 326	Creativity, Innovation, and Problem Solving	3
ENT 341	Technology Entrepreneurship	3
ENT 361	New Product Development	3
Total Credits		9

Graduation Requirements

The BBA degree will be awarded on satisfaction of the following:

1. Completion of the degree requirements and a minimum of 120 credit hours.
2. Achievement of a 2.25 GPA; satisfactory academic standing is based on:
 - a. Cumulative GPA of 2.25 for all University of Missouri courses; and
 - b. GPA of 2.25 for all required junior-and senior-level in-major courses completed at UM schools.
3. Completion of 50% of junior/senior in-major courses at UMKC.
4. Completion of HEIghten, and other assessment exercises assigned by the Bloch faculty.

5. Completion of the Constitution requirement.
6. Filing of a required application for graduation at the beginning of the senior year.

Students are responsible for ensuring their course of study falls within program guidelines.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

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UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
ENGLISH 110 ^{CC}		3 ENGLISH 225 ^{CC}	3
MATH 110 ^{CC}		3 COMM-ST 110 or 277 ^{CC}	3
GEFSE 101 ^{CC}		3 GECRT-AH 101	3
GECRT-SS 101		3 GECRT-SC 101	3
MGT 100 (or other general elective) ^{CC}		3 MIS 202 ^{CC}	3
		15	15

Second Year

Fall Semester	Credits	Spring Semester	Credits
ACCTNG 210 ^{CC}		3 ACCTNG 211 ^{CC}	3
ECON 201 or 202 ^{CC}		3 ECON 201 or 202 ^{CC}	3
GECUE 201		3 DSOM 211 ^{CC}	3
GECDV 201		3 MGT 256	3
HISTORY 101, 102, or POL-SCI 210		3 MGT 301 or 301A	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
DSOM 311		3 DSOM 432 ^{CC}	3

DSOM 340 ^{CC}	3	FIN 325 ^{CC}	3
MGT 332 ^{CC}	3	MGT 370 or 470	3
ENT 315 ^{CC}	3	3XX/4XX Interest Area Course	3
MKT 324 ^{CC}	3	General Elective	3
		15	15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
DSOM 445		3 MGT 471	3
DSOM 442		3 3XX/4XX Interest Area Course	3
DSOM 431		3 3XX/4XX Interest Area Course	3
MIS 402		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs.

Advising Contact Information

Bloch School of Management Student Services

115 Bloch Heritage Hall

816-235-2215

blochadvising@umkc.edu

<https://bloch.umkc.edu/students/advising/>

Bachelor of Science in Accounting

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- use professional judgment to determine, find, and analyze data to provide appropriate information for stakeholder decision making (Technical Accounting Knowledge).
- be able to analyze domestic and global business issues (General Business Knowledge).
- analyze innovation, new business development and high-growth-potential entities (Entrepreneurship & Innovation).
- be able to devise solutions for structured and unstructured business problems and issues (Critical Thinking Skills).
- be able to apply a professional code of conduct to resolve ethical issues in Accounting (Awareness of Ethics).
- be able to communicate professionally both orally and in writing (Communication Skills).
- be able to use technology in modern organizational operations (Technology Skills).

Admission Requirements

First-time college students are eligible to be admitted to the Bloch School if they meet regular UMKC entrance requirements. Those transferring from other institutions must have 2.5 cumulative and University of Missouri (UM) GPAs. Intra-university transfers can enter Bloch School programs with a 2.25 UM GPA. All students are required to maintain a 2.25 cumulative University of Missouri GPA while enrolled in this program.

Program Requirements

The Bloch School requires a minimum of 120 credit hours to earn the Bachelor of Science in Accounting degree. This total includes course work in the following areas: General Education, Electives, Basic Skills, Accounting and Business Requirements.

See the Bloch School Undergraduate Policies and Procedures section (link to <http://catalog.umkc.edu/colleges-schools/henry-w-bloch-management/undergraduate-programs/undergraduate-policies-procedures/>) for additional information.

Upon graduation from the B.S.A. program, a student will have the skill set and professional mindset needed to perform in entry-level financial accounting, taxation, cost management and auditing positions.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Basic Skills Coursework

Code	Title	Credits
ACCTNG 210	Introduction To Financial Accounting (Includes Lab)	3
ACCTNG 211	Introduction To Managerial Accounting	3
DSOM 211	Business Analytics I	3
or STAT 235	Elementary Statistics	
or STAT 115	Statistical Reasoning	
or MOTRMATH 110	MOTR Statistical Reasoning	
ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
MATH 110	Precalculus Algebra (or ALEKS score of 61 or higher; satisfies Math Pathway)	3
MGT 256	Legal and Regulatory Contexts of Organizations	3
Total Credits		21

Major Requirements

Code	Title	Credits
Accounting Core Requirements		
ACCTNG 306	Introduction to the Accounting Profession and Procedures	3
ACCTNG 307	Cost Management	3
ACCTNG 310	Intermediate Accounting	3
ACCTNG 318	Introduction to Data Analysis in Accounting	3
ACCTNG 350	Accounting Systems And Controls	3
ACCTNG 360	Accounting Research and Communications	3
ACCTNG 405	Auditing	3
ACCTNG 412	Introduction to Income Taxation	3
Business Core Requirements		
DSOM 340	Supply Chain and Operations Management	3
ENT 315	Entrepreneurial Mindset and Opportunity Recognition	3
FIN 325	Financial Management	3
MGT 332	Principles of Organizational Behavior	3

MKT 324	Principles of Marketing	3
MGT 471	Strategic Management	3
Accounting or Advanced Business Electives (choose from the following):		9
ACCTNG 418	Data Analytics for Accounting	
ACCTNG 420	Advanced Accounting	
ACCTNG 421	Governmental/Not-For-Profit Accounting	
ACCTNG 464	Principles of Internal Auditing	
ACCTNG 470	Fraud Examination	
ACCTNG 487	Special Topics	
ACCTNG 496	Internship: Accounting	
ACCTNG 497	Special Topics In Accounting	
DSOM 346	Service Industry Analytics	
DSOM 431	Quality Management and Process Improvement	
DSOM 432	Spending Analytics, Contracts, and Risk Management	
DSOM 442	Logistics, Transportation, Warehousing, and Distribution	
DSOM 443	Project Management	
DSOM 444	Digital Transformations and Supply Chain	
DSOM 445	Strategic Sourcing and Supplier Relationship Management	
DSOM 487	Special Topics	
DSOM 496	Internship: Decision Science and Operations Management	
DSOM 497	Special Topics: Decision Science and Operations Management	
ENT 326	Creativity, Innovation, and Problem Solving	
ENT 327	Designing the Business Model	
ENT 329	Entrepreneurship Scholars	
ENT 341	Technology Entrepreneurship	
ENT 361	New Product Development	
ENT 364	Entrepreneurial Management and Innovation	
ENT 412	Entrepreneurial Finance	
ENT 432	Entrepreneurial Marketing and Selling	
ENT 461	Social Entrepreneurship	
ENT 462	Entrepreneurial Experience	
ENT 487	Special Topics	
ENT 496	Internship: Entrepreneurship	
ENT 497	Special Topics: Entrepreneurship	
FIN 326	Financial Management 2	
FIN 340	Financial Markets and Institutions	
FIN 345	Investments	
FIN 350	Introduction to Risk Management and Insurance	
FIN 369	Payment Systems	
FIN 419	Financial Statement Analysis	
FIN 428	Commercial Bank Management	
FIN 435	Advanced Corporate Finance	
FIN 445	Advanced Investments	
FIN 476	Introduction to Fintech	
FIN 487	Special Topics	
FIN 496	Internship: Finance	
FIN 497	Special Topics: Finance	
HLTH-ADM 471	Financial Management Issues of Health and Human Services Organizations	
HLTH-ADM 473	Health and Social Equity	
HLTH-ADM 477	Leadership and Management in Health Care Organizations	
HLTH-ADM 480	The Economics of Health and Medicine	
HLTH-ADM 481	Health Policy in the United States	

MGT 301	Effective Business Communication
MGT 301A	Effective Business Communication for Non-Native Speakers
MGT 337	Managing Human Capital
MGT 355	Organizational Effectiveness and Leadership
MGT 360	Groups and Teams
MGT 365	Managing in a Virtual Environment
MGT 367	Human Resource Analytics
MGT 370	International Management
MGT 372	Ethics and Leadership
MGT 374	Leading a Positive Workplace
MGT 375	Global Mindset for Managers
MGT 410	Corporate Social Responsibility
MGT 470	International Study in Business
MGT 487	Special Topics
MGT 496	Internship: Management
MGT 497	Special Topics: Management
MIS 402	Information Management
MIS 415	Managing the Information Systems Resource
MIS 487	Special Topics
MIS 496	Internship: Management Information Systems
MIS 497	Special Topics: Management Information Systems
PUB-ADM 487	Special Topics
PUB-ADM 492	Creating and Measuring Social Impact
PUB-ADM 493	Nonprofit Fundraising and Development
PUB-ADM 494	Leading and Managing Nonprofit Organizations
PUB-ADM 495	Voluntarism, Philanthropy & The Non-Profit Sector In The U.S.
PUB-ADM 497	Special Topics In Public Administration
RL-EST 321	Real Estate Principles
RL-EST 421	Real Estate Finance Fundamentals
RL-EST 425	Principles of Real Estate Property Management
RL-EST 496	Internship: Real Estate
RL-EST 497	Special Topics: Real Estate

Total Credits 51

Note: Students should ensure that prerequisites are taken in the proper sequence.

International Requirement

Code	Title	Credits
Select one from: ¹		3
MGT 370	International Management	
MGT 470	International Study in Business	
Other classes approved by Management Department		
Total Credits		3

¹ With approval from the Management Department, this can include international business-related course work transferred from other institutions, study abroad opportunities and emphasis-specific international classes.

Code	Title	Credits
General Electives ¹		15

¹ A maximum of two hours of PE activity is accepted as elective credit. Applied or military science and vocational courses may not be taken for elective credit.

Minimum GPA: 2.25 (Major; Univ of MO)

Total Credit Hours: 120**Graduation Requirements**

The BS Accounting degree will be awarded on satisfaction of the following:

1. Completion of the degree requirements and a minimum of 120 credit hours.
2. Achievement of a 2.25 GPA; satisfactory academic standing is based on:
3. Cumulative GPA of 2.25 for all University of Missouri courses; and
4. GPA of 2.25 for all required junior-and senior-level in-major courses completed at UM schools.
5. Completion of 50% of junior/senior in-major courses at UMKC. Additionally, accounting students must complete at least 15 hours of upper-level accounting courses at UMKC.
6. Completion of HEIghten, and other assessment exercises assigned by the Bloch faculty.
7. Completion of the Constitution requirement.
8. Filing of a required application for graduation at the beginning of the senior year.

Students are responsible for ensuring their course of study falls within program guidelines.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
GEFSE 101		3 COMM-ST 110, 140, or 277	3
ENGLISH 110 ^{CC}		3 ENGLISH 225	3
MATH 110 ^{CC}		3 GECRT-SS 101	3
GECRT-SC 101		3 GECRT-AH 101	3

MGT 100 (or other general elective) ^{CC}	3	DSOM 211 ^{CC}	3
	15		15
Second Year			
Fall Semester	Credits	Spring Semester	Credits
ACCTNG 210 ^{CC}		3 ACCTNG 211 ^{CC}	3
ECON 201 or 202 ^{CC}		3 ACCTNG 306 ^{CC}	3
HISTORY 101, 102, or POL-SCI 210		3 ECON 201 or 202 ^{CC}	3
GECDV 201		3 MGT 256	3
General Elective		3 GECUE 201	3
	15		15
Third Year			
Fall Semester	Credits	Spring Semester	Credits
ACCTNG 310 ^{CC}		3 ACCTNG 350 ^{CC}	3
ACCTNG 307 ^{CC}		3 ACCTNG 360 ^{CC}	3
ENT 315		3 FIN 325 ^{CC}	3
MKT 324 ^{CC}		3 MGT 332	3
General Elective		3 MGT 370 or 470	3
	15		15
Fourth Year			
Fall Semester	Credits	Spring Semester	Credits
ACCTNG 318		3 ACCTNG 412	3
ACCTNG 405		3 DSOM 340	3
Accounting/Advanced Business Elective		3 MGT 471	3
Accounting/Advanced Business Elective		3 Accounting/Advanced Business Elective	3
General Elective		3 General Elective	3
	15		15

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs.

Advising Contact Information

Bloch School of Management Student Services

115 Bloch Heritage Hall

816-235-2215

blochadvising@umkc.edu

<https://bloch.umkc.edu/students/advising/>

Business Administration Minors

Business Administration Minor

Student Learning Outcomes

Students graduating from this program will:

- General Business Knowledge: Students will be able to analyze domestic and global business issues.
- Technology Skills: Students are able to use technology in modern organizational operations.

Students interested in business may complete a minor in either business administration or entrepreneurship. The minors are open to degree-seeking undergraduate students, with the exception of students pursuing a degree in programs that do not recognize minors. Additionally, students pursuing a degree in business or accounting are not eligible for the minor in Business Administration.

Students must achieve a minimum GPA of 2.25 in all Bloch School courses. Students are limited to 30 hours of coursework in the Bloch School.

Students interested in the Business Administration or Entrepreneurship minors should contact staff in the Bloch School Student Services Office, room 115, Bloch Heritage Hall.

Program Requirements

The minor consists of the following coursework and is subject to the student satisfying all applicable prerequisites. A minimum of 12 hours must be completed at UMKC.

Code	Title	Credits
Program Prerequisite (not included in 18 hours for minor)		
MATH 110	Precalculus Algebra (or MATH 120 or higher; or 61 ALEKS score or higher.)	3
Business Minor Foundational Courses		
ACCTNG 210	Introduction To Financial Accounting (Includes Lab)	3
MIS 202	Computer Applications In Management	3
BIT students may substitute COMP-SCI 101, COMP-SCI 371 or COMP-SCI 470 for MIS 202		
Required Courses		
MKT 324	Principles of Marketing	3
FIN 325	Financial Management	3
MGT 332	Principles of Organizational Behavior	3
Business Elective		
300/400-level Bloch course		3
Total Credits		18

Entrepreneurship Minor

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate technical competence in domestic and global business through the study of major disciplines within the fields of business.
- Define, analyze and devise solutions for structured and unstructured business problems and issues by using cohesive and logical reasoning patterns for evaluating information, materials and data.
- Conceptualize a complex issue into a coherent written statement and oral presentation.
- Exhibit competence in the uses of technology in modern organizational operations.
- Demonstrate the fundamentals of creating and managing innovation, new business development and high-growth potential entities.

Students interested in business may complete a minor in either business administration or entrepreneurship. The minors are open to degree-seeking undergraduate students, with the exception of students pursuing a degree in programs that do not recognize minors. Additionally, students pursuing a degree in business or accounting are not eligible for the minor in Business Administration.

Students must achieve a minimum GPA of 2.25 in all Bloch School courses. Transfer students with equivalent course credit will be required to take a more advanced course in that same area. Students are limited to 30 hours of coursework in the Bloch School. All coursework toward the minors must be completed at UMKC.

Students interested in the Business Administration or Entrepreneurship minors should contact staff in the Bloch School Student Services Office, room 115, Bloch Heritage Hall.

Program Requirements

The Entrepreneurship minor is designed to help students acquire and refine their entrepreneurial skills. The minor is intended both for Bloch School accounting students and for students outside of the Bloch School who would like to bring an entrepreneurial perspective to their major field of study. Bachelor of Business Administration students are not eligible because of the availability of an Entrepreneurship emphasis within their degree program.

Code	Title	Credits
Required Courses		
ENT 301	Entrepreneurship Toolkit	3
ENT 315	Entrepreneurial Mindset and Opportunity Recognition	3
ENT 327	Designing the Business Model	3
ENT 412	Entrepreneurial Finance	3
Entrepreneurship Electives		
Select two of the following:		6
ENT 332	Managing the New Venture: Experiential Learning	
ENT 341	Technology Entrepreneurship	
ENT 361	New Product Development	
ENT 364	Entrepreneurial Management and Innovation	
ENT 432	Entrepreneurial Marketing and Selling	
Total Credits		18

Undergraduate Policies and Procedures

Admission Requirements

Admission to undergraduate programs is available in the fall, spring and summer semesters. Students can elect to attend classes full-time or part-time and although the majority of courses are offered during the day, courses are also offered in the evening. First-time college students are eligible to be admitted to the Bloch School if they meet regular UMKC entrance requirements. Those transferring from other institutions must have 2.5 cumulative and University of Missouri (UM) GPAs. Intra-university transfers can enter Bloch School programs with a 2.25 UM GPA.

Retention Standards

Students in the bachelor of business administration (B.B.A.) or the bachelor of science in accounting (B.S.A.) programs are required to maintain a 2.25 cumulative University of Missouri GPA while enrolled in these programs. Students with GPAs that fall below the minimum 2.25 requirement are placed on probation and are allowed two successive semesters (including the summer semester, if enrolled) to restore their GPAs to the required 2.25. While on probation, undergraduates must achieve a 2.25 term GPA in order to enroll for the ensuing term. If a student's term GPA is below a 2.25 or, if after two successive semesters, the cumulative University of Missouri GPA is still below a 2.25, the student will be dismissed from the Bloch School. Good academic standing is achieved only if the GPAs are 2.25. A 2.25 average in all junior/senior in-major courses is required as well.

Graduation Requirements

The B.B.A. and B.S.A. degrees will be awarded on satisfaction of the following:

1. Completion of the degree requirements and a minimum of 120 credit hours.
2. Achievement of a 2.25 GPA; satisfactory academic standing is based on:
 - Cumulative GPA of 2.25 for all University of Missouri courses; and
 - GPA of 2.25 for all required junior- and senior-level, in-major courses completed at UM schools.
3. Completion of 50% of junior/senior in-major courses at UMKC. Accounting students must complete at least 15 hours of upper-level accounting courses at UMKC.
4. Completion of HElghten, and other assessment exercises as assigned by the Bloch faculty.
5. Completion of the Constitution Requirement (p. 487).
6. Filing of a required application for graduation at the beginning of the senior year.

Students are responsible for ensuring their course of study falls within program guidelines.

Academic Loads

See the General Undergraduate Academic Regulations and Information section of this catalog.

Concurrent Enrollment

Concurrent enrollment (simultaneous enrollment at UMKC and any other institution of higher education) is prohibited under University and Bloch School policy unless approved in advance of enrollment. Petitions are considered in limited situations including demonstrated scheduling conflicts, course cancellations, and in instances where needed courses are not offered. A separate petition is required. Submitting a petition does not guarantee approval. Concurrent enrollment in the final semester may result in a delay of graduation.

Credit by Exam

Students who have received credit by exam from a previous institution must submit official scores to the UMKC Records Office. These scores must be acceptable to the department at UMKC housing the subject area. Credit by exam is not permitted after admission into the junior/senior portion of Bloch School programs. Bloch School freshmen and sophomore students should talk with an academic advisor in the Student Services Office about credit by exam restrictions.

Credit/No Credit

All undergraduate courses in the Bloch School must be taken for a letter grade, except for internship courses (496) which are taken credit/no credit.

Course Repeat Policy

When undergraduate students repeat courses, they can request to have only the grade for the final attempt used in calculating their GPA. The course repeat policy will not automatically be applied to a student's GPA. After completing a repeated course, a student must submit a request for GPA adjustment form to his/her academic advisor. The full GPA adjustment policy is detailed in the Repeated Courses & GPA Adjustment Policy (p. 486) section of the catalog.

Exceptions

Exceptions to academic regulations must be approved by the Bloch School Student Services Office or the Associate Dean for Academic Affairs. To seek exceptions, students must file a formal written petition seeking an exception to academic policy with staff in the Bloch Student Services Office.

Independent Study

Students are limited to a total of six hours of Bloch School internship/independent study coursework, numbering 496 and 497 or MGT 490. Interested students should consult with an adviser in the Bloch School Student Services Office.

Latin Honors

Students must complete a minimum of 60 hours of coursework at UMKC to qualify for Latin Honors.

School of Medicine

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2411 Holmes Street
Tel: (816) 235-1808
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medicine@umkc.edu
<http://www.med.umkc.edu> (<http://www.med.umkc.edu/>)

Mailing Address:

University of Missouri-Kansas City
School of Medicine
2411 Holmes Street
Kansas City, MO 64108-2792

Dean:

Mary Anne Jackson, M.D.

Vice Deans:

Paul Cuddy, Pharm.D., M.B.A. (Vice Dean for Medical Education, Academic Affairs and Leadership Development)
Steven Waldman, M.D., J.D. (Strategic Initiatives and Stewardship)

Senior Associate Dean:

Dev Maulik, M.D., Ph.D., FACOG, FRCOG (Women's Health)

Associate Deans:

Donald Barnett, M.D. (Kansas City Veterans Affairs Medical Center)
Denise Bratcher, D.O. (Children's Mercy Hospital Programs)
Timothy Dellenbaugh, M.D. (Center for Behavioral Medicine)
Diana Dark, M.D. (Saint Luke's Hospital Programs)
Stefanie Ellison, M.D. (Learning Initiatives)
John Foxworth, Pharm.D. (Academic Enrichment)
Sara Gardner, M.D. (Graduate Medical Education)
David John, M.D. (Alumni Relations)
Paula Nichols, Ph.D. (Research Administration)
Nurry Pirani, M.D. (Council on Curriculum)
Olevia Pitts, M.D. (Research Medical Center)
Brenda Rogers, M.D. (Student Affairs)
Tyler Smith, M.D. (Office of Diversity & Inclusion)
Mark T. Steele, M.D. (Truman Medical Center)
Christine Sullivan, M.D. (Professional Development)
Gary Sutkin, M.D. (Women's Health)
Michael Wacker, Ph.D. (Academic Affairs)
Steven Waldman, M.D. (International Programs)

Assistant Deans:

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Julie Banderas, Pharm.D., FCCP, BCPS (Graduate Studies & Allied Health)
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Lawrence Dall, M.D. (Medical Student Research)
Bridgett Jones, M.D. (Academic Dean of Student Affairs)
Darla McCarthy, Ph.D. (Curriculum)
Robert Riss, M.D. (Career Advising)
Jennifer Quaintance, Ph.D. (Assessment and Quality Improvement)

Council Chairs:

Adam Algren, M.D. (Council on Selection)
James Wooten, Pharm.D. (Faculty Council)
Julie Banderas, Pharm.D. (Graduate Studies)
Stacey Algren, M.D. (Council on Evaluation)
Emily Haury, M.D. (Council of Docents)
Nurry Pirani, M.D. (Council on Curriculum)
Fariha Shafi, M.D. (Diversity Council)

Academic Chairs:

Adam Algren, M.D. Interim (Emergency Medicine)
Michael Artman, M.D. (Pediatrics)
Julie Banderas, Pharm.D., (Graduate Health Professions in Medicine)
Akin Cil, M.D. Interim (Orthopaedic Surgery)
Charles Donohoe, M.D. (Neurology)
Brett Ferguson, D.D.S. (Oral and Maxillofacial Surgery)
Stephen Jarvis, M.D. Interim (Psychiatry)
Kamani Lankachandra, M.D. (Pathology)
Dev Maulik, M.D. (Obstetrics and Gynecology)
Paula Monaghan-Nichols, Ph.D. (Biomedical Sciences)
Jill Moormeier, M.D. (Internal Medicine)
Mark Nichols, Ph.D. (Biomedical and Health Informatics)
Michael O'Dell, M.D. (Community and Family Medicine)
Nelson Sabates, M.D. (Ophthalmology)
Johan Suyderhoud, M.D. (Anesthesiology)
Glenn Talboy, M.D. (Surgery)
Steve Waldman, M.D., J.D. (Medical Humanities and Bioethics)

Brandt C. Wible, M.D. Interim (Radiology)

About the School of Medicine

The University of Missouri opened a medical school in Kansas City in 1971 to meet the health care needs of Missouri and the nation. Using an alternative approach to medical education from that of the traditional four-year school, the UMKC School of Medicine accepts students directly out of high school for the combined baccalaureate/ Doctor of Medicine program (<http://med.umkc.edu/bamd/>), which allows students to graduate in six years with their medical degree.

The School's innovative curriculum provides students with early and continuous patient-care experience and fully integrates liberal arts/humanities, basic sciences and clinical medicine. The learning environment de-emphasizes competition and encourages learning through close faculty-student interaction and student partnerships.

Students begin learning about medicine and interacting with patients from the first day of class. They also learn the skills and attitudes that foster compassion, honesty and integrity. Hands-on learning and clinical experience are integrated throughout all the years of the program. The UMKC School of Medicine also offers the M.D. Program (<http://med.umkc.edu/md/>) to students who have obtained, or will soon earn, a baccalaureate degree. These students may complete their medical degree in four years following their undergraduate programs.

The School of Medicine partners with six of the leading hospitals in Kansas City to provide students and residents outstanding medical education as they rotate through the various clinical departments. These hospitals include Truman Medical Centers, Children's Mercy Kansas City, Saint Luke's Hospital, Center for Behavioral Medicine, the Kansas City VA Medical Center and Research Medical Center. The School does not operate its own hospital, however many of the doctors who practice at these hospitals also hold faculty positions with the School.

Our offerings are growing. The UMKC School of Medicine offers four master's programs: the Master of Science in Anesthesia (<http://med.umkc.edu/msa/>), Master of Medical Science Physician Assistant (<http://med.umkc.edu/pa/>), Master of Health Professions Education (<http://med.umkc.edu/mhpe/>) and the Master of Science in Bioinformatics (<http://med.umkc.edu/msb/>); two Graduate Certificates: Health Professions Education (<http://med.umkc.edu/gchpe/>) and Clinical Research (<http://med.umkc.edu/gc-clinical-research/>). The School of Medicine participates in the Interdisciplinary Ph.D. program (<http://med.umkc.edu/iphd/>) with a primary and co-discipline plan of study in biomedical and health Informatics.

All medical schools are reviewed and accredited by the Liaison Committee on Medical Education, a national body representing the Association of American Medical Colleges and the American Medical Association. This committee has endorsed the academic philosophy and plan, and the School is fully accredited.

For additional information, please click here to visit the School of Medicine website (<http://med.umkc.edu/>).

Mission, Vision & Goals

UMKC School of Medicine Strategic Plan

Mission

The mission of the University of Missouri-Kansas City School of Medicine is to improve the health and well-being of individuals and populations through innovative educational programs in medicine and biomedical science, cutting-edge biomedical research, and leadership in academic medicine. The School strives to implement this mission with the highest professional and ethical standards, in a culture of diversity and inclusiveness, and in an environment that enables each individual to develop to his or her full potential.

Vision

UMKC School of Medicine aims to be the anchoring institution for a leading academic health center.

Introduction and Background

The UMKC School of Medicine opened in 1971 as the result of over a decade of community efforts to establish a medical school in Kansas City, Missouri. Both the history and the current mission and operations of the UMKC School of Medicine are deeply rooted in the community at the local, state, national and international levels. As part of a growing academic health sciences campus in the urban core of Kansas City, Missouri, the School advances the health of the community through education of physicians and other health care professionals, through research and application of new knowledge to health conditions that affect our community, through direct service in the community, and through economic development. In the nearly four decades that the School has been in existence, all of the four mission areas—education, research, service, and economic development—have grown and matured along with the Hospital Hill campus where the School is located. The University of Missouri-Kansas City is a public, urban-serving, research and doctoral university; both it and the School of Medicine are poised to make an even greater contribution to **"Advancing the Health of Our Community"** in the decades to come.

School of Medicine Education Programs: The UMKC School of Medicine was founded on an innovative medical education system based on: early and continuous clinical experiences, humanities woven throughout the curriculum, small group learning communities centered around a physician "docent," continuous assessment of student progress, and an emphasis on application of the basic sciences in clinical medicine. The combined degree program allows the school to accept the majority of its students directly out of high school and to develop the skills, knowledge, and attitudes of these students longitudinally over six years with a goal of instilling the highest standards of medical professionalism, clinical competency, humanism, and altruism during a highly formative period of their lives. The community-based setting has freed the school of fiscal and administrative concerns

over the management of hospitals and practice plans. Time has proven the value of the innovative concepts and format of the original design of the medical school outlined in the original Academic Plan¹. The history and the first thirty-five years of education outcomes were recently published².

In addition to the baccalaureate/MD program, the School also admits three other categories of students seeking the MD degree: students who already have a baccalaureate degree and complete the last four years of the program as “MD-only” students; students who have a DDS degree and complete a combined MD/Oral Surgery residency program; and a limited number of transfer students who have completed their first two years of medical school at an accredited program. Over the past decade, all programs leading to the MD degree combined have resulted in approximately 90 graduates per year. Residency choices of students span the specialties and subspecialties, with approximately 40% initially entering the primary care fields of internal medicine, family medicine, pediatrics and medicine/pediatrics. In addition, 45% of graduates remain in the state of Missouri and the counties surrounding the two largest metropolitan areas of Kansas City and St. Louis. The school will continue its strong commitment to increasing the number of graduates of the medical school who serve the healthcare needs of Missouri.

Beginning in 2008, the school accepted its first students into graduate degree programs. The Masters of Science in Anesthesia leading to a career as anesthesiologist assistants opened in 2008, and the Masters of Science in Bioinformatics opened in Fall 2009. Since then the school has added the Master of Medical Science Physician Assistant, Master in Health Professions Education, Graduate Certificate in Health Professions Education and Graduate Certificate in Clinical Research. Most recently, the School of Medicine established a doctoral discipline in Biomedical and Health Informatics as part of the UMKC Interdisciplinary PhD program. These graduate programs are, another means to meet pressing local and regional healthcare needs.

The School of Medicine is the institutional sponsor for over 40 residency and fellowship programs accredited by the Accrediting Council for Graduate Medical Education (ACGME) conducted at affiliated hospitals. Today, there are nearly 500 residents and fellows in these programs at six affiliated hospitals. Graduates from these programs are a major source of physicians in Kansas City and the surrounding regions.

In 2008, the School of Medicine became accredited by the Accrediting Council for Continuing Medical Education (ACCME) for the first time to offer continuing medical education (CME) programs. Previously, the School relied on affiliated hospital CME departments to provide educational credits for continuing education activities held for faculty and by faculty. In looking at the future directions of required competencies and life-long learning needed for patient care and maintenance of licensure and certifications, it was decided that the School should develop these programs as part of its longitudinal medical education activities. Additionally, these programs provide infrastructure for faculty development programs in scholarship in clinical practice, education and research.

School of Medicine Research Programs: The early efforts of the school were directed toward growth and building of medical education programs on the base of strong clinical affiliations. Over the past decade, scholarly research has become a major goal in order to discover and apply new knowledge to improve human health, to develop and maintain a community of scholars in support of a robust learning environment, and to provide economic development in the region. Concurrently, there has been increasing emphasis on research within the university as a whole and the region. The School of Medicine now has 22 endowed chairs and professorships, more than any other academic division in the University of Missouri System, and the research funding has increased exponentially. The current total extramural funding in grants and contracts in the School has increased four-fold over the past decade and is now \$23 million annually. Total federal funding represents approximately half of the total. Research efforts are focused toward impact on community health conditions, especially in areas that link to areas of clinical strength. These efforts are designed to build and utilize large databases that go beyond “translational” research in general, and to have impact on the health of our community in particular. Health impact may be either at the individual level—i.e. “personalized medicine”—or at the population level. Additionally, it may be directed at either prevention or diagnosis and treatment of disease.

School of Medicine Community Engagement: The UMKC School of Medicine is an essential community partner in advancing health through education and training of physicians and other healthcare providers, through research and application of new knowledge to address health issues, through direct provision of care (including volunteer work and service learning), and through economic development and stability in the urban core. Much has changed in the nearly 40 years since the School’s founding, but the values that relate to a commitment to serve the community have not.

The community has called for an overall strategic plan from UMKC3, including in the life and health sciences. The School of Medicine is ready to deepen this partnership with the community to advance the health of our community. The following strategic plan outlines the specific goals and objectives of the School for 2010-2015. These goals and objectives are designed to align with the overall strategic plans of the University of Missouri System and the University of Missouri-Kansas City

References

1. Dimond EG. The Academic Plan for the School of Medicine, University of Missouri-Kansas City. Last updated in 2009.
2. Drees B, Arnold L, Jonas H. The University of Missouri-Kansas City School of Medicine: Thirty-five years of experience with a non-traditional approach to medical education. *Academic Medicine*, 2007. 82:361-369
3. Time to Get It Right: A strategy for higher education in Kansas City. Greater Kansas City Community Foundation, 2005.

Summary of Goals and Strategic Objectives

Educate outstanding physicians, scientists, and healthcare providers for Missouri and the United States.

Goals:

- Advance our standing as a premier accelerated, dual-degree medical education program in the United States.
- Expand our program in Graduate Health Professions in Medicine by developing new degree and/or certificate programs to meet future healthcare and health sciences needs.
- Ensure that our learners have opportunities to engage in high-quality Research.
- Provide and enhance an outstanding clinical and educational experience in a positive learning environment for residents and fellows in their chosen field of medicine.
- Provide and enhance an outstanding clinical and educational experience, opportunities for lifelong learning, career advising, and a positive learning environment for students.

Increase cutting-edge biomedical research.

Goals:

- Develop a strategic research fund to catalyze translational and health outcomes research.
- Advance existing programmatic excellence in health outcomes, informatics, patient safety, and community health.
- Join forces with our academic, clinical, and community partners to develop a UMKC Health Sciences research agenda.
- Engage with industry partners to pursue innovative entrepreneurial opportunities.

Enhance the ability of our clinical partners to deliver state-of-the-art patient care.

Goals:

- Develop a framework to establish UMKC Health Sciences Center.
- Increase the scope and mission of education and research in simulation.
- Join forces with our clinical and academic partners to develop shared simulation strategies and goals.

Improve the health of our community.

Goals:

- Recruit and retain faculty members who engage in funded, community-based research.
- Establish community-wide collaboratives to leverage resources for the advancement of community health.

Faculty

Graduate Health Professions in Medicine

Julie Banderas; Assistant Dean, Chair, professor Department of Graduate Health Professions in Medicine; Pharm.D., (University of Nebraska)

Lance Carter; Assistant Program Director; Assistant Teaching Professor; M.S.A., AA-C (Case Western Reserve)

Sara Cox; Assistant Teaching Professor; B.S. (Wichita State University) MPAS (University of Nebraska Medical Center)

Katherine Ervie; Program Director; Assistant Teaching Professor; B.A. (Butler University), MPAS (University of Nebraska Medical Center)

Melanie Guthrie; Program Director; Associate Teaching Professor; M.S.A. (Case Western University)

Dan T. Hladky; Assistant Teaching Professor; B.S. (Case Western Reserve University)

Angellar Manguvo; Associate Teaching Professor

Stephanie Painter; Assistant Teaching Professor

Janell Ridenour; Assistant Teaching Professor; B.S. (University of Dallas M.M.S (Yale Medical School)

Biomedical Sciences

Limin Mao; Research Professor; M.D. (Tongji Medical University)

Darla McCarthy; Associate Teaching Professor; Ph.D. (University of Colorado – Boulder)

Paula Monaghan-Nichols; Department Chair, Associate Dean for Research, Professor; Ph.D. (Medical Research Council, Edinburgh, Scotland)

Bart Patenaude; Associate Teaching Professor; Ph.D. (University of Louisville)

Nilofer Qureshi; Professor; Ph.D. (University of Wisconsin)

Neerupma Silswal; Associate Research Professor; Ph.D.

Chad Touchberry; Assistant Teaching Professor; Ph.D. (University of Kansas)

Michael Wacker; Assistant Dean, Vice-Chair of Biomedical Sciences, Medical Student Research and Associate Teaching Professor; Ph.D. (University of Kansas)

Kristin A. Wright; Assistant Teaching Professor; Ph.D.

Lei Zhang; Associate Research Professor; M.D. (Hebei Medical University), Ph.D. (Peking Union Medical College)

Biomedical/Health Informatics

Jenifer Allsworth; Associate Professor; Ph.D. (Brown University)

Jannette Berkley Patton; Professor; Ph.D. (University of Kansas)

An-Lin Cheng; Professor; Ph.D. (University of Georgia)

Stacy Farr; Associate Research Professor; Ph.D. (The Johns Hopkins Bloomberg School of Public Health)

Monica Gaddis; Associate Teaching Professor; Ph.D. (Indiana University)

Timothy Hickman; Associate Teaching Professor; B.A./M.D. (University of Missouri – Kansas City)

Mark Nichols; Associate Research Professor; Ph.D. (Yale University)

Stephen Siimon; Teaching Professor; Ph.D. (University of Iowa)

Kim Smolderen; Associate Professor; Ph.D. (Tilburg University, Tilburg Netherlands)

Community and Family Medicine

Michael O'Dell; Chair, Department of Community and Family Medicine and Professor; M.D., M.S.H.A. (University of Kansas, School of Medicine)

Human Therapeutics

Nicholas Norgard; Associate Teaching Professor; Ph.D.

Humanities

Steve Waldman; Associate Dean of International Studies; Chair, Medical Humanities and Bioethics; M.D. (University of Missouri – Kansas City School of Medicine)

Internal Medicine

John Spertus; Professor; Daniel Lauer, M.D. Endowed Chair in Metabolism and Vascular Disease Research; M.D. (University of California)

OB/Gyn

Dev Maulik; Senior Associate Dean For Women's Health; Chair, Department of Obstetrics and Gynecology and Professor; M.D. (University of Calcutta); Ph.D. (University of London)

Gary Sutkin; Associate Dean For Women's Health; Program Director, Department of Obstetrics and Gynecology; Professor; M.D. (Northwestern University); M.B.A. (J.L. Kellogg Graduate School of Management)

Ophthalmology

Karl E. Kador; Assistant Professor; Ph.D. (University of Nebraska - Lincoln)

Peter Koulen; Professor; Felix and Carmen Sabates Endowed Chair in Vision Research; Ph.D. (Johannes Gutenberg University)

Orthopaedics

Akin Cil; Interim Chair, Department of Orthopaedic Surgery and Professor; M.D. (Hacettepe University Faculty of Medicine); Franklin D. Dickson/ Missouri Endowed Chair in Orthopaedic Surgery

Pediatrics

Mary Anne Jackson; Dean, Professor; M.D. (University of Missouri – Kansas City School of Medicine)

Graduate

Graduate Degree Programs:

Masters of Science Degrees:

Master of Science in Anesthesia
 Master of Science in Bioinformatics (p. 1830)
 Master of Medical Science Physician Assistant (p. 1827)
 Master of Health Professions Education (p. 1826)

Graduate Certificate Degrees:

Graduate Certificate in Clinical Research
 Graduate Certificate in Health Professions Education (p. 1826)

Doctor of Philosophy:

Interdisciplinary Ph.D. primary and co-discipline: Biomedical and Health Informatics (p. 1825)

Medical

Medical Degree Programs:

Baccalaureate/M.D. Program (p. 1833)

M.D. Program (p. 1836)

For additional information about the above Medical Degree programs, please visit the website (<http://www.med.umkc.edu/prospective/>) or contact:

UMKC School of Medicine
 Council on Selection
 2411 Holmes Street
 Kansas City, MO 64108
 (816) 235-1870
medicine@umkc.edu

Anesthesia Courses

ANESTH 5505 Anatomy for Anesthesiologist Assistants I Credit: 1

This course is designed to meet the needs of students seeking a Master of Science in Anesthesia degree at UMKC. A thorough understanding of anatomy provides a basic foundation for future coursework and for the profession of Anesthesiologist Assistant. This course covers gross anatomy from a regional (or systemic in some cases) perspective bringing together all body systems present in each defined area of study.

Prerequisites: Acceptance to the MSA program.

ANESTH 5506 Anatomy for Anesthesiologist Assistants II Credit: 1

In this course, students will learn anatomy that directly impacts clinical situations. Diagnostic skills will be enhanced through an understanding of radiologic tests, identification of common chest X-rays, and a basic understanding of transesophageal echocardiography. Students will learn to recognize the basic 4 chamber TEE views and diagnose the most common lesions and abnormalities in patients undergoing cardiac surgery. An ultrasound machine will be used to identify anatomy for a variety of clinical procedures, including intravenous line placement, central line placement, arterial line placement, and peripheral nerve block placement. Students will learn the principles of how to operate and manipulate the ultrasound monitor, and will learn the relevant anatomy and anesthetic implications and management for the most common peripheral nerve blocks used today. In addition, clinically significant anatomy case studies in anesthesia will be presented and discussed.

Prerequisites: Acceptance to the MSA program.

ANESTH 5518 Professionalism for the Anesthesiologist Asst I Credits: 0.5

Introduction to legal and ethical areas of Anesthesiologist Assistant practice; professional behavior, legal obligations of anesthetists and patient, and social and community contexts of health care.

Prerequisites: Acceptance to the MSA program.

ANESTH 5528 Professionalism for the Anesthesiologist Asst II Credits: 0.5

Special topics in Anesthesiologist Assistant practice; impact of substance abuse, cognitive deficiency and mental illness in creating an impaired provider.

Prerequisites: Acceptance to the MSA program.

ANESTH 5538 Professionalism for the Anesthesiologist Asst III Credits: 0.5

Special topics in Anesthesiologist Assistant practice; principles of evidence based medicine and approaches to mastering life long learning and maintaining professional competencies.

Prerequisites: Acceptance to the MSA program.

ANESTH 5540 Patient Monitoring and Instrumentation Credits: 3

This is a three credit hour course which integrates concepts of circuits and engineering with the clinical application of anesthesia instrumentation. To the extent possible, the material covered will be directly linked to clinical scenarios. In order for the monitors to be fully understood from a clinical management perspective, relevant physiology related to the monitors and to the field of anesthesia will be taught and practiced. In addition to the monitors, students will gain an in depth understanding of all parts of the anesthesia machine, anesthesia circuits, central line and arterial line equipment, and the properties of common intravenous and inhalational anesthetics.

ANESTH 5541 Methods of Anesthesia I Credits: 2

In this course, students will be prepared to give safe anesthesia in all types of cardiac surgery, learn how to interpret arterial blood gases, and obtain an in depth understanding of ACLS principles so that they will be prepared for any resuscitation scenario in the OR. A cardiac drug card will be administered. Videos and PPTs will be administered to help students understand the concepts of ACLS, acid base management, cardiac bypass, cardiac surgery monitoring, techniques, and anesthetic management.

Prerequisites: ANESTH 5540.

ANESTH 5548 Anesthesiologist Assistant Senior Seminar Credits: 0.5

This is 0.5 credit hour course taken in the final semester of the Master of Science in Anesthesia Program and is designed to prepare the student for their future roles. This course will prepare the student for the job market and placement and enforce the life-long learning needed within medical professions. The course will contain information on student loan payback, financial literacy after graduation, and leadership opportunities for the graduate. The course will also clinically update the students in basic life saving for the healthcare provider (BLS), advanced cardiac life saving (ACLS) and Pediatric advance life saving (PALS).

ANESTH 5556 Physiology for Anesthesiologist Assistants I Credits: 3

This course is the first of two parts of a human physiology series. The course is designed to provide an understanding of basic neurophysiology, autonomic nervous system, blood, respiratory and cardiovascular physiology. Topics of special interest to anesthesiologist assistants will be highlighted.

ANESTH 5557 Physiology for Anesthesiologist Assistants II Credits: 2

This course is the 2nd of two parts of a human physiology series. The course is designed to provide an understanding of endocrine, reproductive, neonatal, gastrointestinal, and neurophysiology. Topics of special interest to anesthesiologist assistants will be highlighted as it relates to the physiology.

Prerequisites: ANESTH 5556.

ANESTH 5558 Anesthesia & Co-existing Disease I Credits: 2

This course provides an essential anesthesia link to the basic anatomy and physiology classes in the Masters of Science in Anesthesia program. The content outline intentionally corresponds with and builds upon that of the Physiology for Anesthesiologist Assistants coursework. This course focuses on primary cardiac, respiratory and endocrine coexisting diseases that affect anesthetic care. It provides for the student a strategic plan in the management of patients with these disease processes.

Prerequisites: ANESTH 5556.

ANESTH 5559 Anesthesia & Co-existing Disease II Credits: 2

This is the second course that establishes an essential anesthesia link to the basic anatomy and physiology classes in the Masters of Science in Anesthesia program. The content outline intentionally corresponds with and builds upon that of the Physiology for Anesthesiologist Assistants coursework. This course focuses on a variety of coexisting diseases states but all focuses on pediatric and obstetric co-existing disease and how they affect anesthesia management.

Prerequisites: ANESTH 5558.

ANESTH 5560 Introduction to Anesthesia Credits: 2

Introduction to basic concepts dealing with clinical anesthesia. Medical terminology, human anatomy, medical chart interpretation and drug dosage calculations.

ANESTH 5561 Orientation to Simulation and Clinical Application Credits: 5

This skills based course is an introduction to the student's clinical experience in the operating room. The goal is to rapidly engage students in anesthesia patient care. Fundamental procedures and techniques used in administering anesthesia will be emphasized. Simulated clinical models are used to allow students to first practice anesthesia care in a safe, controlled, low pressure environment. Students are prepared for quality immersion into patient care. Operating room set up and etiquette, pre-operative assessment, IV placement techniques, airway management, intraoperative care, and postoperative management are emphasized. Course includes hands on introduction to the operating room and anesthetic management and students obtain 80-100 hours of clinical contact time.

ANESTH 5563 Anesthesia Clinical Experience I Credits: 4

During this course students gain clinical and professional experience in the operating room. In this course students are expected to perform program competencies with the level of assistance developed in the programs goals for skills development. Students will be one on one with a Certified Anesthesiologist Assistant or Anesthesiologist clinical supervisor while obtaining these goals. Students will complete a specific IV, pre-surgical testing and post anesthesia care unit rotation during their clinical experience courses.

Prerequisites: ANESTH 5561.

ANESTH 5564 Anesthesia Clinical Correlation II Credit: 1

This one credit course is designed to help students understand how to effectively research and apply current anesthesia journal articles, and to prepare for the NCCAA certification examination. The students will spend the entire semester studying 6 (Principles of anesthesia/ Instrumentation and monitoring, anesthesia delivery systems, physics / renal, genital urologic / respiratory system / clinical subspecialties) of the 16 topics that are included on the NCCAA certification examination. Homework will include submission of test questions based on their presentations and the 6 assigned NCCAA testing topics. The students will also receive an assignment to find and summarize a journal article from one of the 6 assigned topics. The students will cap off the semester with a clinical final examination, which includes submitted questions from assigned topics.

Prerequisites: ANESTH 5562.

ANESTH 5565 Anesthesia Clinical Experience II Credits: 8

During this course students gain clinical and professional experience in the operating room. In this course students are expected to perform program competencies with the level of assistance developed in the programs goals for skills development. Students will be one on one with a Certified Anesthesiologist Assistant or Anesthesiologist clinical supervisor while obtaining these goals. Students will complete a specific IV, pre-surgical testing and post anesthesia care unit rotation during their clinical experience courses.

ANESTH 5567 Anesthesia Clinical Experience III Credits: 16

Clinical clerkship component of program clinical phase. Students are in the operating room (OR) five days per week and through the combined clinical experience clerkships will receive extended exposure to all clinical subspecialties. Students complete 4 week or 8 week rotations at several hospitals to gain experience with general surgery, obstetrics, pediatrics, trauma surgery, neurosurgery, cardiovascular surgery, orthopedic surgery, intensive care unit and others. Students are expected to perform program competencies with the level of assistance developed in the programs goals for skills development. Students will be one on one with a Certified Anesthesiologist Assistant or Anesthesiologist clinical supervisor while obtaining these goals.

Prerequisites: ANESTH 5565, ACLS and PALS certification.

ANESTH 5568 Anesthesia Clinical Correlation III Credit: 1

This one credit course is designed to help students understand how to effectively research, apply, and prepare for the NCCAA certification examination. The students will spend the entire semester studying 4 (cardiovascular/ Hematology coagulation / Metabolism endocrine / Neurosciences neuromuscular) of the 16 topics that are included on the NCCAA certification examination. Homework will include submission of test questions based on the 4 assigned NCCAA testing topics. The students will cap off the semester with a clinical final examination, which includes submitted questions from the assigned topics. This course also includes a one week in person session where will identify risk management issues for anesthesia providers, learn key strategies when applying for a job and demonstrate key points of patient assessment in the ICU. Recertification for Basic Life Support (BLS) occurs during this course.

Prerequisites: ANESTH 5564.

ANESTH 5569 Anesthesia Clinical Experience IV Credits: 12

Clinical clerkship component of program clinical phase. Students are in the operating room (OR) five days per week and through the combined clinical experience clerkships will receive extended exposure to all clinical subspecialties. Students complete 4 week or 8 week rotations at several hospitals to gain experience with general surgery, obstetrics, pediatrics, trauma surgery, neurosurgery, cardiovascular surgery, orthopedic surgery, intensive care unit and others. Students are expected to perform program competencies with the level of assistance developed in the programs goals for skills development. Students will be one on one with a Certified Anesthesiologist Assistant or Anesthesiologist clinical supervisor while obtaining these goals.

Prerequisites: ANESTH 5567.

ANESTH 5570 Anesthesia Clinical Correlation IV Credit: 1

This one credit course is designed to help students understand how to effectively research and apply current anesthesia journal articles, and to prepare for the NCCAA certification examination. The students will spend the entire semester studying 6 (Peds the Neonatal Period / Pharmacology / Regional Anesthesia Pain Management/ GI Hepatic/ OB Perinatal Management) of the 16 topics that are included on the NCCAA certification examination. Homework will include submission of test questions based on their presentations and the 6 assigned NCCAA testing topics. The students will also receive an assignment to find and summarize a journal article from one of the 6 assigned topics. The students will cap off the semester with a clinical final examination, which includes submitted questions from assigned topics.

Prerequisites: ANESTH 5568.

ANESTH 5571 Anesthesia Clinical Experience V Credits: 16

Clinical clerkship component of program clinical phase. Students are in the operating room (OR) five days per week and through the combined clinical experience clerkships will receive extended exposure to all clinical subspecialties. Students complete 4 week or 8 week rotations at several hospitals to gain experience with general surgery, obstetrics, pediatrics, trauma surgery, neurosurgery, cardiovascular surgery, orthopedic surgery, intensive care unit and others. Students are expected to perform program competencies with the level of assistance developed in the programs goals for skills development. Students will be one on one with a Certified Anesthesiologist Assistant or Anesthesiologist clinical supervisor while obtaining these goals.

Prerequisites: ANESTH 5569.

ANESTH 5573 Anesthesia Clinical Experience VI Credits: 16

Clinical clerkship component of program clinical phase. Students are in the operating room (OR) five days per week and through the combined clinical experience clerkships will receive extended exposure to all clinical subspecialties. Students complete 4 week or 8 week rotations at several hospitals to gain experience with general surgery, obstetrics, pediatrics, trauma surgery, neurosurgery, cardiovascular surgery, orthopedic surgery, intensive care unit and others. Students are expected to perform program competencies with the level of assistance developed in the programs goals for skills development. Students will be one on one with a Certified Anesthesiologist Assistant or Anesthesiologist clinical supervisor while obtaining these goals.

Prerequisites: ANESTH 5571.

ANESTH 5575 Pharmacology for Anesthesiologist Assistants I Credits: 2

Basic concepts in pharmacology: principles of drug action, receptor theory, pharmacokinetics, pharmacodynamics and drug dose calculations. The course will emphasize the primary medications used to provide anesthesia and to support patients during the perioperative period.

ANESTH 5576 Pharmacology for Anesthesiologist Assistants II Credit: 1

This is a one credit hour course designed for the M.S. in Anesthesia Program. The course prepares students to apply knowledge of pharmacotherapy to anesthesia care by taking into account type of surgery and patient coexisting diseases.

ANESTH 5577 Methods of Anesthesia II Credits: 3

In this course, students will be prepared to manage anesthetics for more complex situations. Anesthetic management for certain patient conditions will include permanent implantable pacemakers, fluid electrolyte abnormalities, and congenital heart disease. Clinical management for individual patient populations will include obstetrics and pediatric advanced life support (PALS). In addition, clinically relevant information regarding advanced equipment and techniques will include 12 lead ECG interpretation, ultrasound guided peripheral nerve blocks, neuraxial anesthesia, and physics for anesthesiologist assistants.

ANESTH 5578 Pharmacology for Anesthesiologist Assistants III Credits: 2

This is a two credit hour course designed for the M.S. in Anesthesia Program. The course prepares students to apply knowledge of pharmacotherapy to anesthesia care by taking into account type of surgery and patient coexisting diseases.

Prerequisites: ANESTH 5575, ANESTH 5576.

ANESTH 5585 Physiological Model-based Simulation I Credits: 2

This is a two credit hour course, which utilizes physiological model-based simulation and procedure simulation to integrate anesthesia-associated basic science knowledge into a laboratory setting. The focus for this semester is designed to help student become proficient in central lines, pulmonary artery monitoring, epidural and spinal placement, and managing more complex anesthetic cases involving trouble shooting and crisis management via simulation. Advanced Cardiac Life Saving is obtained during this course.

ANESTH 5586 Physiological Model-based Simulation II Credits: 2

This is a two credit hour course, which builds upon the technical skills learned in ANES 5585. Students will be asked to manage complex anesthetic cases involving multiple co- existing diseases and methods of anesthesia. Pediatric Advanced Lifesaving Saving (PALS) is a certification required to be obtained during this course.

Prerequisites: ANESTH 5585.

ANESTH 5590 Special Topic Credits: 0.5-3

An opportunity to explore new topics or existing topics in greater detail and are not included in the usual course offerings.

Basic Medical Science Courses

BMS 5590 Special Topics Credits: 1-3

An opportunity to explore new topics or existing topics in modified or greater detail; topics which are not included in the usual course offerings.

BMS 9265 Human Biochemistry 1 - Medical Credits: 5

Presents basic principles of human biochemistry. Addresses structure, function, biosynthesis, degradation and utilization of the major constituents of living systems. Employs an integrative approach to the basic science and clinical medicine aspects of normal and defective metabolism.

BMS 9296 Human Structure Function I Credits: 6

Part 1 of a 4 part series (January-February). Integrated course in anatomy, histology, embryology, physiology and biochemistry. This unit covers introductory principles and the musculoskeletal system.

BMS 9297 Human Structure Function II Credits: 5

Part 2 of a 4 part series (February-April). Integrated course in anatomy, histology, embryology, physiology and biochemistry. This unit covers cardiopulmonary and gastrointestinal systems.

BMS 9298 Human Structure Function III Credits: 5

Part 3 of a 4 part series (April-May). Integrated course in anatomy, histology, embryology, physiology and biochemistry. This unit covers urinary and reproductive systems.

BMS 9300 Human Gross Anatomy I Credits: 5

Regional study of the anatomy of the chest, abdomen and pelvis. A systematic and regional study of the anatomy of the maxillofacial and anterior neck structures with emphasis on the biomedical applications of the anatomy studies.

BMS 9301 Human Gross Anatomy II Credits: 5

A continuation of BMS 9300.

BMS 93065 Anatomy of the Head & Neck Credits: 2

A regional approach to the study of the head and neck. Content will include a brief discussion of human anatomy and didactic information on the structures of the head and neck as they relate to the practice of dental hygiene.

BMS 9308 Histology Credits: 2.5

A motivative microanatomic study of the normal morphology of cells, tissues, organs and organ systems to stimulate the learning of terminology and basic cellular structure of the human body.

BMS 9310 Medical Neurosciences Credits: 9

Lecture-based course covering major neurological disorders and disease states. Specific neurologic diseases will be correlated to the didactic sessions by clinicians. Laboratory component is oriented around brain dissection sessions. Laboratory experience will demonstrate gross lesions and integrate the lesions with the clinical symptoms. A variety of supplemental audiovisual material also supports the class.

Prerequisites: BMS 9298.

Co-requisites: BMS 9399.

BMS 9311 Medical Microbiology Credits: 5

Covers basic scientific principles of virology, bacterial physiology and genetics. Presents information relevant to the pathogenesis of human infections caused by viruses, bacteria, fungi, protozoa and helminthes. Provides a concise presentation of basic immunological principles and their clinical relevance. Provides a concise review of antimicrobial therapeutic regimens including mechanism of action and clinical settings in which specific agents might be used. Utilizes case presentations to illustrate the manner in which reasonable differential diagnoses are developed and a rational approach toward empiric antimicrobial usage.

BMS 9399 Human Structure Function IV Credits: 6

Part 4 of a 4 part series (June-July). Integrated course in anatomy, histology, embryology, physiology and biochemistry. This unit covers the head and neck system. Includes a comprehensive examination for the Human Structure Function Series I-IV.

BMS 9701 Clinical Anatomy of Head and Neck Credits: 2-4

A detailed dissection of the maxillofacial and anterior neck regions, with the emphasis being placed on the clinical application of the surgical procedures used in these areas. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline-specific requirements for the Interdisciplinary Ph.D. program.

Medical Bioinformatics Courses

MEDB 5501 Applied Biostatistics I Credits: 3

Introduction to statistical concepts and analytic methods as applied to health science. Course includes lectures and hands on computer laboratory.

Prerequisites: graduate or professional students and an advanced math course (i.e. Calculus, statistics).

MEDB 5502 Applied Biostatistics II Credits: 3

The second in the Applied Biostatistics sequence and is intended for graduate, doctoral, and professional students in the biological, clinical and medical fields, and medical education. Statistical concepts, analysis methods, and research designs commonly used in these fields are included: diagnostic testing, hypothesis testing, power analysis, analysis of variance, analysis of covariance, multivariate analysis of variance, propensity scoring, simple and multiple regression, logistic regression, and survival analysis. Familiarity with basic statistics and the statistical techniques presented in Applied Biostatistics I is required. Statistical analyses involved in this course will be performed primarily using the SPSS statistical analysis package. The course will also cover the interpretation, presentation and the write up of analytical results and graphs.

Prerequisites: MEDB 5501.

MEDB 5503 Mixed-Effects Models Credits: 3

This course will cover the computational basis of mixed-effects models and how to apply these models to analyze data. Students will learn how to graph, investigate, and model data that are not independent and identically distributed, and how to evaluate model fit.

Prerequisites: MEDB 5507, MEDB 5501, MEDB 5502.

MEDB 5505 Introduction to R Credit: 1

Provides a working familiarity with R. No advanced programming or statistical analytic skills, other than the ability to create and modify text files are needed. Basic methods for data import, data management, simple graphics, and basic statistical analysis are introduced. Provides student with a firm foundation to address these areas in advanced statistics classes or in the student's research efforts, including thesis/dissertation research. A basic understanding of statistical terminology and a working familiarity with computer-based data files (e.g., Excel) is necessary. A basic understanding of the concepts of computer coding is recommended.

MEDB 5506 Introduction to SPSS Credit: 1

Session provides a working familiarity with SPSS. Students are not expected to have advanced programming or statistical analysis skills, other than the ability to create and modify text files. Basic methods for data import, data management, simple graphics, and basic statistical analysis are introduced. This class will not cover advanced statistical methods, but will provide the student with a firm foundation to address these areas in advanced statistics classes or in the student's research efforts, including thesis/dissertation research. A basic understanding of statistical terminology and a working familiarity with computer-based data files (e.g., Excel) is necessary.

MEDB 5507 Introduction to SAS Credit: 1

Course provides a working familiarity with SAS. Students are not expected to have advanced programming or statistical analysis skills, other than the ability to create and modify text files. Basic methods for data import, data management, simple graphics, and basic statistical analysis are introduced. This class will not cover advanced statistical methods, but will provide the student with a firm foundation to address these areas in advanced statistics classes or in the student's research efforts, including thesis/dissertation research. A basic understanding of statistical terminology and a working familiarity with computer-based data files (e.g., Excel) is necessary.

MEDB 5508 Introduction to SQL Credits: 2

This course is an introduction to SQL programming. The course is designed to teach students basic skills that will prepare them to use SQL for data analysis.

MEDB 5510 Clinical Research Methodology Credits: 3

This course trains the student to contribute to research design, planning, and implementation, and to manage and interpret health-related data. This course will provide a broad overview of clinical research in terms of definition, methodology, conduct and applications. The course will explore basic elements of clinical research including the hierarchy of clinical research design and the conduct of clinical research. Application of clinical research knowledge to specific health-related issues will also be explored. Course topics include: conceiving the research question; study designs; questionnaire construction; research methodology; research ethics; human subjects requirements; the role of statistical analysis in clinical research; research proposal preparation; and research based on analysis of secondary data. Both classroom and online asynchronous sections offered.

MEDB 5511 Principles and Applications of Epidemiology Credits: 3

This course will provide an introductory overview of the principles of epidemiology and illustrate applications in specialized topic areas. Course lectures will introduce measures of effect used to study disease in human populations, epidemiological study designs, concepts of causal inference, and threats to study validity. Specialized lectures will demonstrate the application of these concepts in select health and disease conditions.

MEDB 5512 Clinical Trials Credits: 3

Clinical Trials explores the knowledge and skills required to conduct clinical trials, and implications of clinical trials on practice in medicine and allied health.

MEDB 5513 Overview of Health Services Research Credits: 3

Provides an overview of the U.S. health care and public health systems including issues about cost, access, and quality of health care. This course focuses on the role of research and information in the process of redesigning of health care delivery in the U.S. for the purpose of improving the value of health services.

Prerequisites: MEDB 5501, MEDB 5510 or MEDB 5511.

MEDB 5514 Human Genome Epidemiology Credits: 3

Designed for biological researchers and clinicians interested in studying common human diseases using state of the art genomics/genetics epidemiological approaches. Comprehensive introduction to concepts and methodologies of quantitative/statistical genetics, emerging technologies and analytical methods for genomic science, basic study design, utilization of software packages for analyses of genomic data, successful examples of using human genome epidemiology information to improve health, and ethical, legal and social issues in the design and conduct human genome epidemiology research.

MEDB 5520 Introduction to Medical Informatics Credits: 3

This course provides an overview of Biomedical and Health Informatics. It describes the use of data, information and knowledge in improving healthcare and biomedical research. This includes the use of technology and computers to store, retrieve, and process data. Topics include clinical decision making, standards and clinical terminology, natural language processing, imaging, electronic health records, patient monitoring, consumer health informatics, public health informatics, clinical decision support, bioinformatics, translational bioinformatics and clinical research informatics.

MEDB 5521 Clinical Bioinformatics Credits: 3

Clinical bioinformatics will provide the foundation required for effective communication between computational, biological and clinical experts. This class uses a series of exercises to enable participants to independently perform gene and protein-based bioinformatics queries and analyses. Throughout the course, core biological principles are explained, as are the foundational technology and computational topics. Students will become proficient with public bioinformatics resources. This course will prepare students to apply the techniques to their research or participation in interdisciplinary clinical terms.

MEDB 5525 Social Determinants of Health Credits: 3

This course will describe how social, economic and political factors affect health. It will examine strategies to address social determinants of health to reduce health inequities. Students will explore how specific social determinants like socioeconomic status, race ethnicity, and lifestyle influence health, use a "life course" approach to look at different stages of life and the effect of social determinants on specific populations.

MEDB 5530 Independent Study I Credits: 1-3

Focused readings and/or special research project in an area selected by the graduate student in consultation with the advisor.

MEDB 5531 Independent Study II Credits: 1-3

Focused readings and/or special research projects in an area selected by the graduate student in consultation with the advisor.

MEDB 5535 Quantitative Aspects of Epidemiologic Research Credits: 3

This course offers students advanced training in the analysis of epidemiological data. Topics include application of common measures of frequency and association, confounding, effect modification, bias, misclassification, and sensitivity analysis in epidemiologic and clinical data sources.

Prerequisites: MEDB 5501, MEDB 5502 and one of the following: MEDB 5510 or MEDB 5511

MEDB 5540 Multidisciplinary Graduate Seminar Credit: 1

This course will be a combination of discussion, presentations, and didactic presentations that will allow students and faculty to exchange information and explore current research across the disciplines that make up the bioinformatics degree program. The course is designed to help student develop critical skills for evaluating published research, designing research projects, and communicating research findings.

MEDB 5550 Health Outcomes Seminar Credit: 1

The course content is guided by a series of seminars presented by research researchers who are actively engaged in health outcomes studies. It explores multiple topics that are unique relevant to clinical investigators. Faculty and peer discussion forums highlight key concepts and applications.

MEDB 5560 Medical Decision Making Credits: 3

This course will introduce the concept of medical decision making under uncertainty through an examination of disease probabilities and how they are altered by the characteristics of the diagnostic test being studies or used clinically. Decision trees will be introduced as a mechanism for communicating complex medical decisions and introductory level decision analysis will be presented. The measurement of patient values for alternative outcomes will be introduced as they pertain to direct payoff values as well as modifiers to cost payoffs.

MEDB 5561 Responsible Conduct of Research Credits: 3

An interdisciplinary course which covers principles and day-to-day practicalities of research ethics, information about regulatory requirements for conducting research including safety issues and the use of humans, animals and radioactive biohazardous materials; discuss current issues in the ethical aspects of research, such as scientists' obligations with respect to public policy and advocacy.

MEDB 5573 Biostatistical Consulting Practicum Credits: 2-4

This course is designed to provide students with an opportunity for statistical consulting training. Students will work on real consulting projects that were received through the Research and Statistical Consult Service. Projects may involve sample size calculation, study design, data analysis, generating statistical reports and manuscripts. Student will be able to apply their statistical knowledge and communication skills while learning how to work with other researchers.

Prerequisites: MEDB 5501, MEDB 5502, MEDB 5507 and MEDB 5503.

MEDB 5589 Special Topics Credits: 1-3

An opportunity to explore in depth topics not included in usual course offerings. One or more topics will be announced in advance of registration.

MEDB 5591 Internship I Credits: 1-3

Opportunity to apply knowledge and skills in clinical, computational, or genomics research and gain insight into potential career options. Students develop appreciation for teamwork and commitment in professional environments.

Prerequisites: MEDB 5501, MEDB 5502, MEDB 5510, MEDB 5513.

MEDB 5592 Internship II Credits: 1-3

Opportunity to apply knowledge and skills in clinical, computational, or genomics research and gain insight into potential career options. Students develop appreciation for teamwork and commitment in professional environments. Internship II is applicable to students who have previously completed 3 hours of internship.

Prerequisites: MEDB 5501, MEDB 5502, MEDB 5510, MEDB 5513, MEDB 5591.

MEDB 5595 Capstone Experience Credits: 3

This course is designed for the non-thesis student to demonstrate that they have mastered key learning objectives expected of the graduating master's student in the Clinical Research emphasis area. After completion of the core courses in the Masters of Bioinformatics curriculum, students will apply their learning to developing, implementing and presenting results from a project that demonstrates integration of the knowledge, abilities and values emphasized in the degree program.

MEDB 5599 Research and Thesis Credits: 1-6

Research for thesis.

MEDB 5696 Pre-Dissertation Research Credits: 1-6

This course is individually directed research leading to the preparation of a doctoral dissertation.

Prerequisites: Permission of the instructor.

Co-requisites: Completion of comprehensive exam.

MEDB 5699 Research and Dissertation Credits: 1-12

Research and dissertation preparation for IPhD degree students participating in Biomedical and Health Informatics primary and co-discipline.

Prerequisites: instructor approval

MEDB 5899 Required Graduate Enrollment Credit: 1

Medicine Courses

MEDICINE 9110 Fundamentals of Medical Practice I Credits: 5

Introduces students to professional values, attitudes and skills required to practice medicine competently. Develops student competence in basic communication, relationship-building and patient centered interviewing skills. Provides self-awareness and personal growth strategies that facilitate the acquisition of professional behavior affecting honesty and integrity, compassion and altruism, as well as the management of stress. Explores non-biological factors influencing health and the appreciation of different value systems and life styles. Promotes ethical considerations relating to professional behavior and student conduct as a forerunner to professional behavior. Emphasizes the team approach in solving medical problems through direct small group activities as part of weekly onsite docent experiences. Integrates patient interviews and examinations with sciences fundamental to clinical medicine.

MEDICINE 9115 Medical Terminology Credit: 1

1 credit hour/twice weekly each semester. Methodical introduction to the language of medicine and its usage in modern clinical documentation.

Introduces word elements in a logical, graduated sequence correlated with laboratory practice. Encourages skills in etymological analysis based on the word elements presented to facilitate interpretation of composite medical terms.

MEDICINE 9119 Learning Basic Medical Sciences Credit: 1

1 credit hour/1 hour per week. Provides students with an understanding of their own learning processes and those study strategies that promote maximum learning efficiency. Active participation in course increases achievement in both science and non-science courses, smoothes transition to college-level work, and further develops reasoning and thinking skills that apply to medical school

MEDICINE 9120 Fundamentals of Medical Practice II Credits: 5

Introduces students to professional values, attitudes and skills required to practice medicine competently. Develops student competence in basic communication, relationship-building and patient centered interviewing skills. Provides self-awareness and personal growth strategies that facilitate the acquisition of professional behavior affecting honesty and integrity, compassion and altruism, as well as the management of stress. Explores non-biological factors influencing health and the appreciation of different value systems and life styles. Promotes ethical considerations relating to professional behavior and student conduct as a forerunner to professional behavior. Emphasizes the team approach in solving medical problems through direct small group activities as part of weekly onsite docent experiences. Integrates patient interviews and examinations with sciences fundamental to clinical medicine.

MEDICINE 9210 Fundamentals Of Medical Practice III Credits: 5

5 credit hours, 3 hours per week onsite, 2 hours lecture. Reinforces important concepts in diversity and professionalism. Continues the team approach in solving medical problems through direct small group activities as part of weekly onsite docent experience.

MEDICINE 9220 Fundamentals Of Medical Practice IV Credits: 5

5 credit hours, 3 hours per week onsite, 2 hours lecture. Reinforces important concepts in diversity and professionalism. Continues the team approach in solving medical problems through direct small group activities as part of weekly onsite docent experiences. Integrates patient interviews and examinations with sciences fundamental to clinical medicine, including biochemistry, anatomy, physiology, biochemistry and social sciences. Exposes students to a series of interviews with seasoned professionals who address issues of professionalism and career development.

MEDICINE 9221 Hospital Team Experience Credit: 1

1 credit hour/2-week assignment in hospital. Teaches students to make good observations, interact appropriately with patients, family, and hospital staff, assist with non-physician duties, and perform technical skills appropriate to assigned departments. Facilitates understanding of allied health care personnel roles in patient care, communication among health care professionals and its influence on the delivery of health care and patient outcomes, and the hospital process and structure of authority within the hospital.

MEDICINE 9308 Clinical Practice of Medicine I Credits: 3

Basic communication/clinical examination skills will be taught in the classroom with skills workshops. Students will learn to enhance their communication skills with patients and their families aligned with a systems-based approach to the physical examination. Students will also begin to practice complaint-based histories and a review of systems to prepare them for their Year 3 Continuing Care Clinic Clerkship and clinical decision-making. Students will practice communication and interpersonal skills in small groups and also have the opportunity to practice examination skills in workshops, with standardized patients, and linked to their experiences in the Continuing Care Clinic clerkship.

Prerequisites: Successful completion of HSF III, and enrollment in HSF IV.

MEDICINE 9309 Clinical Practice of Medicine II Credits: 5

Advanced communication/physical examination skills will be taught in the classroom with communication skills workshops. Students will learn/practice skills to communicate/examine patients aligned with a systems-based pathophysiology approach. Students will learn/practice a complaint-based HP exam by system aligned to their objectives in the Pathology II: Pathophysiology course. Students will learn/develop skills in clinical diagnosis and decision-making by system that includes instruction/practice on more advanced physical examination skills. Students will practice communication and interpersonal skills in small groups and also have the opportunity to practice examination skills in workshops, with standardized patients, and linked to their experiences in the Continuing Care Clinic.

Prerequisites: BMS 9298.

Co-requisites: BMS 9399.

MEDICINE 9310 History of Medicine Credit: 1

In this course students will learn the ways disease has altered history and that conceptions of disease undergo constant change. Topics covered include diseases and their relationships to other medical sciences, as well as the historical and scientific developments which led to our present understanding of diseases and medicine.

MEDICINE 9312 Pathology I: General Pathology, Genetics, and Immunology Credits: 10

Students will learn and be able to apply basic science education in the clinical practice of medicine. This application includes the areas of gross and microscopic anatomy, biochemistry, genetics, pathophysiology, and immunology. Students will develop a basic understanding of laboratory tests. They will develop competency in clinical diagnosis based on pathologic findings related to anatomic pathology, laboratory medicine and pathophysiology. Course materials will also cover prevention of disease and disability, global health issues, forensic medicine and pathology, age and gender-related issues in pathology and medicine, and appropriate utilization of Pathology and Laboratory Medicine Services.

MEDICINE 9313 Pathology II: Systems-Based Pathology and Pathophysiology Credits: 11

Students will learn and apply basic science education in the clinical practice of medicine through systems-based teaching about disease. This application includes the areas of biochemistry, genetics, pathophysiology, and medical microbiology. Students will expand their understanding of basic laboratory tests with a focus on interpretation and gain familiarity with more complex or specialized laboratory tests, enhancing their abilities in test selection and interpretation. They will also begin to approach a multi-system health problem in terms of its pathogenesis, the mechanisms of systemic interactions, and consequent/subsequent potential complications. Content areas emphasized include cardiovascular, lymphatic, hematologic, gastrointestinal, renal, hepatic, and genitourinary systems.

MEDICINE 9383 Continuing Care Clinic Credits: 5

Provides ambulatory and continuous care experience in general medicine clinics. The docent teams are assigned to a clinic in which students see and follow a panel of patients on a continuous basis for up to four years, where necessary, under the supervision of docents. Provides continuity of care from inpatient hospitalization to outpatient care, allowing longitudinal experience for the student and personalized care for the patients. Allows students to observe the natural progression of disease and experience the rewards and challenges of an ongoing doctor-patient relationship.

MEDICINE 9385 Introduction to Pharmacology Credits: 2

Consists of self-paced, independent learning, computer-based instruction. Introductory principles of pharmacology are covered that provide students with basic knowledge and skills necessary for upcoming didactic and clinical curriculum. Students become familiar with drug information resources, pharmaceutical calculations, and prescription writing skills, and learn basic mechanisms of drug action, preventive therapeutics and pharmacokinetic principles.

MEDICINE 9387 Extended Clinic I Credits: 5**MEDICINE 9390 Clinical Correlations Credits: 5**

5 credit hours. Case-based discussions provided by clinicians that serve to reinforce basic science concepts provided during BMS 9296, BMS 9297, and BMS 9298.

MEDICINE 9401 Internal Medicine/Docent Instruction Yr 4 Credits: 10

Students spend this eight-week rotation on the medical wards at Truman Medical Center, each working as a integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, and Year 4 and 6 students are paired together in a junior-senior partnership. Rounds, conference and consultations.

MEDICINE 9401BR Internal Medicine/Docent Instruction Yr 4 Credits: 5

Students spend this eight-week rotation on the medical wards at Truman Medical Center, each working as a integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, and Year 4 and 6 students are paired together in a junior-senior partnership. Rounds, conference and consultations. This section is a single four-week block of the rotation.

MEDICINE 9408 Pharmacology Credits: 10

Introduces the study of the interaction of drugs with biological systems. Provides the medical student with relevant basic pharmacology of the model drugs under clinical investigation and in use today. Includes extensive small group activities.

MEDICINE 9471 Family Medicine Credits: 5

Exposes students to the unique specialty that focuses on the family. Students experience the act of medicine as well as science, working with patients in the context of their family and community. Includes care of the child, the adolescent, pregnant women, young and middle aged adults, and the elderly. Addresses ambulatory medicine, prevention and health maintenance.

MEDICINE 9472 Behavioral Science in Medicine Credits: 5

Teaches the basic taxonomy, assessment methods and treatment interventions of chemical dependence and major psychiatric disorders. Serves as preparation for the psychiatry rotation. Examines relevant ethical issues commonly faced in current medical practice. Utilizes case studies and a problem-centered approach in addition to clinical experience including home health care visits, supervised interviewing, and time on an inpatient chemical dependency unit. Challenges the student to achieve an integrated theoretical understanding of various approaches in behavioral sciences as a background for meeting patients needs. Teaches communication skills including education of older patients.

MEDICINE 9482 Patient, Physician, Society I Credits: 2

Introduces students to a 7-week unit emphasizing medical decision making. Introduces students to a 6-week unit which focuses on public health. Activities include lecture, problem sets, small group projects.

MEDICINE 9483 Continuing Care Clinic Credits: 5

Provides ambulatory and continuous care experience in general medicine clinics. The docent teams are assigned to a clinic in which students see and follow a panel of patients on a continuous basis for up to four years, where necessary, under the supervision of docents. Provides continuity of care from inpatient hospitalization to outpatient care, allowing longitudinal experience for the student and personalized care for the patients. Allows students to observe the natural progression of disease and experience the rewards and challenges of an ongoing doctor-patient relationship.

MEDICINE 9483RC Year Four Repeat Clinic Credits: 5

Prerequisites: MEDICINE 9383.

MEDICINE 9484 Patient, Physician, Society II Credits: 2

Introduces students to a unit emphasizing medical ethics and palliative care. Activities include lecture, small group sessions, and assigned readings.

MEDICINE 9485 Ambulatory Care Pharmacology Credits: 2

Consists of a self-paced, independent learning, computer-based instruction. Focuses on integration of patient-related data with basic science data. Students obtain skills in assessing patient risk or disease staging and selecting appropriate pharmacotherapy based on such information. The selected topics focus on outpatient pharmacotherapy of common disease states for which there are established treatment guidelines, such as hypertension, heart failure, diabetes mellitus, asthma, pain, and hyperlipidemia.

MEDICINE 9487 Extended Clinic II Credits: 5**MEDICINE 9501 Internal Medicine/Docent Instruction Yr 5 Credits: 10**

Students spend this eight-week rotation on the medical wards at Truman Medical Center, each working as an integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, Year 4 and 6 students are paired together in the junior-senior partnership. Rounds, conference and consultations.

MEDICINE 9501BR Internal Medicine/Docent Instruction Yr 5 Credits: 5

Students spend this eight-week rotation on the medical wards at Truman Medical Center, each working as a integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, and Year 4 and 6 students are paired together in a junior-senior partnership. Rounds, conference and consultations. This section is a single four-week block of the rotation.

MEDICINE 9503 Pediatrics Rotation Credits: 10

This eight-week rotation is designed to help students master t skills necessary in assessing normal and abnormal development and behavioral variation in the newborn, infant and child in the outpatient clinical setting. History-taking and physical examination of infants, children and adolescents are emphasized.

MEDICINE 9503BR Peds Rotation Credits: 5**MEDICINE 9505 General Surgery Rotation Credits: 10**

Introduces students to the field of general surgery. Emphasizes the indications, contraindications, types of operative management, and the mortality and morbidity of various operations. Involves the student in several different kinds of learning experiences, such as preoperative and postoperative care, work in the operating room, outpatient clinic visits, night call, student conferences and resident conferences. Covers skills in surgical scrub, putting on gown and gloves, knot tying, vena puncture, proctoscopy, and suturing of the skin. Students assist in performing skills such as insertion of CVP catheters, insertion of a chest tube, thoracentesis, paracentesis and Swan-Ganz catheters.

MEDICINE 9506 Obstetrics-Gynecology Rotation Credits: 10

Provides the student with an opportunity to gain basic competence in obstetrics and gynecology, including proficiency in the history and physical examination related to the obstetric and gynecologic patient. Emphasizes outpatient gynecology, family planning and techniques for early detection of gynecologic cancer. Provides basic information in reproductive physiology and endocrinology, infertility, gynecologic oncology, and the psychologic aspect of diseases of women. Covers concepts of prenatal care and fundamentals of normal labor and delivery, and pregnancy complications.

MEDICINE 9506BR Obset-Gynecol Rotation Credits: 5**MEDICINE 9514 Medicine, War & Bioethics Credits: 5**

This course considers the continually evolving relationship between medicine, war, and the arts, from the slaughter of the American Civil War (1861-65) to today's conflicts in Iraq. Our focus is on the extraordinary difficult medical and ethical decisions faced by physicians in times of war, and the ways in which those experiences are reflected in the arts. Topics include the effects of disease on armies, biological warfare, the development of ambulance and hospital services in the Civil War, battlefield medicine, the diagnosis and treatment of shellshock victims in WWI, chemical warfare, the pioneering of plastic surgery, triage techniques in WWII, nuclear warfare, and the personal experiences of physicians in the Vietnam and Iraq wars.

MEDICINE 9515 Medicine and Music Credits: 5

This course will explore ways in which music and medicine interact, including the following topics: therapeutic applications of music (music therapy), current research on how the brain processes music, the treatment of medical themes (including illness and disease, patients, physicians, and human experimentation) in musical works, and how certain composers' medical conditions affected their creative output.

MEDICINE 9515A1 Independent Readings Month Credits: 5

Independent Readings Month

MEDICINE 9516 Medicine and Film Credits: 5

Movies are narratives that record, instruct, motivate, entertain and transform. This course investigates the ways in which physicians, patients, and medical students have been portrayed in Hollywood films over the course of the twentieth and the early twenty-first centuries. Compassion, idealism, and heroism were common traits in early doctor movies but there was also a recurrent theme of the greedy callous doctor who valued research over patient welfare, and profits over ethics. We discuss how films reflected, changed, and molded perceptions of physicians and patients in the past, and examine what contemporary portrayals of the medical profession can tell us about the expectations and fears of patients today.

MEDICINE 9517 Medicine and Literature Credits: 5

The aim of this course is to engage students in the process of self-reflection about their roles as health care professionals through the lens of literature. Reading about the ways in which people interact with professionals, patients, and disease can enrich our understanding of cultural, economic, and social issues. Medical literature is a diverse field and it increases our awareness of the different reactions to medicine and illness. This course is intended to improve our empathy for patients and peers.

MEDICINE 9518 Medicine, Law and Bioethics Credits: 5

This course provides the basic doctrines and principles of the law that form the foundation for legally and ethically sound medical practice. It includes the comprehensive coverage of the history of legal medicine in the United States and the dynamics of law applied to the practice of medicine. Current developments in the U.S. health care delivery and in the field of bioethics are identified along with the impact on practice of medicine. Lecture, discussion, and writing about legal and ethical issues related to the practice of medicine prepares students in Year 5 and Year 6 to assume the legal and ethical responsibilities of the M.D. degree. This course fulfills the requirement for a Medical Humanities course in year 5 or year 6.

MEDICINE 9519 Medicine and Philosophy Credits: 5

The class is constructed on three premises. First, everyone is a philosopher. Second, philosophy is not passive, it is an activity. In class, we will do philosophy. Students will be given some basic philosophic tools and they will then be asked to critically examine, refine and sharpen their thinking. Third, the practice of medicine requires critical and creative thinking. Students must acquire voluminous knowledge and information. Philosophy addresses wisdom, how to apply the knowledge and information wisely.

Prerequisites: Must be a professional student in the UMKC School of Medicine.

MEDICINE 9570 Family Medicine Preceptorship Credits: 5

Provides work experience with a rural Missouri physician. Helps students understand the responsibilities and importance of family physicians in the provision of health care. Provides continuing emphasis on the need for and importance of family practice.

MEDICINE 9571 Psychiatry Rotation Credits: 5

Gives each medical student a clinical assignment that involves responsibility for patient care under supervision on the adult inpatient service and experience in the clinic. Includes seminars in psychopathology, psychiatric syndromes, mechanisms of defense, psychopharmacology, drug and alcohol abuse and specific psychosocial assessment.

MEDICINE 9578 Medicine and Art Credits: 5

Lecture, discussion.

MEDICINE 9583 Continuing Care Clinic Credits: 5

Provides ambulatory and continuous care experience in general medicine clinics. The docent teams are assigned to a clinic in which students see and follow a panel of patients on a continuous basis for up to four years, where necessary, under the supervision of docents. Provides continuity of care from inpatient hospitalization to outpatient care, allowing longitudinal experience for the student and personalized care for the patients. Allows students to observe the natural progression of disease and experience the rewards and challenges of an ongoing doctor-patient relationship.

MEDICINE 9583RC Year Five Repeat Clinic Credits: 5

Monthlong course in which students repeat or complete outstanding requirements of Year 5 Continuing Care Clinic.

MEDICINE 9585 Prescribing for Special Populations Credits: 2

Consists of a self-paced, independent learning, computer-based instruction. Teaches principles of prescribing for special populations. Students learn to recognize special patients and to assess risks and benefits and individualize drug therapy in special patient situations. The course addresses concepts of pharmacology in five commonly-encountered special populations: pediatrics, elderly, patients with liver or kidney disease, and pregnant or breast-feeding patients.

MEDICINE 9587 Extended Clinic III Credits: 5**MEDICINE 9594 Medicine and Body Image Credits: 5**

Lecture, discussion, writing about ethical issues related to death.

MEDICINE 9601 Internal Medicine/Docent Instruction Yr 6 Credits: 10

Students spend this eight-week rotation on the medical wards at Truman Medical Center, each working as an integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, and Year 4 and 6 students are paired together in a junior-senior partnership. Rounds, conference and consultations.

MEDICINE 9601BR Internal Medicine/Docent Instruction Yr 6 Credits: 5

Students spend this eight-week rotation on the medical wards at Truman Medical Center, each working as a integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, and Year 4 and 6 students are paired together in a junior-senior partnership. Rounds, conference and consultations. This section is a single four-week block of the rotation.

MEDICINE 9678 Emergency Medicine Credits: 5

Based at Truman Medical Center Hospital Hill or Saint Luke's Hospital of Kansas City, the major affiliated adult hospitals for the School of Medicine. Emphasizes principles, concepts and skills necessary for the initial evaluation and care of medical and surgical emergencies. Teaches management of simple lacerations, burns, contusions, sprains, and infections, and recognition of life threatening emergencies and initiation of emergency care in response.

MEDICINE 9683 Continuing Care Clinic Credits: 5

Provides ambulatory and continuous care experience in general medicine clinics. The docent teams are assigned to a clinic in which students see and follow a panel of patients on a continuous basis for up to four years, where necessary, under the supervision of docents. Provides continuity of care from inpatient hospitalization to outpatient care, allowing longitudinal experience for the student and personalized care for the patients. Allows students to observe the natural progression of disease and experience the rewards and challenges of an ongoing doctor-patient relationship.

MEDICINE 9685 Rational and Safe Drug Prescribing Credits: 2

Consists of self-paced, independent learning, computer-based instruction. Teaches principles of clinical pharmacology that will assist the student in responsibly prescribing medications. Students develop skills in making informed clinical decisions through studying topics such as literature evaluation, medication errors, adverse drug reactions, drug allergies, drug interactions, overdose management, alternative therapies, and therapeutic drug monitoring.

MEDICINE 9687 Extended Clinic IV Credits: 5**MEDICINE 9714A2 Academic General Year I Credit: 1****MEDICINE 9715A1 Independent Readings Month Credits: 5****MEDICINE 9716A1 Independent Study Month Credits: 5****MEDICINE 9732 Academic-Biomedical and Health Informatics Credits: 5****MEDICINE 9816C11 Family Practice Sub-Internship Credits: 5**

Sub-internship in Family Medicine

MEDICINE 9818-C11 Special Topics - Community and Family Medicine Credits: 5

Special Topics - Community and Family Medicine

MEDICINE 9818-C21 Special Topics - Internal Medicine Credits: 5

Special Topics - Internal Medicine

MEDICINE 9818-C31 Special Topics - Neurology/Psychiatry Credits: 5

Special Topics - Neurology/Psychiatry

MEDICINE 9818-C41 Special Topics-OB/GYN REI SUB-I Credits: 5

Special Topics-OB/GYN REI SUB-I

MEDICINE 9818-C51 Special Topics - Pathology Credits: 5

Special Topics - Pathology

MEDICINE 9818-C61 Special Topics - Pediatrics Credits: 5

Special Topics - Pediatrics

MEDICINE 9818-C71 Special Topics - Radiology Credits: 5

Special Topics - Radiology

MEDICINE 9818-C81 Special Topics - Surgery Credits: 5

Special Topics - Surgery

MEDICINE 9818-C91 Special Topics - Miscellaneous Credits: 5
Special Topics - Miscellaneous

MEDICINE 9818-C92 Special Topics - Miscellaneous Credits: 5
Special Topics - Miscellaneous

Prerequisites: SOM Student

MEDICINE 9842-C21 Internal Medicine Sub-Internship Credits: 5

MEDICINE 9850-C31 Neurology Sub-Internship Credits: 5

MEDICINE 9852 Neurology Intensive Care Credits: 5
Intensive care in Neurology

Prerequisites: Must be a School of Medicine student.

MEDICINE 9870-C41 Obstetrics and Gynecology - Sub-Internship Credits: 5
Obstetrics and Gynecology - Sub-Internship.

MEDICINE 9898-C61 Internal Medicine/Pediatrics-Sub-Internship Credits: 5
Internal Medicine/Pediatrics-Sub-Internship.

Prerequisites: Successful completion of the core Internal Medicine and Pediatrics clerkships.

MEDICINE 9899-C61 Internal Medicine Pediatrics Clinic Credits: 5

MEDICINE 9921-C61 Pediatrics Sub-Internship Credits: 5
Pediatrics Sub-Internship.

MEDICINE 9922-C61 Neonatal Intensive Care Sub-Internship Credits: 5

MEDICINE 9923-C61 Pediatrics-Rehabilitation Credits: 5

MEDICINE 9924-C61 Pediatrics-Dermatology Credits: 5

MEDICINE 9925-C61 Pediatrics-Ophthalmology Credits: 5

MEDICINE 9926-C61 Pediatrics-Genetics Credits: 5

MEDICINE 9927-C61 Pediatrics-Neurology Credits: 5

MEDICINE 9928-C61 Pediatrics-Child and Adolescent Psychiatry Credits: 5

MEDICINE 9929-C61 Pediatrics-Plastic Surgery Credits: 5

MEDICINE 9930-C61 Pediatrics-Orthopedic Surgery Credits: 5

MEDICINE 9940-C61 Pediatrics-Allergy and Immunology Credits: 5
Pediatrics-Allergy and Immunology.

Prerequisites: Must be a School of Medicine Student.

MEDICINE 9945-C81 Anesthesiology-Sub-Internship Credits: 5

MEDICINE 9972-C81 Surgery-General Sub-Internship Credits: 5

MEDICINE 9973-C81 Surgery Orthopedics Sub-Internship Credits: 5
Surgery Orthopedics Sub-Internship.

MEDICINE 9974-C81 Surgery Neurological Sub-Internship Credits: 5
Surgery Neurological Sub-Internship.

MEDICINE 9975-C81 Surgery-Trauma Credits: 5
Surgery-Trauma

Prerequisites: Must be an SOM student

MEDICINE 9976-C81 Surgery - Oral and Maxillofacial Surgery Credits: 5

MEDICINE 9977-C81 Surgical Oncology Credits: 5
Elective in Surgical Oncology.

MEDICINE 9985 Miscellaneous - Medical Clinical Nutrition Credits: 5

Build upon basic (biochemistry/physiology) and clinical science knowledge and skills in order to be able to perform nutrition assessments in children/adults, counsel patients and families on nutrition, order medical nutrition therapy, work with multidisciplinary teams, and appropriately refer for specialized nutrition/feeding services. The elective utilizes didactic instruction, case studies, team projects, individual assignments, and outside reading combined with clinical/community experiences to facilitate student acquisition of knowledge/skills. Gain an appreciation of nutritional therapy from both the clinician and patient/family perspective. Didactic sessions, case studies, and clinical experiences are designed to augment students' outside reading of assigned and suggested references.

Physician Assistant Courses

MEDPA 5501 Anatomy for the Physician Assistant Credits: 3

This course studies the anatomy of the human body and its correlation and relationship of anatomic configuration to diagnosis of clinical problems.

Prerequisites: MMSPA student.

MEDPA 5502 Foundations in Basic Medical Science Credits: 4

This course introduces the basic principles of biochemistry, microbiology, immunology, and pharmacology which prepares the student for Science and Practice of Medicine I - IV.

Prerequisites: MMSPA student.

MEDPA 5503 Research Applications in Medicine Credit: 1

This course introduces the student to clinical research in medicine and its application to clinical decision making through the concepts and principles of evidence-based medicine.

MEDPA 5504 Ethics, Law and Policy Credit: 1

This course examines ethical rules, principles, and theories as they relate to health care.

MEDPA 5505 Clinical Assessment for the PA Credits: 2

This course will focus on developing foundational physical exam and history taking skills for the physician assistant.

MEDPA 5511 Clinical Practicum I Credit: 1

The Clinical Practicum course series will develop professional behaviors, reinforce effective communication with classmates, patients and preceptors, introduce patient safety concepts and give the student clinical experience under preceptor supervision to develop and apply the skills learned in the curriculum.

MEDPA 5512 Clinical Practicum II Credit: 1

This course will consist of a variety of activities including lectures, clinical exposure, interprofessional education activities, service learning, and community health experiences. Emphasis will be on developing communication skills, exhibiting professional behaviors, recognizing diversity and needs of the community, and identifying attributes of a health care team.

Prerequisites: MEDPA 5511.

MEDPA 5513 Clinical Practicum III Credit: 1

This course will consist of a variety of activities including lectures, clinical exposure, interprofessional education activities, service learning, and community health experiences. Emphasis will be on developing communication skills, exhibiting professional behaviors, recognizing diversity and needs of the community, and identifying attributes of a health care team.

Prerequisites: MEDPA 5512.

MEDPA 5514 Clinical Practicum IV Credit: 1

This course will consist of a variety of activities including lectures, clinical exposure, interprofessional education activities, service learning, and community health experiences. Emphasis will be on developing communication skills, exhibiting professional behaviors, recognizing diversity and needs of the community, and identifying attributes of a health care team.

Prerequisites: MEDPA 5513.

MEDPA 5521 PA Professions I Credit: 1

This course in the PA Professions series that will focus on the history of the PA profession including the social, regulatory, ethical and professional aspects. Instruction will also be provided in clinical management practices and procedures including coding systems for diagnosis and reimbursement, quality assurance and risk management.

MEDPA 5522 PA Professions II Credit: 1

This course focuses on the impact of racial, ethnic and socioeconomic health disparities on health care delivery. The student will become aware of differing health beliefs, values and expectations of patients and other health care professionals that can affect communication, decision-making, compliance and health outcomes.

MEDPA 5523 PA Professions III Credit: 1

This course in the PA Professions series will provide basic doctrines and principles of the law to serve as a foundation for legally and ethically sound medical practice. It will include a comprehensive coverage of the history of legal medicine in the United States, the dynamics of the law applied to medical issues and the recent developments in health care delivery and biomedical issues. The legal and ethical issues of narrative medicine in medical practice and its practical applications will be explored and discussed.

MEDPA 5524 PA Professions IV Credit: 1

This course in the PA Professions will give students knowledge of the evolution of the health care industry's components and describe the technical, economic, political and social forces that shaped their development. Principles of health policy and public health will be discussed so the student will have a systematic way of thinking about health care in the United States, its problems and the alternatives for managing these problems.

MEDPA 5531 Science and Practice of Medicine I Credits: 9

This is a first of four series course that will address the physiology, pathophysiology, basic medical science, clinical presentation, pharmacotherapeutics, physical exam and clinical skills of disease processes presented in a systems format.

MEDPA 5532 Science and Practice of Medicine II Credits: 12

This is the second of a four series course that will address the physiology, pathophysiology, basic medical science, clinical presentation, pharmacotherapeutics, physical exam and clinical skills of disease processes presented in a systems format.

Prerequisites: MEDPA 5531.

MEDPA 5533 Science and Practice of Medicine III Credits: 20

This is the third of a four series course that will address the physiology, pathophysiology, basic medical science, clinical presentation, pharmacotherapeutics, physical exam and clinical skills of disease processes presented in a systems format.

Prerequisites: MEDPA 5532.

MEDPA 5534 Science and Practice of Medicine IV Credits: 19

This is the fourth in a four series course that will address the physiology, pathophysiology, basic medical science, clinical presentation, pharmacotherapeutics, physical exam and clinical skills of disease processes presented in a systems format.

Prerequisites: MEDPA 5533.

MEDPA 5580 Senior Seminar Credit: 1

This course will focus on discussion, study, and review of previously covered health topics in preparation for the Physician Assistant National Certification Exam (PANCE).

MEDPA 5581 Professional Development for the PA Credits: 0.5

This course focuses on professional development topics for the graduating PA students. Students attend and participate in seminars and discussions pertinent to employment and practice as a PA. Students enroll in the course each of the three semesters that make up the program clinical phase (semesters 5, 6, and 7).

Prerequisite: Must be a student in the MMS Physician Assistant program.

MEDPA 5589 Special Topics Credits: 1-3

An opportunity to explore in depth topics not included in usual course offerings. One or more topics will be announced in advance of registration.

MEDPA 5595 Capstone Credit: 1

This course will align didactic, clinical and professional instruction as well as Graduate Learning Competencies into a project that will have lasting impact for patients, clinical practice, PA education and/or the PA profession.

MEDPA 5610 Family Medicine I Rotation Credits: 4

This is a required 4-week rotation in an ambulatory family medicine setting.

MEDPA 5611 Family Medicine II Rotation Credits: 4

This is a required 4-week rotation in an ambulatory family medicine setting.

MEDPA 5612 Elective Family Medicine Rotation - 4 week Credits: 4

This is an elective 4-week rotation in an ambulatory family medicine setting.

MEDPA 5613 Elective Family Medicine Rotation II - 4 week Credits: 4

This is an elective 4-week rotation in an ambulatory family medicine setting.

MEDPA 5614 Elective Family Medicine Rotation I-2 week Credits: 2

This is an elective 2-week rotation in an ambulatory family medicine setting.

MEDPA 5615 Elective Family Medicine Rotation II - 2 week Credits: 2

This is an elective 2-week rotation in an ambulatory family medicine setting.

MEDPA 5620 Internal Medicine Rotation I Credits: 4

This is a required 4-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5621 Internal Medicine Rotation II Credits: 4

This is a required 4-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5622 Elective Internal Medicine Rotation I Credits: 4

This is an elective 4-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5623 Elective Internal Medicine Rotation II Credits: 4

This is an elective 4-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5624 Elective Internal Medicine Rotation I - 2 week Credits: 2

This is an elective 2-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5625 Elective Internal Medicine Rotation II - 2 week Credits: 2

This is an elective 2-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5630 Emergency Medicine Rotation Credits: 4

This is a required 4-week rotation in an emergency medicine setting.

MEDPA 5632 Elective Emergency Medicine I - 4 week Credits: 4

This is an elective 4-week rotation in the emergency medicine setting.

MEDPA 5633 Elective Emergency Medicine II - 4 week Credits: 4

This is an elective 4-week rotation in the emergency medicine setting.

MEDPA 5634 Elective Emergency Medicine I - 2 week Credits: 2

This is an elective 2-week rotation in the emergency medicine setting.

MEDPA 5635 Elective Emergency Medicine II - 2 week Credits: 2

This is an elective 2-week rotation in the emergency medicine setting.

MEDPA 5640 Women's Health Rotation Credits: 4

This is a required 4-week rotation in a women's health setting.

MEDPA 5642 Elective Women's Health Rotation I - 4 week Credits: 4

This is an elective 4-week rotation in a women's health setting.

MEDPA 5643 Elective Women's Health Rotation II - 4 week Credits: 4

This is an elective 4-week rotation in a women's health setting.

MEDPA 5644 Elective Women's Health I - 2 week Credits: 2

This is an elective 2-week rotation in a women's health setting.

MEDPA 5645 Elective Women's Health II - 2 week Credits: 2

This is an elective 2-week rotation in a women's health setting.

MEDPA 5650 Pediatrics Rotation Credits: 4

This is a required 4-week rotation in a pediatric medicine setting.

MEDPA 5652 Elective Pediatrics Rotation I Credits: 4

This is an elective 4-week rotation in a pediatric medicine setting.

MEDPA 5653 Elective Pediatrics Rotation II Credits: 4

This is an elective 4-week rotation in a pediatric medicine setting.

MEDPA 5654 Elective Pediatrics Rotation I - 2 week Credits: 2

This is an elective 2-week rotation in a pediatric medicine setting.

MEDPA 5656 Elective Pediatrics Rotation II 2 week Credits: 2

This is an elective 2-week rotation in a pediatric medicine setting.

MEDPA 5660 General Surgery Rotation Credits: 4

This is a required 4-week rotation in a general surgery setting.

MEDPA 5662 Elective Surgery Rotation I Credits: 4

This is an elective 4-week rotation in a surgery setting.

MEDPA 5663 Elective Surgery Rotation II Credits: 4

This is an elective 4-week rotation in a surgery setting.

MEDPA 5664 Elective Surgery Rotation I - 2 week Credits: 2

This is an elective 2-week rotation in a surgery setting.

MEDPA 5665 Elective Surgery Rotation II - 2 week Credits: 2

This is an elective 2-week rotation in a surgery setting.

MEDPA 5670 Behavioral Medicine Rotation Credits: 4

This is a required 4-week rotation in a behavioral health setting.

MEDPA 5671 Behavioral Medicine Rotation - 2 week Credits: 2

This is a required 2-week rotation in a behavioral health setting.

MEDPA 5672 Elective Behavioral Medicine I Credits: 4

This is an elective 4-week rotation in the behavioral medicine setting.

MEDPA 5673 Elective Behavioral Medicine II Credits: 4

This is an elective 4-week rotation in the behavioral medicine setting.

MEDPA 5674 Elective Behavioral Medicine I - 2 week Credits: 2

This is an elective 2-week rotation in the behavioral medicine setting.

MEDPA 5675 Elective Behavioral Medicine II - 2 week Credits: 2

This is an elective 2-week rotation in the behavioral medicine setting.

MEDPA 5680 Geriatrics Rotation Credits: 4

This is a required 4-week rotation in a geriatric specialty care setting.

MEDPA 5681 Geriatrics Rotation - 2 week Credits: 2

This is a required 2-week rotation in a geriatric specialty care setting.

MEDPA 5682 Elective Geriatrics Rotation I Credits: 4

This is an elective 4-week rotation in the geriatric medicine setting.

MEDPA 5683 Elective Geriatrics Rotation II Credits: 4

This is an elective 4-week rotation in the geriatric medicine setting.

MEDPA 5684 Elective Geriatrics Rotation I - 2 weeks Credits: 2

This is an elective 2-week rotation in the geriatric medicine setting.

MEDPA 5685 Elective Geriatrics Rotation II - 2 weeks Credits: 2

This is an elective 2-week rotation in the geriatric medicine setting.

MEDPA 5690 Elective Clinical Rotation I Credits: 4

This is a 4-week clinical rotation experience in a new setting or an established area that students wish to gain additional experience.

MEDPA 5691 Elective Clinical Rotation II Credits: 4

This is a 4-week rotation in a newly or recently established clinical setting.

MEDPA 5692 Elective Clinical Rotation I - 2 week Credits: 2

This is a 2-week clinical rotation experience in a new setting or an established area that students wish to gain additional experience.

MEDPA 5693 Elective Clinical Rotation II - 2 week Credits: 2

This is a 2-week clinical rotation experience in a new setting or an established area that students wish to gain additional experience

MEDPA 5899 Required Graduate Enrollment Credit: 1

Required Graduate Enrollment.

Admission Requirements

Current High School Students

The School of Medicine offers a six-year B.A./M.D. program that requires students to complete both a baccalaureate degree and doctor of medicine degree. Admission to the B.A./M.D. program is highly competitive, and admitted students are challenged by a demanding curriculum scheduled for 35 weeks in the first year and 48 weeks in each of the remaining five years.

Applicants for admission to Year 1 of the six-year medical program must first be accepted by the University of Missouri – Kansas City. Admission to the university is determined by a combination of ACT score and class rank, as well as graduation from an accredited U.S. high school with completion of the following high school curriculum.

- Four units of English
- Four units of Mathematics (Algebra 1 or higher)
- Three units of science (including one unit of Biology and one unit of Chemistry)
- Three units of social studies
- Two units of a single foreign language
- One unit of fine arts (visual arts, music, dance, or theater).

For more information about UMKC admission requirements and/or the application procedures, please contact the UMKC Office of Admissions at:

Office of Admissions
University of Missouri – Kansas City
120 Administrative Center
5100 Rockhill Road
Kansas City, MO 64110-2499

In addition, School of Medicine applicants are also required to submit a supplemental application and additional supporting documents, consisting of the following:

- Personal statement (500 words or less)
- Short answer responses
- Listing of all health-related and co-curricular activities (high school only)
- References (minimum 3, must be provided on official School of Medicine Reference Forms)

The School of Medicine strongly encourages prospective students to earn credit through Advanced Placement (AP) courses, if available, in math, English, European history, or American history.

Students whose high school does not offer biology, chemistry, and/or foreign language are encouraged to contact the Council on Selection at the School of Medicine.

Students are selected to interview based on the information provided in a complete application. Once interviews are complete, the Council on Selection will convene to determine which students will be offered admission to the program. Most applicants to the combined degree program display outstanding academic credentials and backgrounds and strong leadership and involvement. The applicant pool is extremely competitive, and no one component of the application guarantees an offer of admission.

Current College Students

Students with 24 college credit hours or less:

Students with 24 hours or less of post high school graduation college credit at the time of application are eligible to apply for admission to the 6-year B.A./M.D. program. These applicants will be reviewed with the same criteria as freshman applicants.

If the applicant is currently enrolled in college in the semester in which they apply to the six-year program, the number of hours accumulated at the end of that semester must not exceed the 24-hour credit limit. While the application is being processed, applicants may continue taking college courses during the next semester.

Applicants must have earned a 3.0 GPA or higher at the end of the fall semester in order to be considered for admission. Official college transcripts must be submitted along with other application materials. Grades for courses completed in the fall semester in which the applicant applied must also be submitted upon completion of the semester. A current ACT test within the last three years is also required.

Students with more than 24 college credit hours:

Students who have completed more than 24 post high school college credit hours and have not yet received a Bachelor's degree are not eligible to apply to the School of Medicine.

Students who have earned, or will be earning in the year of application, a Bachelor's degree:

Students who have completed more than 24 post high school college credit hours and have earned, or will soon earn, a Bachelor's degree are eligible to apply to the M.D. Program.

A limited number of positions are available for students who have completed their baccalaureate degree. For admission requirements for entrance as an M.D. Program student, please contact the Council on Selection in the School of Medicine.

For more information about the combined B.A./M.D. program, please contact the Council on Selection at:

UMKC School of Medicine
Council on Selection
2411 Holmes
Kansas City, MO 64108

Application Deadlines

Completed application materials will be accepted during the following period:

- Earliest date - Aug. 1 of the year preceding the fall semester for which applying.
- Latest date - Nov. 1 of the year preceding the fall semester for which applying.

All applications must be complete with supporting documents by November 1. Late applications will be considered on a space available basis. Incomplete applications will not be considered.

(Applicants are urged to apply as soon after Aug. 1 as possible.)

High school students wishing to enter this program should recognize that many other well-qualified high school students with strong science backgrounds also will be applying. Because this is a state-assisted university, primary consideration is given to Missouri residents with over fifty percent of the incoming class from the state of Missouri.

Criminal background checks will be performed on combined-degree students and M.D. Program students before matriculation into the program.

Application Fee

Applicants are strongly advised to apply online. A \$35 non-refundable application fee is required.

These fees are for students applying with the online application only. Paper applications may be assessed a higher fee.

Graduate Programs

Graduate Degree Programs:

Masters of Science Degrees:

- Master of Science in Anesthesia
- Master of Science in Bioinformatics (p. 1830)
- Master of Medical Science Physician Assistant (p. 1827)
- Master of Health Professions Education (p. 1826)

Graduate Certificate Degrees:

- Graduate Certificate in Clinical Research
- Graduate Certificate in Health Professions Education (p. 1826)

Doctor of Philosophy:

- Interdisciplinary Ph.D. primary and co-discipline: Biomedical and Health Informatics (p. 1825)

Doctor of Philosophy

Degree Requirements

The Department of Biomedical and Health Informatics participates in the Interdisciplinary Ph.D. program at UMKC. Students interested in studies at the doctoral level in Biomedical and Health Informatics, should apply to the Interdisciplinary Ph.D. program in the School of Graduate Studies.

Detailed information on the general and discipline-specific admission requirements for the Interdisciplinary Ph.D. is found in the School of Graduate Studies (<http://catalog.umkc.edu/colleges-schools/graduate-studies/>) section of this catalog, with specific details in the Biomedical and Health Informatics (p. 1555) discipline section. More information about the program can be found on the school's Website at <http://sgs.umkc.edu/interdisciplinary-ph-d-studies-at-umkc/>.

Graduate Certificate in Clinical Research

Student Learning Outcomes

Students graduating from this program will:

- Have the ability to perform statistical analysis
- Have the ability to generate a research hypothesis
- Have the ability to propose, conduct, and report research

Program Description

The Department of Biomedical and Health Informatics (DBHI) at the School of Medicine (SOM) offers a Graduate Certificate in Clinical Research. The Graduate Certificate is a valuable credential for health care professionals who want exposure to the fundamentals of clinical research methods and applications. Junior faculty, clinical fellows, physicians, nurses, pharmacists, dentists, clinical research coordinators, and other health professionals will advance their research careers and become more discriminate consumers of research upon completion of this program.

Please visit our Department Website (<http://med.umkc.edu/dbhi/>) to learn more about this program.

Curriculum Description

Students must complete the following courses while maintaining a 3.0 or better grade point average to earn the Graduate Certificate:

Code	Title	Credits
MEDB 5501	Applied Biostatistics I	3
MEDB 5510	Clinical Research Methodology	3
MEDB 5511	Principles and Applications of Epidemiology	3
MEDB 5512	Clinical Trials	3
MEDB 5513	Overview of Health Services Research	3

Since the Graduate Certificate includes coursework that counts toward the Master of Science in Bioinformatics (MSB) Degree, Graduate Certificate graduates will be offered the option of applying to the MSB program. If accepted, they will be able to apply 15 credit hours towards completion of the MSB degree or the MSB with an emphasis in Clinical Research.

Admission Requirements

Please visit our [Admissions Page \(http://med.umkc.edu/gc-clinical-research/\)](http://med.umkc.edu/gc-clinical-research/) to learn about our requirements.

Graduate Certificate in Health Professions Education

Student Learning Outcomes

Students graduating from this program will:

- Have the ability to deliver effective, theory-based instruction in large group, small group, and clinical settings
- Have the ability to develop skill in educational research as it relates to the quality of instructional practice
- Have the ability to design evidence-based educational programs and materials with appropriate scope, sequence, and focus for learners
- Have the ability to understand assessment and to effectively use assessment tools to track student progress and to promote student learning
- Have the ability to develop skill in program and curriculum development and evaluation in health professions education
- Have the ability to identify current issues in health professions education and develop skill in monitoring changes in the field

Program Overview

The Graduate Certificate in Health Professions Education provides an educational research foundation for teaching and assessment in health professions education. The certificate, which includes six courses (18 credit hours), is based on a mix of both classroom and online instruction.

Plan of Study

Code	Title	Credits
HPRE 5530	Current Issues in Health Professions Education	3
HPRE 5550	Assessment in Health Professions Education	3
HPRE 5508	Principles and Methods of Research	3
HPRE 5560	Teaching in Health Professions Education	3
HPRE 5522	Curriculum Design in Health Professions Education	3
HPRE 5580	Program Evaluation in Health Professions Education	3

Please visit the Program Website (<http://med.umkc.edu/gchpe/>) to learn more about this program:

- Curriculum & Calendar (<http://med.umkc.edu/gchpe/curriculum/>)
- Applying for Admission (<http://med.umkc.edu/gchpe/>)
- Contact Us (<http://med.umkc.edu/gchpe/>)

Master of Health Professions Education

Program Overview

The Masters Degree in Health Professions Education (MHPE) provides an educational research foundation for teaching, assessment and leadership in health professions education. The MHPE curriculum is comprised of twelve courses which focus on the application of learning principles to educational practice. All courses emphasize an applied project based on students' professional experiences. The educational portfolio serves as an integrative tool across courses and as a showcase for student accomplishments.

Program Features

- Inter-professional—For all health education professionals
- Educational research foundation—Evidence-based decision making
- Application—Based on solving real instructional problems in health professions education
- Professional Portfolio—Documents learning goals and accomplishments
- Online and Blended—Most coursework is online with occasional in-class meeting

Student Learning Outcomes

Students graduating from this program will:

- Have the ability to understand and apply educational research in health professions education.
- Have the ability to design evidence-based educational programs and materials.
- Have the ability to deliver effective, theory-based instruction in large, small and clinical group settings.
- Have the ability to effectively use assessment tools to reflect student progress in learning.
- Have the ability to evaluate the effectiveness of programs, curricula and instructional events.
- Have the ability to develop cultural awareness and commitment to diversity.
- Have the ability to provide reflective and evidence-based leadership.

Degree Requirements

A minimum of 36 credit hours are required to earn the Master of Health Professions Education degree. Students must complete the program of study while maintaining a 3.0 or better grade point average.

Code	Title	Credits
MEDB 5501	Applied Biostatistics I	3
HPRE 5500	Leadership and Administration in Health Professions Education	3
HPRE 5508	Principles and Methods of Research	3
HPRE 5522	Curriculum Design in Health Professions Education	3
HPRE 5530	Current Issues in Health Professions Education	3
HPRE 5535	Community Engagement in Education	3
HPRE 5540	Independent Study	3
HPRE 5550	Assessment in Health Professions Education	3
HPRE 5560	Teaching in Health Professions Education	3
HPRE 5566	Teaching about Culture and Health	3
HPRE 5580	Program Evaluation in Health Professions Education	3
HPRE 5588	Learning Portfolio in Health Professions Education	3
Total Credits		36

Master of Medical Science Physician Assistant

PROGRAM DESCRIPTION

The Master of Medical Science Physician Assistant degree is offered by the School of Medicine. The mission of the program is to educate competent, compassionate, and culturally-aware Physician Assistants who are prepared to meet the healthcare needs of our community. Graduates will advance the Physician Assistant profession through clinical excellence, service, and dedication to lifelong learning.

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate competency in interpersonal and communication skills
- Demonstrate competency in medical knowledge
- Demonstrate competency in professionalism
- Demonstrate competency in practice-based learning and improvement
- Demonstrate competency in systems-based practice
- Demonstrate competency in interprofessional collaborative practice
- Demonstrate competency in social, cultural, and community contexts of health care
- Demonstrate competency in patient care

DEGREE REQUIREMENTS

To complete the program graduate students must complete a 7-semester program of study. Within the program of study, successful students earn 129.5 credit hours, which includes 48 credit hours (12 months) comprised of clinical rotation experiences. Students must pass a Promotion exam during semester 4 and a Summative exam during semester 7. Students must also maintain a 3.0 or better grade point average to receive the Master of Medical Science Physician Assistant degree.

Required Courses Include:

Code	Title	Credits
Year 1 Spring Semester (21 credit hours)		
MEDPA 5501	Anatomy for the Physician Assistant	3
MEDPA 5502	Foundations in Basic Medical Science	4
MEDPA 5504	Ethics, Law and Policy	1
MEDPA 5505	Clinical Assessment for the PA	2
MEDPA 5511	Clinical Practicum I	1
MEDPA 5521	PA Professions I	1
MEDPA 5531	Science and Practice of Medicine I	9
Year 1 Summer Semester (14 credit hours)		
MEDPA 5512	Clinical Practicum II	1
MEDPA 5522	PA Professions II	1
MEDPA 5532	Science and Practice of Medicine II	12
Year 1 Fall Semester (22 credit hours)		
MEDPA 5513	Clinical Practicum III	1
MEDPA 5523	PA Professions III	1
MEDPA 5533	Science and Practice of Medicine III	20
Year 2 Spring Semester (25 credit hours)		
MEDPA 5600 Clinical Rotation - May		4
MEDPA 5514	Clinical Practicum IV	1
MEDPA 5524	PA Professions IV	1
MEDPA 5534	Science and Practice of Medicine IV	19
Year 2 Summer Semester (8.5 credit hours)		
MEDPA 5600 Clinical Rotation - June		4
MEDPA 5600 Clinical Rotation - July		4
MEDPA 5581	Professional Development for the PA	0.5
Year 2 Fall Semester (20.5 credit hours)		
MEDPA 5600 Clinical Rotation - August		4
MEDPA 5600 Clinical Rotation - September		4
MEDPA 5600 Clinical Rotation - October		4
MEDPA 5600 Clinical Rotation - November		4
MEDPA 5600 Clinical Rotation - December		4
MEDPA 5581	Professional Development for the PA	0.5
Year 3 Spring Semester (18.5 credit hours)		
MEDPA 5600 Clinical Rotation - January		4
MEDPA 5600 Clinical Rotation - February		4
MEDPA 5600 Clinical Rotation - March		4
MEDPA 5600 Clinical Rotation - April		4
MEDPA 5580	Senior Seminar	1
MEDPA 5581	Professional Development for the PA	0.5
MEDPA 5595	Capstone	1

MEDPA 5600s are a series of required and elective clinical rotations. Required clinical rotations include Family Medicine, Adult Internal Medicine, Women's Health, Emergency Medicine, Pediatrics, General Surgery, Behavioral Medicine, and Geriatrics. Student schedules are supplemented with additional 2 to 4 week elective rotations.

Master of Science in Anesthesia Program

Student Learning Outcomes

Students graduating from this program will:

- Demonstrate competency in patient care including preoperative preparation/anesthetic plan, patient monitoring, airway management, patient positioning, and anesthesia record documentation
- Demonstrate competency in integration of basic medical knowledge into clinical practice through application of concepts from foundational coursework in the clinical setting
- Demonstrate competency in clinical management through mastery of skills in multitasking, problem solving, specialty specific management and techniques, responding to changes in patient status, and overall case management
- Demonstrate competency in self-learning and professionalism
- Demonstrate competency in communication with preceptors, operating room staff, other health professionals, and patients

Program Description

The Master of Science in Anesthesia program at the UMKC School of Medicine prepares students to become anesthesiologist assistants (AAs). The program mission is to graduate AAs with advanced specialized knowledge and skills and individuals who are compassionate, competent, ethical and patient-centered AAs who work within an Anesthesia Care Team.

Degree Requirements

To complete the program students must complete a 7 semester plan of study, which involves 112 credit hours of coursework, and at least 2000 clinical hours (obtained during Anesthesia Clinical Experience courses). The minimum patient case requirements are outlined in the student handbook. Students must also maintain a 3.0 or better grade point average to earn the Master of Science in Anesthesia degree.

Required Courses Include:

Semester 1 (January to May) (16.5 credit hours)

Code	Title	Credits
ANESTH 5505	Anatomy for Anesthesiologist Assistants I	1
ANESTH 5518	Professionalism for the Anesthesiologist Asst I	.5
ANESTH 5540	Patient Monitoring and Instrumentation	3
ANESTH 5556	Physiology for Anesthesiologist Assistants I	3
ANESTH 5560	Introduction to Anesthesia	2
ANESTH 5561	Orientation to Simulation and Clinical Application	5
ANESTH 5575	Pharmacology for Anesthesiologist Assistants I	2
Total Credits		16.5

Semester 2 (May to August) (13.5 credit hours)

Code	Title	Credits
ANESTH 5528	Professionalism for the Anesthesiologist Asst II	0.5
ANESTH 5541	Methods of Anesthesia I	2
ANESTH 5557	Physiology for Anesthesiologist Assistants II	2
ANESTH 5558	Anesthesia & Co-existing Disease I	2
ANESTH 5563	Anesthesia Clinical Experience I	4
ANESTH 5576	Pharmacology for Anesthesiologist Assistants II	1
ANESTH 5585	Physiological Model-based Simulation I	2
Total Credits		13.5

Semester 3 (August to December) (17.5 credit hours)

Code	Title	Credits
ANESTH 5506	Anatomy for Anesthesiologist Assistants II	1
ANESTH 5538	Professionalism for the Anesthesiologist Asst III	0.5
ANESTH 5559	Anesthesia & Co-existing Disease II	2
ANESTH 5565	Anesthesia Clinical Experience II	8
ANESTH 5577	Methods of Anesthesia II	3
ANESTH 5578	Pharmacology for Anesthesiologist Assistants III	1
ANESTH 5586	Physiological Model-based Simulation II	2
Total Credits		17.5

Semester 4 (January to May) (17 credit hours)

Code	Title	Credits
ANESTH 5564	Anesthesia Clinical Correlation II	1
ANESTH 5567	Anesthesia Clinical Experience III	16
Total Credits		17

Semester 5 (May to August) (13 credit hours)

Code	Title	Credits
ANESTH 5568	Anesthesia Clinical Correlation III	1
ANESTH 5569	Anesthesia Clinical Experience IV	12
Total Credits		13

Semester 6 (August to December) (17 credit hours)

Code	Title	Credits
ANESTH 5570	Anesthesia Clinical Correlation IV	1
ANESTH 5571	Anesthesia Clinical Experience V	16
Total Credits		17

Semester 7 (January to May) (16.5 credit hours)

Code	Title	Credits
ANESTH 5573	Anesthesia Clinical Experience VI	16
ANESTH 5548	Anesthesiologist Assistant Senior Seminar	0.5
Total Credits		16.5

Master of Science Program in Bioinformatics

Student Learning Outcomes

Students graduating from this program will:

- Have the ability to perform statistical analysis.
- Have the ability to generate a research hypothesis.
- Have the ability to propose, conduct, and report research.
- Have the ability to apply knowledge and skills in biomedical informatics.
- Have the ability to communicate scientific information.

Program Description

The Department of Biomedical and Health Informatics at the School of Medicine, in cooperation with the School of Biological Sciences and the School of Computing and Engineering, offers the Master of Science in Bioinformatics degree. Students may complete the degree without an area of emphasis or may choose one of three emphasis areas (Clinical Research, Computational Bioinformatics, or Genomic Bioinformatics).

The program is designed to prepare a new generation of informatics professionals who will have the necessary skills to work collaboratively for the advancement of health sciences. Graduates are expected to be effective team members who can contribute to education, research, and development in the fields of bioinformatics and/or clinical research. This degree program prepares students to assume a variety of professional informatics

positions in translational research and development, institutional management, public policy, information systems, hospitals, private industry, or as members of a clinical research team. Students completing the M.S. Bioinformatics degree may also choose to continue their education at advanced graduate levels.

Program Goals

1. Produce competent researchers at the interface of biomedical and health informatics and clinical research
2. Produce graduates able to establish partnerships with stakeholders and the community
3. Produce effective communicators
4. Produce ethical and responsible researchers

Degree Requirements

A minimum of 36 credit hours are required to earn the Master of Science in Bioinformatics degree. Students must complete the program of study while maintaining a 3.0 or better grade point average to earn the MSB. The total number of credit hours, required coursework, elective course work and Thesis or Capstone requirements vary based on the MS Bioinformatics option selected by the student. These options are shown in the following table:

	MSB without an Emphasis	Computational Emphasis	Clinical Research Emphasis	Genomics Emphasis
Required course hours	18	24	24	33
Elective course hours*	12	6	6	0
Research & Thesis hours	6	6	6	6
Capstone option available*	Yes	Yes	Yes	No
Minimum Total hours	36	36	36	39

*Students may choose to complete the 3 credit hour Capstone course and 3 additional elective credit hours in place of Research and Thesis credit hours. This option is not available for the Genomics Bioinformatics emphasis.

MSB Emphasis Options

1. The M.S. in Bioinformatics (without an emphasis area): Gives students flexibility to complete a bioinformatics curriculum that best meets their academic and career goals.
2. Clinical Research: Emphasizes the creation and understanding of data generated by patient care and clinical studies and on the statistical methodology needed for clinical research and improved bedside care.
3. Computational Bioinformatics: Emphasizes the development and use of the next generation of bioinformatics tools and software.
4. Genomic Bioinformatics: Emphasizes the use of existing software for biological analysis and the analysis of a diverse set of biological data.

The required coursework for each M.S. Bioinformatics option are listed below. Information about elective coursework can be obtained from program faculty. Please visit our Department Website (<http://med.umkc.edu/msb/>) to learn more about this program.

M.S. Bioinformatics without emphasis area

Code	Title	Credits
MEDB 5501	Applied Biostatistics I	3
MEDB 5502	Applied Biostatistics II	3
MEDB 5510	Clinical Research Methodology	3
MEDB 5561	Responsible Conduct of Research	3

At least 2 from the following:

MEDB 5520	Introduction to Medical Informatics	3
or MEDB 5521	Clinical Bioinformatics	
or BIOLOGY 5525	Bioinformatics and Data Analysis	
or COMP-SCI 5566	Introduction to Bioinformatics	

Clinical Research Emphasis

Code	Title	Credits
MEDB 5501	Applied Biostatistics I	3
MEDB 5502	Applied Biostatistics II	3

MEDB 5510	Clinical Research Methodology	3
MEDB 5511	Principles and Applications of Epidemiology	3
MEDB 5512	Clinical Trials	3
MEDB 5513	Overview of Health Services Research	3
MEDB 5520	Introduction to Medical Informatics	3
MEDB 5561	Responsible Conduct of Research	3

Computational Emphasis

Code	Title	Credits
MEDB 5501	Applied Biostatistics I	3
MEDB 5502	Applied Biostatistics II	3
MEDB 5510	Clinical Research Methodology	3
MEDB 5520	Introduction to Medical Informatics	3
MEDB 5561	Responsible Conduct of Research	3
COMP-SCI 470	Introduction to Database Management Systems (or)	3
or COMP-SCI 371	Database Design, Implementation and Validation	
COMP-SCI 5565	Introduction to Statistical Learning	3
COMP-SCI 5566	Introduction to Bioinformatics	3

Genomic Emphasis

Code	Title	Credits
MEDB 5501	Applied Biostatistics I	3
MEDB 5502	Applied Biostatistics II	3
MEDB 5510	Clinical Research Methodology	3
MEDB 5561	Responsible Conduct of Research	3
LS-CBB 5530	Cell and Molecular Biology I	3
LS-CBB 5520	Cell and Molecular Biology II	3
LS-MBB 5561	General Biochemistry I	4
LS-MBB 5562	General Biochemistry II	3
BIOLOGY 5519	Principles of Evolution	3
BIOLOGY 5525	Bioinformatics and Data Analysis	3
COMP-SCI 470	Introduction to Database Management Systems	3
or COMP-SCI 371	Database Design, Implementation and Validation	

Medical Degree Programs

B.A. / M.D. (p. 1833)

Program Overview (p. 1833)

From high school student to medical student (p. 1833)

A medical student's journey begins as soon as they enter the UMKC School of Medicine's B.A./M.D. program. Immediate exposure to a curriculum that builds a strong foundation in medical science and clinical skills is integrated with the liberal arts and humanities into a year-round program. Our program allows students to choose an undergraduate major and earn their B.A. and M.D. in six years. (p. 1833)

M.D. Program (p. 1836)

Program Overview (p. 1836)

The UMKC School of Medicine offers an opportunity for medical education to students who have obtained, or will soon earn, a baccalaureate degree. This program is the M.D. Program. Students interested in the M.D. Program must apply for admission between May 1 and August 1. If selected for admission, students will begin coursework in January. (p. 1836)

B.A. / M.D.

B.A./M.D. Program

Program Overview

From high school student to medical student

A medical student's journey begins as soon as they enter the UMKC School of Medicine's B.A./M.D. program. Immediate exposure to a curriculum that builds a strong foundation in medical science and clinical skills is integrated with the liberal arts and humanities into a year-round program. Our program allows students to choose an undergraduate major and earn their B.A. and M.D. in six years.

During the first two years of the program, three-fourths of a student's time is dedicated to the arts and sciences to fulfill baccalaureate degree requirements, while one-fourth is spent in medical school coursework. In the final four years of the program, the majority of the student's time is spent in medical school coursework with a smaller percentage of time spent completing baccalaureate degree requirements.

Students pursue baccalaureate degrees in a variety of areas:

- Liberal Arts
- Chemistry
- Biology

The ability to pursue certain undergraduate degree options is dependent on the college credit a student is able to transfer in from high school. College credit may be accepted for Advanced Placement, International Baccalaureate, CLEP or dual-enrollment courses.

Clinical Experience and Physician Interaction

Students begin clinical experiences in the third week of the program through the docent system. A docent is a teaching physician who also serves as a mentor as a student advances through the curriculum. In years 1 – 2, students are assigned to docent teams of 10 – 15 students from their class. In this early docent experience, students are educated and mentored on the fundamentals of medicine.

In years 3 – 6, students are assigned to docent teams of 12-15 year 3 – 6 students, a docent, a clinical pharmacologist, a clinical medical librarian, an education team coordinator and other health care professionals. In this docent experience, students spend a half day per week every week assisting with outpatient care in a continuing care clinic. This team also works together on the internal medicine rotation two months out of the year in years 4 – 6.

Research

Students have the opportunity to work with faculty in both clinical and research settings. Students involved in research have the opportunity to present their findings each spring at the annual Student Research Summit, and funding is available to support student research projects. The Office of Research Administration facilitates student research programs as well as coordinates supplemental research lectures and seminars.

Service

Students at the UMKC School of Medicine have the opportunity to develop community partnerships, provide community service and reflect upon their experiences. Students participate in service-based programs, such as the Sojourner Clinic, a free outpatient clinic developed and managed by medical students, and the Kansas City Free Eye Clinic.

Core Competencies

Our curriculum utilizes experiences with patients, peers and faculty in clinical settings that develop students who are passionate about medicine. Students learn the skills and attitudes for compassion, honesty and integrity which receive the same priority as scientific and technical skills.

To further develop these skills and attitudes, the School of Medicine uses the following core competencies as the foundation for all educational experiences, as well as the selection of new students.

Interpersonal and communication skills are crucial to a successful doctor-patient relationship. Through immediate and ongoing patient interaction, our students learn to engage with patients, families and other members of the health care team. Our graduates are able to establish a therapeutic relationship with patients, regardless of age or cultural background, and are able to communicate in an effective manner.

It is important for both medical students and graduates to have an acute sense of **professional behavior** during interactions with others in clinical, academic, and co-curricular activities. Students master the professional behaviors of respect, compassion and empathy, altruism, honesty, excellence and accountability. In addition, our students are taught the value of moral reasoning and ethical judgment and learn to identify ethical issues in medicine, evaluate ethical choices, and recommend and defend those choices. Our graduates have the ability to recognize individual patient value systems, while integrating moral reasoning and ethical judgment in the care of patients without compromising their own ethical integrity.

The **medical knowledge** students gain during their four years of medical training allows our graduates to apply both basic and clinical science to understand, explain and solve complex, multi-system problems. Our students receive four years of outstanding clinical education that sets them apart from other medical school graduates, allowing our students greater opportunity to evaluate problems from multiple perspectives and to identify an appropriate and rational solution to address those problems. Additionally, our graduates are able to apply the knowledge, skills and concepts from all scientific perspectives to overall patient care.

By acquiring **practice-based learning and improvement skills**, including how to access and evaluate medical information, students learn how to provide effective up-to-date patient care. Learning how to use evidence-based medicine and skills related to patient safety and continuing quality improvement furthers students' development into graduates competent in practice-based learning.

Through **systems-based practice**, our graduates are able to actively incorporate psychological, social, cultural and economic factors that influence both individual patients and communities. Our graduates have an increased awareness of the role diversity plays in the context of health care, and use this awareness to benefit patients and serve as better health advocates.

Through a variety of teaching and learning strategies, students acquire the attitudes, knowledge and skills required for **patient care** through time-honored data gathering methods of history-taking and the physical examination, appropriate use and interpretation of tests, identification and in some instances administration of needed procedures, formulation of diagnoses and companion management plans using clinical reasoning and problem-solving skills and provision of patient education. They learn how to care for the full range of patient problems – acute, chronic, emergent, preventative, rehabilitative – in inpatient, outpatient and continuing care settings.

Curriculum

During the first two years of the program, three-fourths of a student's time is dedicated to the arts and sciences to fulfill baccalaureate degree requirements, while one-fourth is spent in medical school coursework. In the final four years of the program, the majority of the student's time is spent in medical school coursework with a smaller percentage of time spent completing baccalaureate degree requirements.

Students will select from three baccalaureate degree options: **Liberal Arts, Chemistry and Biology**. Selection of the baccalaureate degree is dependent upon the number of transferable courses available from high school (AP, IB, dual enrollment, etc.)

Typical six-year program of study (p. 1845)

Years 1 & 2

- Through the docent team, clinical experience begins immediately in the first year and increases as students advance through the next six years.
- Beginning in Year 1, information learned in the classroom is integrated in the clinical experience. Presentations on various medical symptoms and clinical findings are provided to integrate anatomy and physiology with medical history-taking and provide a format for learning about developing a differential diagnosis based on the patient's history.
- The Fundamentals of Medicine series (I-IV) builds on communication skills and learning to perform a patient-centered interview. This provides the students an opportunity to learn more about themselves, their profession and further develop effective interviewing skills. The Fundamentals of Medicine series offers a unique theme each semester: women's health (Fall Year 1), geriatrics (Spring Year 1), pediatrics (Fall Year 2) and adult medicine (Spring Year 2).
- In addition, students meet two to three hours a week with their docent teams to interact with patients, learn the basics of clinical medicine and develop fundamental skills.

Year 3

In Year 3, students join a new docent team, a group of 1 to 15 medical students who will learn together in Years 3 through 6. A docent and other health care professionals will provide supervision and support as students continue to develop medical knowledge and clinical skills.

- Students move from classes primarily on the Volker Campus to the Hospital Hill Campus for intensified basic medical science classes that prepare students for increased clinical responsibilities.
- A Year 3 student is paired with a Year 5 senior partner who serves as a mentor, allowing advanced students to take additional responsibility for the professional development of younger students. This junior-senior partnership allows students to teach each other, as well as build knowledge, skills and camaraderie.
- One half-day a week throughout Years 3 through 6, students assist to diagnose and treat patients in outpatient clinics located at two of our partner hospitals, Truman Medical Center Hospital Hill or Saint Luke's Hospital. This clinical assignment provides continuity of patient care, as well as a wealth of clinical experience.

Years 4 – 6

In Year 4, students will return to the UMKC Volker campus to complete coursework towards the baccalaureate degree. While completing the undergraduate degree, students continue to participate in clinical assignments.

During the last three years of the program, students have a number of experiences to complete the curriculum.

- Students will be immersed in a one-block rural Missouri preceptorship that provides experiences in societal and health care concerns unique to non-urban primary care settings.
- Two blocks a year, students join their full docent team for daily ward rounds called docent rotation. This docent rotation, block clinical rotations and continuing care clinic make up most of the final three years.
- Clerkships in Emergency Medicine, Family Medicine, Obstetrics/Gynecology, Pediatrics, Psychiatry and Surgery are the required medical school clerkship offerings in the final two years.

** Three to 12 credit hours will come from general degree requirements and/or core major requirements.*

***Students may take 6-7 electives in year 6. They must choose three clinical electives from nine designated categories. One of these electives must be a critical care elective.*

Student Learning Outcomes

Please click here to review the Student Learning Outcomes (<http://med.umkc.edu/docs/catalog/UMKC-SOM-SLO.pdf>)

Graduation Requirements

BACCALAUREATE DEGREE

- Students must select an undergraduate B.A. major or emphasis area from a variety of disciplines.
- The most common baccalaureate degrees are in liberal arts, biology and chemistry.
- Students may earn up to 30 semester hours of college credit through the Advanced Placement program, International Baccalaureate program or specific subject-area examinations of the College Level Examination Program (CLEP).
- Students must satisfactorily complete a minimum of 90 semester hours of non-medical courses on the UMKC Volker Campus in the following subject areas: English, fine arts, government, history, humanities, literature, natural science, philosophy and social/ behavioral science.
- Thirty additional semester hours toward the baccalaureate degree are awarded from required concurrent medical coursework.
- Students enrolled in the combined degree program at UMKC are required to complete a minimum of 38 hours of credit through the College of Arts and Sciences and/or the School of Biological Sciences subsequent to matriculation into the B.A./M.D. program regardless of the amount of previous credit earned.

DOCTOR OF MEDICINE DEGREE

- Students in the combined B.A./M.D. program must have satisfactory completion, certified by the UMKC registrar, of requirements for the baccalaureate degree and 38 months of medical curriculum credit.
- Students must achieve Certification in Advanced Cardiac Life Support.
- Students must receive docent certification of clinical competence.
- Student must earn a cumulative GPA of 2.8-4.0.
- Students must earn passing scores on Step 1 and Step 2 CS & CK of the United States Medical Licensing Examination (USMLE).
- Students must complete 48 months of enrollment in the School of Medicine, Years 3-6.
- At least three clinical electives are required and these must come from a minimum of three of the nine School of Medicine approved clinical elective categories. One of these electives must be a critical care elective.
- Students are expected to evaluate the quality of their experiences through course and performance evaluations, an annual program assessment, a graduation questionnaire and a survey of their performance at the end of their first postgraduate year.

Applying for Admission

Please click on listing below to visit the website (<http://med.umkc.edu/bamd/>) for detailed information regarding:

- Applying for Admission (<http://med.umkc.edu/bamd/apply/>)
- Requirements & Eligibility (<http://med.umkc.edu/bamd/admission-requirements-eligibility/>)
- Application Timeline (<http://med.umkc.edu/bamd/timeline/>)
- Council on Selection (<http://med.umkc.edu/bamd/council/>)
- Technical Standards (http://med.umkc.edu/docs/admissions/Technical_Standards.pdf)
- Costs, Scholarships, and Financial Aid. (<http://med.umkc.edu/bamd/finance/>)

Additional Information

Please visit the Program Website (<http://med.umkc.edu/bamd/>) to learn more about this program: <http://med.umkc.edu/bamd> (<http://med.umkc.edu/bamd/>)

UMKC School of Medicine
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Kansas City, MO 64108
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M.D. Program

M.D. Program

Program Overview

The UMKC School of Medicine offers an opportunity for medical education to students who have obtained, or will soon earn, a baccalaureate degree. This program is the M.D. Program. Students interested in the M.D. Program must apply for admission between May 1 and August 1. If selected for admission, students will begin coursework in January.

Clinical Experience and Physician Interaction

Students join a group of 10 to 12 fellow medical students, called a docent team. Early and continued contact with a team of clinical physicians, known as docents, builds student capacity for clinical judgment. Docent teams include a docent, a clinical pharmacologist, a clinical medical librarian, an Education Team Coordinator and other health care professionals.

Half a day every week for three-and-a-half years, students assist with outpatient care in continuing care clinics at two of our partner hospitals. This clinical assignment provides a continuity of patient care, as well as a wealth of clinical experience, and allows students to work with full-time, hospital-based staff, including physicians, nurses and residents.

Students practice skills through the use of state-of-the art simulators that replicate the human body and human conditions.

Two months a year for the last three years, students join their full docent team for daily ward rounds called DoRo, or docent rotation.

New students are paired with a senior partner who serves as another mentor, allowing advanced students to take additional responsibility. Peer and self-evaluations are used to augment student education and training.

Research

Students have the opportunity to work with faculty in both clinical and research settings. Students involved in research have the opportunity to present their findings each spring at the annual Student Research Summit, and funding is available to support student research projects. The Office of Research Administration facilitates student research programs as well as coordinates supplemental research lectures and seminars.

Service

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Curriculum

M.D. students enter the medical program and enroll in the Human Structure Function series in January and remain in the program for 52 consecutive blocks. Three distinct curriculum plans have been devised, which allow M.D. students to proceed through the curriculum along one of three possible tracks. Two tracks provide the M.D. students with five blocks of time during which they do not formally enroll. The first track allows M.D. students to elect the five-block leave of absence immediately following completion of USMLE Step 1, and the second track provides for a five-block leave of absence midway through the clinical clerkship sequence. The third track allows M.D. students to complete their 52 blocks of continuous enrollment in December, and does not provide any break during the program other than one block of vacation time per year of enrollment.

Code	Title	Credits
Year 1		
BMS 9296	Human Structure Function I	6
BMS 9297	Human Structure Function II	5
BMS 9298	Human Structure Function III	5
BMS 9311	Medical Microbiology	5
MEDICINE 9220	Fundamentals Of Medical Practice IV	5
MEDICINE 9308	Clinical Practice of Medicine I	3
MEDICINE 9312	Pathology I: General Pathology, Genetics, and Immunology	10
MEDICINE 9383	Continuing Care Clinic	5
MEDICINE 9385	Introduction to Pharmacology	2
MEDICINE 9390	Clinical Correlations	5
Year 2		

MEDICINE 9309	Clinical Practice of Medicine II	5
MEDICINE 9313	Pathology II: Systems-Based Pathology and Pathophysiology	11
MEDICINE 9401	Internal Medicine/Docent Instruction Yr 4	10
MEDICINE 9408	Pharmacology	10
MEDICINE 9471	Family Medicine	5
MEDICINE 9472	Behavioral Science in Medicine	5
MEDICINE 9482	Patient, Physician, Society I	2
MEDICINE 9483	Continuing Care Clinic	5
MEDICINE 9484	Patient, Physician, Society II	2
MEDICINE 9485	Ambulatory Care Pharmacology	2
Year 3		
MEDICINE 9501	Internal Medicine/Docent Instruction Yr 5	10
MEDICINE 9503	Pediatrics Rotation	10
MEDICINE 9505	General Surgery Rotation	10
MEDICINE 9506	Obstetrics-Gynecology Rotation	10
MEDICINE 9570	Family Medicine Preceptorship	5
MEDICINE 9571	Psychiatry Rotation	5
MEDICINE 9583	Continuing Care Clinic	5
MEDICINE 9585	Prescribing for Special Populations	2
Medical Humanities/Social Science Elective		5
Year 4		
MEDICINE 9601	Internal Medicine/Docent Instruction Yr 6	10
MEDICINE 9678	Emergency Medicine	5
MEDICINE 9683	Continuing Care Clinic	5
MEDICINE 9685	Rational and Safe Drug Prescribing	2
Electives ¹		30
Total Credits		222

¹ Students may take six to seven electives in Year 4. Students must complete at least three clinical electives from nine designated categories. One of these electives must also be a critical care elective.

Student Learning Outcomes

Please click here to review the Student Learning Outcomes (<http://med.umkc.edu/docs/catalog/UMKC-SOM-SLO.pdf>)

Graduation Requirements

Approval of each student's curriculum plan is contingent on the following expectations:

1. Continuous enrollment in the School of Medicine for 52 blocks (including four blocks vacation).
2. Four vacation blocks (one per 13 block period) during the 52 blocks of enrollment.
3. Successful completion of 34 blocks of UMKC School of Medicine credit for graduation.
4. Participation in Fundamentals of Medicine IV (MED 9220) concurrent with participation in Human Structure Function.
5. Enrollment in all required School of Medicine rotations and courses with students in Years III through VI of the six-year program including the Patient Physician Society Series and Self-Paced Pharmacology Series.
6. All students will be required to complete a one blocks humanities/social sciences course in the last two years. Any alternative must be petitioned.

Applying for Admission

Please click here to visit the program website (<http://med.umkc.edu/md/apply/>) for information regarding:

- Applying for Admission
- Admission Requirements
- Council on Selection (Admissions Committee)

- Technical Standards
- Costs & Financial Aid

Please visit the M.D. Program website (<http://med.umkc.edu/md/>) for additional information regarding this program: <http://med.umkc.edu/md> (<http://med.umkc.edu/md/>)

UMKC School of Medicine

Office of Admissions, M1-103

2411 Holmes

Kansas City, MO 64108

Phone: 816-235-1870

Fax: 816-235-6579

Website: med.umkc.edu (<http://med.umkc.edu>)

Email: medicine@umkc.edu

Medical Student Organizations, Publications and Awards

Alpha Omega Alpha

The Delta Chapter of the Alpha Omega Alpha Honor Society is an organization open to the no more than 1/6th of the graduating class. In accordance with the national constitution, scholastic achievement should be the primary but not sole basis for election of a student. Leadership capabilities, ethical standards, fairness in dealing with colleagues, potential for achievement in medicine, integrity, compassion, professionalism, conscientiousness, and a record of service to the school and community at large should be criteria considered in addition to the academic record. Memberships are also granted each year to a faculty member, an alum of the school, and a member of the housestaff or fellow each year.

American Medical Association - Medical Student Section

Dedicated to representing medical students, improving medical education, developing leadership and promoting activism for the health of America.

American Medical Student Association

The primary goal of AMSA is the initiation of student-organized projects for the benefit of medical students and the community on local, state and national levels. The development of hypertension clinics, presentations about venereal disease to area high schools, AIDS awareness programs and a drug-replacement program represent some of AMSA's projects in past years.

American Medical Women's Association

The AMWA promotes an understanding of the individual in medicine. Its membership is open to all interested men and women. AMWA's programs include speakers on special topics, field trips, social projects and other activities of benefit to all students.

Association of American Medical Colleges - Organization of Student Representatives

The OSR is the student branch of the Association of American Medical Colleges (AAMC). The OSR is charged with the representation of the undergraduate medical student body of the United States to the academic medical community.

Asian Pacific American Medical Students' Association

The goals of APAMSA are to educate all medical students about health-care needs specific to the Asian Pacific community and to address issues important to Asian Pacific American medical students.

Christian Medical/Dental Society

This group is open to students of all faiths. The organization fosters greater understanding of spiritual concerns in relationship to health and well-being.

Global Medicine Relief Program

GMRP's mission is to promote quality health care in under-served communities around the world by working with local doctors and health care professionals and by providing medical supplies and equipment; to provide dental, hygiene and basic health care supplies in areas of natural disaster; to promote human rights in developing regions by improving health infrastructure; to participate in a global community of organizations which are similarly dedicated to providing health care in developing regions; and to organize student groups at all educational levels in these humanitarian efforts. GMRP especially seeks to touch the lives of the most vulnerable people in any population and believes in the importance of assisting both internally and externally displaced refugees.

Gold Humanism Society

The Gold Humanism Society is sponsored by the Arnold P. Gold Foundation and is closely linked to the Sirridge Office of Medical Humanities.

Medical Student Advisory Council

The MSAC serves as the student government body in the School of Medicine and is comprised of student-elected representatives who focus on promoting student interests, keeping the administration informed of student opinion and organizing social activities. MSAC serves as an umbrella organization for student interest groups in the areas of Anesthesiology, Emergency Medicine, Family Medicine, Geriatric Medicine, Internal Medicine, International Medicine, Med/Peds, Obstetrics/Gynecology, Physical Medicine and Rehabilitation, Psychiatry, Spanish in Medicine, and Surgery

Sojourner Clinic

The Sojourner Health Clinic is a free clinic developed and managed by UMKC Medical Students to provide outpatient care to the homeless and underprivileged population served by Grand Avenue United Methodist Temple. On Sunday afternoons, the students, with faculty supervision, provide acute and chronic medical care to the Sojourners of downtown Kansas City, many of whom also are served a free hot lunch at Grand Avenue Temple.

Student National Medical Association

The promotion of the interests of minority students is the foundation of the SNMA. Leadership development, social awareness, service to humanity and excellence as physicians are the major objectives of this group

Student Wellness Council

The Student Wellness Council promotes healthy habits and wellness amongst UMKC School of Medicine students

Publications

A monthly publication of the school, P.R.N., provides information on school programs, policies and student activities and is distributed online to School of Medicine students, their families and faculty. A quarterly magazine, Panorama, is primarily distributed to alumni, affiliated hospitals and friends of the school and is available throughout the school.

Philosophy

The fundamental purpose of medical schools is to educate physicians. The prime objective of all professionals, physicians included, is to apply a sophisticated body of knowledge and skills to the solution of problems faced by people. In doing so, the individual will follow standards of the profession for competence, ethics and communication and will demonstrate commitment to the principles of professionalism - altruism, humanism, excellence and accountability.

The school does not separate the several obligations of a medical school: to educate the student, the house officer and the physician; to attract new talent to the health-care field and to ensure that talent remain active and prepared; to maintain maximum standards of ethics and care; to have concern equally for the individual and for the community; and to foster inquiry, to find answers and to apply those answers.

Requirements for Graduation in the B.A. - M.D. Combined Program

B.A./M.D. Program

In order to graduate from the UMKC School of Medicine B.A./M.D. Program, students must complete the following graduation requirements. Baccalaureate Degree

- Students must select an undergraduate B.A. major or emphasis area from a variety of disciplines
- The most common baccalaureate degrees are in liberal arts, biology, chemistry, communication studies, philosophy, psychology and sociology.
- Students may earn up to 30 semester hours of college credit through the Advanced Placement Program, International Baccalaureate Program or specific subject-area examinations of the College Level Examination Program (CLEP).
- Students must satisfactorily complete a minimum of 90 semester hours of non-medical courses on the UMKC Volker campus in the following subject areas: English, fine arts, government, history, humanities, literature, natural science, philosophy and social/behavioral science.
- Thirty additional semester hours toward the baccalaureate degree are awarded from required concurrent medical coursework.
- Students enrolled in the combined degree program at UMKC are required to complete a minimum of 38 hours of credit through the College of Arts and Sciences and/or the School of Biological Sciences subsequent to matriculation into the B.A./M.D. program regardless of the amount of previous credit earned.

Doctor of Medicine Degree

Students in the combined B.A./M.D. program must have satisfactory completion, certified by the UMKC registrar, of requirements for the baccalaureate degree and 38 months of medical curriculum credit.

- Students must achieve Certification in Advanced Cardiac Life Support.
- Students must receive docent certification of clinical competence.
- Student must earn a cumulative GPA of 2.8 – 4.0.
- Students must earn passing scores on Step 1 and Step 2 CS & CK of the United States Medical Licensing Examination (USMLE).
- Students must complete 48 months of enrollment in the School of Medicine, Years 3 – 6.
- At least three clinical electives are required and these must come from a minimum of three of the nine School of Medicine approved clinical elective categories. One of these electives must be a critical care elective.
- Students are expected to evaluate the quality of their experiences through course and performance evaluations, a graduation questionnaire and a survey of their performance at the end of their first postgraduate year.

Residency & Subspecialty Programs

Residencies & Subspecialty Fellowships

See information about Residencies & Subspecialty Fellowships on the Graduate Medical Education Page >>>> (<http://med.umkc.edu/gme/residencies-and-fellowships/>)

Student Learning Outcomes for Six Year B.A.-M.D. Program

Years 1-2

Effective Communication

- The student demonstrates competence in written communications such as laboratory reports, term papers and other classroom writing assignments.
- The student demonstrates competence in oral communications in a one-on-one setting, such as introducing and beginning a history with an individual patient. History-taking skills at this level will be very basic and straightforward.
- The student demonstrates effective listening skills with faculty members, other students and patients.

Clinical Skills

- The student is able to perform the basic elements of a history. The student will have observed a physical examination and observed some of the routine clinical procedures.

Using Basic Science in the Practice of Medicine

- The student has an introductory and very general understanding of anatomy and microbiology.
- The student has a more advanced understanding and an ability to apply some information to a few clinical situations in biochemistry and physiology.

Diagnosis, Management and Prevention

- The student has an introductory understanding of principles of diagnosis, management and prevention.
- The student is able to identify general, rather than specific approaches to management, but is usually not expected to carry them out in real settings.

Lifelong Learning in Medicine, Basic Sciences, the Social Sciences and the Humanities

- The student is proficient in framing a question, utilizing modern information searching modalities, organizing data, compiling and using information to answer the question in the context of a structured setting, such as an undergraduate course.
- The student has an introductory knowledge of the humanities and social science. Enough information is learned at this level to stimulate the student to desire further learning in medicine, humanities and social sciences.

Self-awareness, Self-care, Personal Growth and Professional Behavior

- The student exhibits behaviors indicative of personal self-awareness through a process of self reflection. Students are able to identify potential areas of weakness and are able to conceive of potential options for addressing these areas.
- The student is able to identify areas of strength and is able to build on these strengths.
- The student is able to set goals for a self-study plan.
- The student is aware of his/her personal growth in regards to age specific developmental tasks.
- The student knows the elements of professional behavior and can explain the meaning of each element.
- The student can cite an example of how each of the elements applies in Year 1 and Year 2 coursework for the baccalaureate and M.D. degree.

- The student shows courteous regard for other students and faculty and acknowledges the views of others. The student shows courteous regard for his/her mentor on aging and for the patients they meet in their docent group experiences. The student interacts with patients they meet in their docent group experiences in an appropriately compassionate fashion. The student expresses empathy for his/her mentor on aging as appropriate.
- The student puts the legitimate needs of his/her mentor on aging, patients, docent group members and study group members first before his/her own needs.
- The student demonstrates academic honesty in all aspects of his/her coursework for the baccalaureate-M.D. degree.
- The student carries through on assignments and other responsibilities; arrives promptly for meetings or classes; accepts personal responsibility for group projects; and completes course evaluations in a timely and thoughtful fashion.
- The student searches out opportunities to learn and tries to excel in their coursework.

Diversity and the Social and Community Contexts of Health Care

- The student appreciates some of the non-biological factors that influence health, disease, disability and access to care.
- The student attributes proper importance to identifying non-biological factors.
- The student is aware of different value systems and life styles.

Moral Reasoning and Ethical Judgment

- The student can identify and apply ethical considerations relating to professional behavior and student conduct as a forerunner to professional behavior.
- The student develops an introductory understanding of ethical choices related to a few controversial medical issues.

Problem-Solving Skills

- The student displays competence in basic problem-solving skills as applied to basic science courses or simple, straightforward medical problems.

Years 3-4

Effective Communication

- The student develops and demonstrates competency in using the written language effectively by:
 - Medical record documentation in the continuing care clinic and on docent rotation.
 - Writing papers for courses and rotations.
 - Essay examinations in medical ethics.
- The student develops and demonstrates competency in using oral language and listening effectively by:
 - Communicating with patients and families in the continuing care clinic and on docent rotation.
 - Communicating with senior partners, peers and faculty.
 - Functioning as an effective junior partner.

Clinical Skills

- The student is able to perform a comprehensive history and physical examination of patients in the outpatient setting and the general medical wards, excluding critical care settings.
- The student is competent in performing venipuncture and basic CPR.
- The student is able to perform a gram-stain, vaginal smear wet prep, stool occult blood, urinalysis, urine pregnancy test, finger stick glucose determination and peak expiratory flow rate.
- The student has observed and is familiar with some of the more complex or specialized lab and diagnostic tests.
- The student knows the basics in the interpretation of plain x-ray studies; chest x-ray, abdominal x-ray.

Using Basic Science in the Practice of Medicine

- The student applies knowledge in the areas of behavioral science, anatomy, pathology, biochemistry, physiology, microbiology and immunology, and pharmacology to the overall care of patients.

Diagnosis, Management, Continuing Care and Prevention

- The student is able to interpret standard diagnostic studies and history and physical examination data. From these data, the student is able to state the most likely diagnosis when presented with straightforward presentations of common problems in general internal medicine. The student is expected to carry out management plans in those situations that are relatively straightforward and uncomplicated.

Lifelong Learning in Medicine, Basic Sciences, the Social Sciences and the Humanities

- The student is able to do a computerized literature search as it applies to patient problems.
- The student is able to comprehend the medical literature and understand basic statistics and the scientific method.
- The student is continually motivated by an awareness of the limits of his/her personal knowledge and experience.

Self-awareness, Self-care, Personal Growth and Professional Behavior

- The student is reflective about him or herself in a group context.
- He or she is able to confront his/her own values as they relate to the practice of medicine.
- The student is able to identify real situations of stress and his/her response to these situations.
- The student is able to practice personal techniques for relaxation and time management and can modify behavior and respond to constructive criticism.
- The student is able to identify learning needs, plan a program to meet those needs and determine how well they have met them and what further learning issues they need to address.
- The student identifies the elements of professional behavior and can explain the meaning of each element: respect, compassion and empathy, altruism, honesty, responsibility, and excellence. The student can give an example of how each of the elements of professionalism applies to Year 3 and Year 4 coursework for the baccalaureate and MD degrees and actively demonstrates them by behavior.
- The student shows courteous regard for patients, students, faculty, and members of the health care team and acknowledges their views.
- The student interacts with patients, patients' families, and members of the health care team in an appropriately empathic and compassionate fashion.
- The student contributes to the docent team and other small groups by sharing knowledge and skills, expressing positive attitudes and accepting help from others to address his/her deficiencies.
- The student recognizes how potential conflicts between his/her own needs and the legitimate needs of patients, docent group members, and study group members might be resolved and can discuss a rationale for alternative resolutions.
- The student is honest in all aspects of coursework for the baccalaureate-MD degree and takes responsibility for his/her errors in the patient care setting after discussion with supervisors.
- The student carries through on assignments and other responsibilities; arrives promptly for meetings, classes, rounds and clinics; accepts personal responsibility for group projects and for assigned patients; and completes course evaluations in a timely and thoughtful fashion.
- The student searches out opportunities to learn, demonstrates lifelong learning skills, and tries to excel in coursework and scholarship.

Diversity and the Social and Community Contexts of Health Care

- The student elicits and identifies non-biological factors as part of the routine history taking and includes those issues, as appropriate, in the problem list formulations and management plans.
- The student takes personal responsibility for discussing these issues with patients, assessing their needs and matching them to appropriate community resources.
- The student works with his/her individual patients and families to enhance their total well-being.

Moral Reasoning and Ethical Judgment

- The student is able to employ ethical concepts and reasoning when presented with typical ethical cases in medicine, and is able to recognize ethical issues in medical practice.

Problem-Solving Skills

- The student displays competence in problem-solving skills with common clinical problems utilizing a limited knowledge base.

Years 5-6

Effective Communication

- The student develops and demonstrates competency in using the written language effectively by:
 - medical record documentation on clinical rotations.
 - preparing written patient education material.
 - writing clinical papers.
 - journals, short stories, papers or poetry during medical humanities and social science courses.
- The student develops and demonstrates competency in using oral language and listening effectively by:
 - communicating with patients and families in the continuing care clinic and clinical rotations.
 - presenting new patients to faculty in continuing care clinic and clinical rotations.
 - delivering lectures on clinical rotations utilizing slides and handouts.

- communicating with student partners, peers, faculty and the health care providers.
- oral examinations.
- The student develops and demonstrates competency in respecting patients and sharing information effectively with patients, families and health care team members by:
 - interacting with the individuals on clinical rotations and the continuing care clinic.
 - working as an integral part of the docent team and teams on other clinical rotations.
 - functioning as an effective senior student partner.

Clinical Skills

- The student is able to perform the basic and emergency elements of a history and physical examination smoothly and efficiently in the outpatient setting, inpatient setting, critical care setting and emergency department settings.
- The student is able to perform and interpret basic clinical procedures, laboratory and diagnostic tests smoothly and efficiently as listed.
- The student is able to describe the procedural steps necessary to carry out advanced clinical procedures as listed.
- The student observes and is able to state the indications, complications, and limitations of advanced clinical procedures as listed.
- The student is aware of the indications, complications and limitations of and interpret from the written reports complex and specialized laboratory and diagnostic tests as listed.

Using Basic Science in the Practice of Medicine

- The student is able to explain a multi-system health problem in terms of pathogenesis, mechanisms of system-to-system interactions and potential complications. The student is able to present therapeutic goals and interventions aimed at the multiple pathophysiological forces in motion.
- The student is able to exhibit clinical decision analysis that weighs the pros and cons of proposed interventions, taking into consideration such factors as drug-drug interactions and the trade-off of proposed drug interventions in the context of multi-system problems.

Diagnosis, Management, and Prevention

- The student is able to state the most likely diagnosis and management plan when presented with presentations of common problems in any of the major disciplines.
- The student is able to integrate the approach of care to individuals, families and communities, taking advantage of opportunities for prevention and education in addition to the immediate physical care.
- The student through his/her experiences in the continuing care clinic is able to provide continuing care and management for both chronic and acute medical problems and provide appropriate plans for prevention.

Lifelong Learning in Medicine, Basic Sciences, the Social Sciences and the Humanities

- The student begins to explore new opportunities for intellectual growth and professional enlightenment in medicine, the social sciences and humanities.
- The student attends a continuing medical education course.
- The student continues to recognize his/her limits of knowledge and experience.
- The student is able to recognize the significance of valid scientific discoveries reported in medical journals and recognize unsubstantiated, inaccurate or poorly performed studies and conclusions.

Self-awareness, Self-care, Personal Growth and Professional Behavior

- The student utilizes skill in coping with stress during clinical rotations.
- The student develops and demonstrates appropriate personal values and beliefs relevant to his/her practice of medicine.
- The student identifies the elements of professional behavior and can explain the meaning each element: respect, compassion and empathy, altruism, honesty, responsibility, and excellence.
- The student gives examples of how each of the elements of professionalism applies to Year 5 and Year 6 coursework for the baccalaureate and MD degrees and actively demonstrates them by behavior. He/she teaches these elements of professional behavior to junior students by explicit role modeling.
- The student shows courteous regard for patients, student, faculty and health care team members, and acknowledges their views. He/she teaches respect for other people to junior students by explicit role modeling.
- The student interacts with patients, patient families and members of the health care team in an appropriately empathic and compassionate fashion. He/she teaches compassion and empathy to junior students by explicit role modeling.
- The student contributes to the docent team and other small groups by exercising effective leadership and active teaching of teamwork.
- The student resolves potential conflicts between his/her own needs and the legitimate needs of his/her patients or health care team members appropriately and can discuss a credible rationale for the resolution.

- The student is honest in all aspects of coursework for the baccalaureate-MD degree and takes responsibility for his/her errors in the patient care setting after discussion with little or no supervision.
- The student carries through on assignments and other responsibilities; arrives promptly for meetings, classes, rounds and clinics; accepts personal responsibility for group projects and for assigned patients; and completes course evaluations in a timely and thoughtful fashion. He/she teaches junior students about responsibility through explicit role modeling.
- The student searches out opportunities to learn, demonstrates lifelong learning skills, and endeavors to excel in coursework and scholarship. He/she teaches junior students about life learning.

Diversity and the Social and Community Contexts of Health Care

- The student is able to identify and propose solutions for non-biological factors that influence health, disease, disability and access to care.
- The student is able to utilize resources in the community that may provide assistance to his or her patients.
- The student is an advocate for better health for the patients and the community.
- The student demonstrates knowledge of practice management, utilization review, quality improvement and economic and cultural issues in health care.

Moral Reasoning and Ethical Judgment

- The student is able to identify patient care and health policy ethical issues and choices in his or her own clinical experience; to evaluate critically alternative ethical courses of action by analyzing and articulating reasons for the relative importance of the different ethical considerations bearing on each choice; to select and ethically defend a course of action.
- The student recognizes the importance of the ethical treatment of research subjects and the functions of an Institutional Review Board.

Problem Solving

- The student displays competence in more advanced clinical problem solving using a comprehensive knowledge base.
- The student can effectively utilize a team approach in solving clinical problems.

Typical Six-Year Program of Study

Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

Students in the six-year program can choose from three undergraduate degrees as shown below: **Bachelor of Arts in Biology, Bachelor of Arts in Chemistry, or Bachelor of Liberal Arts**. Undergraduate degrees are conferred by either the School of Biological & Chemical Sciences or the College of Arts & Sciences, as appropriate for the declared undergraduate program.

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

6 Year BA/MD Program - Bachelor of Arts in Biology

Please Note:

- AP, IB, CLEP, or transfer credit may be applied to select courses below. See UMKC Registration and Records for details.
- Students may satisfy the ENGLISH 110 requirement with ACT English subscore of 30 or above or SAT verbal subscore of 690 or above.
- **One of the following courses must be completed before beginning the 6-year combined degree curriculum in order to be able to complete the BA Biology:** BIOLOGY 108+108L General Biology with lab (4 cr, min grade B) *OR* CHEM 211 + 211L General Chemistry I with lab (5 cr, min grade B)

First Year

Summer Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
Attend Freshmen Orientation		0 LS-ANATO 219 & 219L ^{CC}		4 CHEM 212R & CHEM 212LR ^{CC}	5
		BIOLOGY 108 & 108L (or CHEM 211 & CHEM 211L) ^{CC}	4-5	LS-MCRB 121 & 121L ^{CC}	4
		MEDICINE 9110 ^{CC}	5	MEDICINE 9120 ^{CC}	5
		MEDICINE 9115 ^{CC}	1	ENGLISH 225	3

	GEFSE 101	3	GECRT-SC 101	3
	ENGLISH 110	3	GECRT-AH 101	3
	0	20-21		23

Second Year

Summer Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 202	3	BMS 9265 ^{CC}	5	BMS 9296 ^{CC}	6
CHEM 320 & 320L	5	BIOLOGY 206 ^{CC}	3	BMS 9297 ^{CC}	5
MEDICINE 9221	1	MEDICINE 9210 ^{CC}	5	BMS 9298 ^{CC}	5
		SOCIOL 211 ^{CC}	3	MEDICINE 9220 ^{CC}	5
		COMM-ST 110	3		
		GECRT-SS 101	3		
	9		22		21

Third Year

Summer Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
BMS 9399	6	BMS 9310	9	BMS 9311	5
MEDICINE 9310	1	MEDICINE 9308	3	MEDICINE 9309	5
MEDICINE 9390	5	MEDICINE 9312	10	MEDICINE 9313	11
		MEDICINE 9383	5	MEDICINE 9383	5
		MEDICINE 9385	2		
	12		29		26

Fourth Year

Summer Semester	Credits
POL-SCI 210, HISTORY 101, or HISTORY 102 (Summer, Fall, or Spring)	3
STAT 235 or MATH 210 (Summer, Fall, or Spring)	3
GECDV 201 (Summer, Fall, or Spring)	3
GECUE 201 (Summer, Fall, or Spring)	3
BIOLOGY 498WI (Summer, Fall, or Spring)	3
PSYCH 210	3
	18

Total Credits: 180-181

Medical Courses

Fourth Year	Credits
MEDICINE 9401	10
MEDICINE 9408	10
MEDICINE 9471	5
MEDICINE 9472	5
MEDICINE 9483	5
MEDICINE 9482 (Fall)	2
MEDICINE 9484 (Spring)	2
MEDICINE 9485 (Spring, online)	2

Fifth Year	Credits
MEDICINE 9501	10
MEDICINE 9503	10
MEDICINE 9505	10
MEDICINE 9506	10
MEDICINE 9570	5
MEDICINE 9571	5
MEDICINE 9583	5
MEDICINE 9585 (online)	2
	57

Sixth Year	Credits
MEDICINE 95XX Medical Humanities Elective	5
MEDICINE 9601	10
MEDICINE 9683	5
MEDICINE 9685 (online)	2
MEDICINE 9678	5
MEDICINE 98XX-99XX Clinical Elective	5
MEDICINE 98XX-99XX Clinical Elective	5
MEDICINE 98XX-99XX Clinical Elective	5
MEDICINE 98XX-99XX Clinical Elective	5
	47

Total Credits: 145

6 Year BA/MD Program - Bachelor of Arts in Chemistry

Please Note:

- AP, IB, CLEP, or transfer credit may be applied to select courses below. See UMKC Registration and Records for details.
- Students may satisfy the ENGLISH 110 requirement with ACT English subscore of 30 or above or SAT writing subscore of 690 or above.
- **The following courses must be completed before beginning the 6-year combined degree curriculum in order to be able to complete the BA Chemistry:**
 - PHYSICS 210 General Physics I AND PHYSICS 220 General Physics II OR PHYSICS 240 Physics for Sci/Engr I AND PHYSICS 250 Physics for Sci/Engr II (4-5 cr, min grade B)
 - MATH 210 Calculus I OR STAT 235 Elementary Statistics (3-4 cr, min grade B)

First Year

Summer Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
Attend Freshmen Orientation	0	CHEM 211 & 211L	5	CHEM 212R & CHEM 212LR	5
		LS-ANATO 219 & 219L ^{CC}	4	LS-MCRB 121 & 121L ^{CC}	4
		MEDICINE 9110 ^{CC}	5	MEDICINE 9120 ^{CC}	5
		MEDICINE 9115 ^{CC}	1	ENGLISH 225	3
		GEFSE 101	3	COMM-ST 110	3
		ENGLISH 110	3	GECRT-SS 101	3
	0		21		23

Second Year

Summer Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
MEDICINE 9221	1	BMS 9265 ^{CC}	5	BMS 9296 ^{CC}	6

CHEM 320 & 320L	5	BIOLOGY 206 ^{CC}	3	BMS 9297 ^{CC}	5
BIOLOGY 202	3	MEDICINE 9210 ^{CC}	5	BMS 9298 ^{CC}	5
		SOCIOL 211 ^{CC}	3	MEDICINE 9220 ^{CC}	5
		GECRT-AH 101	3		
	9		19		21

Third Year

Summer Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
MEDICINE 9390	5	BMS 9310	9	BMS 9311	5
MEDICINE 9310	1	MEDICINE 9308	3	MEDICINE 9309	5
BMS 9399	6	MEDICINE 9312	10	MEDICINE 9313	11
		MEDICINE 9383	5	MEDICINE 9383	5
		MEDICINE 9385	2		
	12		29		26

Fourth Year

Summer Semester	Credits
GECDV 201 (Summer, Fall, or Spring)	3
GECUE 201 (Summer, Fall, or Spring)	3
HISTORY 101, 102, or POL-SCI 210 (Summer, Fall, or Spring)	3
PSYCH 210	3
CHEM 341WI (Summer, Fall, or Spring)	4
CHEM 3XX/4XX Major Elective (Summer, Fall, or Spring)	3
	19

Total Credits: 179

Fourth Year	Credits
MEDICINE 9401	10
MEDICINE 9408	10
MEDICINE 9471	5
MEDICINE 9472	5
MEDICINE 9483	5
MEDICINE 9482 (Fall)	2
MEDICINE 9484 (Spring)	2
MEDICINE 9485 (Spring, online)	2
	41

Fifth Year	Credits
MEDICINE 9501	10
MEDICINE 9503	10
MEDICINE 9505	10
MEDICINE 9506	10
MEDICINE 9570	5
MEDICINE 9571	5
MEDICINE 9583	5

MEDICINE 9585 (online)	2
	57
Sixth Year	Credits
MEDICINE 95XX Medical Humanities Elective	5
MEDICINE 9601	10
MEDICINE 9683	5
MEDICINE 9685 (online)	2
MEDICINE 9678	5
MEDICINE 98XX-99XX Clinical Elective	5
MEDICINE 98XX-99XX Clinical Elective	5
MEDICINE 98XX-99XX Clinical Elective	5
MEDICINE 98XX-99XX Clinical Elective	5
	47

Total Credits: 145

6 Year BA/MD Program - Bachelor of Liberal Arts

Please Note:

- AP, IB, CLEP, or transfer credit may be applied to select courses below. See UMKC Registration and Records for details.
- Students may satisfy the ENGLISH 110 requirement with ACT English subscore of 30 or above or SAT writing subscore of 690 or above.
- Students may satisfy the MATH 110 or higher requirement with ACT Math subscore of 28 or above or SAT math subscore of 660 or above.
- BLA students MUST complete a minor. Most BA/MD students complete the chemistry minor and the following classes will count toward that: CHEM 211, CHEM 211L, CHEM 212R, CHEM 212LR, CHEM 320, CHEM 320L, BMS 9265, and a 3xx/4xx CHEM elective.

First Year

Summer Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
Attend Freshmen Orientation	0	LS-ANATO 219 & 219L ^{CC}	4	LS-MCRB 121 & 121L ^{CC}	4
		CHEM 211 & 211L ^{CC}	5	CHEM 212R & CHEM 212LR ^{CC}	5
		MEDICINE 9110 ^{CC}	5	MEDICINE 9120 ^{CC}	5
		MEDICINE 9115 ^{CC}	1	COMM-ST 110	3
		GEFSE 101	3	ENGLISH 225	3
		ENGLISH 110	3	GECRT-SC 101	3
	0		21		23

Second Year

Summer Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
MEDICINE 9221	1	BMS 9265 ^{CC}	5	BMS 9296 ^{CC}	6
BIOLOGY 202	3	BIOLOGY 206 ^{CC}	3	BMS 9297 ^{CC}	5
CHEM 320 & 320L	5	MEDICINE 9210 ^{CC}	5	BMS 9298 ^{CC}	5
		SOCIOL 211 ^{CC}	3	MEDICINE 9220 ^{CC}	5
		GECRT-AH 101	3		
		GECRT-SS 101	3		
	9		22		21

Third Year

Summer Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
MEDICINE 9390	5	BMS 9310	9	BMS 9311	5

MEDICINE 9310	1	MEDICINE 9308	3	MEDICINE 9309	5
BMS 9399	6	MEDICINE 9312	10	MEDICINE 9313	11
		MEDICINE 9383	5	MEDICINE 9383	5
		MEDICINE 9385	2		
	12		29		26

Fourth Year**Summer Semester****Credits**

GECDV 201 (Summer, Fall, or Spring)	3
GECUE 201 (Summer, Fall, or Spring)	3
HISTORY 101, 102, or POL-SCI 210 (Summer, Fall, or Spring)	3
MATH 110	3
PSYCH 210	3
3XX/4XX Writing Intensive Course (Humanities prefix) (Summer, Fall, or Spring)	3
CHEM 3XX/4XX Minor Elective (Summer, Fall, or Spring)	3
	21

Total Credits: 184

Fourth Year**Credits**

MEDICINE 9401	10
MEDICINE 9408	10
MEDICINE 9471	5
MEDICINE 9472	5
MEDICINE 9483	5
MEDICINE 9482 (Fall)	2
MEDICINE 9484 (Spring)	2
MEDICINE 9485 (Spring, online)	2
	41

Fifth Year**Credits**

MEDICINE 9501	10
MEDICINE 9503	10
MEDICINE 9505	10
MEDICINE 9506	10
MEDICINE 9570	5
MEDICINE 9571	5
MEDICINE 9583	5
MEDICINE 9585 (online)	2
	57

Sixth Year**Credits**

MEDICINE 95XX Medical Humanities Elective	5
MEDICINE 9601	10
MEDICINE 9683	5
MEDICINE 9685 (online)	2

MEDICINE 9678	5
MEDICINE 98XX-99XX Clinical Elective	5
MEDICINE 98XX-99XX Clinical Elective	5
MEDICINE 98XX-99XX Clinical Elective	5
MEDICINE 98XX-99XX Clinical Elective	5

47

Total Credits: 145

School of Nursing & Health Studies

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¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

⁴ Located at UM-St. Louis campus

Health Sciences Courses

HLSC 100 Student Success Strategies Credit: 1

Topics will include setting goals for academic success, anticipating obstacles, problem solving solutions, and time management. Students will practice improving their listening, note-taking, and reading skills. They will practice communication, public speaking, and writing skills. Students will begin self-evaluation strategies to learn more about their motivation for successfully completing their academic program.

HLSC 101 Introduction to Health Sciences Credits: 2

This course introduces students to career options in health sciences. Students will explore basic concepts related to understanding one's role and scope of practice, professional responsibilities, and education and credentialing requirements for various careers in health. The course will explore basic concepts required by any health professional including history, safety, ethics, interpersonal skills, general well-being, as well as special skills and aptitudes required in various health career clusters. Students will explore health career paths in medical, government, business, non-profit, and many other sectors.

HLSC 110 Personal Wellness Credits: 3

This course presents an overview of health behaviors and actions needed to achieve a combination of physical, mental, and social well-being through intelligent lifestyle choices. Effective strategies for staying healthy and improving one's health will be explored. Elements of stress management, preservation of physical and mental well-being, personal hygiene and strong social relationships will be discussed.

HLSC 120 Anatomy & Physiology I Credits: 4

This course examines the structure and function of the human body from the molecular to the organism level as they interact among all body systems across the life span. Instructors also attempt to correlate course materials with the clinical aspects of the application of physiological knowledge. Co-requisite laboratory exercises provide practical application of theoretical concepts. In this first term of two-term course, molecular biology, biochemistry, cellular biology, and histology are studied as well as the integumentary, musculoskeletal, and nervous systems.

HLSC 125 Medical Terminology Credit: 1

This course is designed to provide the student with a foundation in medical terminology and the components of health records. Course content will include how medical terms are formed; how medical terms are applied to organs, body systems and pathological conditions; how common medical abbreviations are used; and how health records are organized and compiled.

HLSC 160 Anatomy and Physiology II Credits: 4

This course is a continuation of HLSC 120. Co-requisite laboratory exercises provide practical application of theoretical concepts. Physiologic systems including endocrine, cardiovascular, immune, respiratory, digestive, renal, and reproductive are studied as well as embryology and genetics.

Prerequisites: HLSC 120 or NURSE 120.

HLSC 200 First Aid / CPR Credit: 1

This course is designed to certify students with the American Heart Association (AHA) in Basic Life Saving for Healthcare Providers and bloodborne pathogens. Students will be exposed to critical concepts of high quality Cardiopulmonary Resuscitation (CPR), the AHA's Chain of Survival, and 1 and 2 rescuer CPR and Automatic External Defibrillator (AED) for adult, child and infants. Bag-mask technique, rescue breathing, relief of choking will be covered. Adult and pediatric first aid basics, medical emergencies, injury emergencies, and environmental emergencies will be covered. The course will include information on bloodborne pathogens (protection, action, proper cleaning and reporting).

HLSC 230 Health Issues in Aging Credits: 3

This course focuses on promotion and maintenance of the health and well-being of the older adult population. Current trends and needs of the ever changing and diversifying older adult population are discussed. The physiological and psychological domains, socio-cultural influences, legal and ethical issues, and health care resources pertaining to older adults in relationship to their health and quality of life are explored. Assessments, problems and strengths, interventions, and outcomes specific to the older adult population are discussed. Opportunities are provided for interaction with the older adult population through service learning.

HLSC 252 Human Growth and Development Credits: 3

This course provides a basic introduction to the theory for human growth and development across the life span. Emphasis is placed upon the biological and the psychosocial aspects of growth and development. Content is organized in a modified chronological order dividing information into major stages of growth and development across the lifespan.

HLSC 252 - MOTR PSYC 200: Lifespan Human Development

**HLSC 255 Spanish for Health Care Pre-Professionals Credits: 3**

This course focuses on conversational Spanish, medical terminology in Spanish, and written/read Spanish. This course will provide the student with basic knowledge that will allow communication with clients who speak/read/write Spanish. This is a fast paced course and will require practice of the language outside of the classroom in order to master the material presented. Recommended preparation: SPANISH 110.

HLSC 300 Diversity in Health Credits: 3

This course will explore social determinants of health, i.e. how social, cultural, political, historical, and economic influences shape the individual's own values, beliefs, and behaviors. This course expands students' basic knowledge of cultural diversity to provide special focus on health disparities among marginalized populations. Students will examine diversity by exploring health inequities related to race and ethnicity, immigration status, disabilities, gender, access, poverty, sexual identity, and veteran status. The course includes experiential learning with organizations focused on reducing health disparities.

Prerequisites: HLSC 101 or PBHL 158.

HLSC 310 Healthcare Systems Credits: 3

The course is designed to provide a description and overview of the organization, financing, and delivery of healthcare in the United States. The historical background and the impact of socio-political, economic, and cultural influences will be explored. The purpose of the course is to provide a framework of understanding of the healthcare system through examination of public and private sectors, market competition, and government regulation. Major issues currently facing the healthcare system will be examined.

Prerequisites: HLSC 101 (or co-requisite) or PBHL 158 (or co-requisite).

HLSC 315 Health Literacy Credit: 1

In this course participants will explore the fundamentals of health literacy and demonstrate the impact on health outcomes. Students will be introduced to tools that health care professionals can use to assess the health literacy of their patients/clients. Tools and resources to provide health information at the correct health literacy level will be presented. Students will explore interventions that can increase an individual's health literacy.

HLSC 323 Bluford Healthcare Leadership Institute Phase I Credits: 3

This course is a leadership development program designed to expose students to dynamic leadership principles while analyzing challenging issues in today's healthcare landscape with leading national and local executives in the field. Topics covered include social determinants of health, delivery of healthcare in the U.S., for profit and not for profit healthcare systems, public health, public policy, and health law. The course includes site trips to an urban core safety net hospital and its behavioral health department, a community health center, and a healthcare informational technology corporation among others. Students will need to be accepted into the Bluford program to take this course.

HLSC 325 Human Sexuality Credits: 3

This course is designed to introduce students to the field of human sexuality. Course content will include sexual anatomy and physiology, sexuality across a life-span, sexually transmitted infections, contraception, pregnancy and childbirth, sexual orientation, love and relationships, sexual therapy, sex education, gender identity and gender roles and social and legal issues related to sex. Recommended preparation: HLSC 110.

HLSC 345 Quantitative Analysis in the Health Sciences Credits: 3

This course focuses upon the skills required for the utilization of scientific findings in evidence-based care. The conceptual basis of descriptive and inferential statistics found in the properties of the normal distribution, comprise the core of these skills. Using the normal distribution as a structure for understanding descriptive and inferential procedures, the course presents information necessary to the selection, computation and interpretation of basic statistics relevant to evidence based-care in the health sciences. Discussions of variables, measurement and tabular and graphic presentation of data precede the development of computation skills.

Prerequisites: MATH 110 or MATH 116 or STAT 115 or MOTRMATH 110 or higher level math course; or ALEKS score of 61 or higher; or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

HLSC 403A Comparative Weight Loss I Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Specific topics that will be addressed include risks of overweight/obesity; common psychological issues for the overweight/obese; societal perceptions and barriers for overweight/obese individuals. This course consists of one hour of didactic work with one module per week for four weeks.

HLSC 403B Comparative Weight Loss II Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Comparison of common medically recommended diets and diet programs and their efficacy/risks; exercise requirements for weight loss and weight maintenance. This course consists of one hour of didactic education with one module per week for four weeks.

Co-requisites: HLSC 403A.

HLSC 403C Comparative Weight Loss 3 Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Comparison of pharmacologic weight loss options and their efficacy/risks; non-prescription medications/nutraceuticals for weight loss and their efficacy/risks; and bariatric surgeries and efficacy/risks. This course consists of one hour of didactic work with one module per week for four weeks.

Co-requisites: HLSC 403A.

HLSC 404 Introduction to Social Justice Credit: 1

This course is designed to increase a student's knowledge regarding personal and social biases based on race, ethnicity, culture, religion, age, sex, sexual orientation, social and economic status, political ideology, disability and how these entities contribute to social injustice. The focus of the course will center on issues involving diversity, prejudice and oppression that impacts social justice. During the course, students will be introduced to tools for developing social justice literacy in order to take action towards establishing a more just society.

HLSC 408 Gender, Health and Development in Senegal Credits: 3

This course examines women's economic empowerment, health education initiatives, philanthropy, and social entrepreneurship in West Africa and Senegal in particular. In the main city of Dakar we will visit indigenous and global nonprofits to study their policies and processes. The culture, both urban and rural, will be experienced in order to provide a unique perspective on the Senegalese and their culture.

Prerequisite: Departmental consent.

HLSC 410 Epidemiology Credits: 3

This course is an introduction to epidemiology with an emphasis on applications in public health. Students will learn basic principles of epidemiology, including the relationship of simple statistics to epidemiology and public health, methods of disease investigation, epidemiological study designs and their uses and measures of effects. Through the course, students will be able to apply measures of disease incidence and prevalence, and explain the uses of screening tests and criteria for their evaluation, including measures of validity. The class will explore epidemiology in environmental health and social sciences.

Prerequisites: HLSC 101 or PBHL 158; HLSC 345, NURSE 345, or STAT 235.

HLSC 417 Information Systems and Technology for Improved Health Care Credits: 3

This course provides a basic introduction to health information technology across health care settings. Students will acquire an understanding of key concepts associated with health informatics and network models, systems and management strategies, health information strategic planning, clinical and public health application, data retrieval and analytics, public policy, research, and one's professional responsibility to protect electronic health care records.

HLSC 419 Introduction to Social Epidemiology Credit: 1

This course is designed to increase a student's knowledge of Social Epidemiology, which is the branch of epidemiology that studies the social determinants of health. Social processes will be explored that center on social networks, social support, social capital, social cohesion, and contributing ecological factors that influence health and wellness. Students will discover how social relationships and institutions, such as familial relationships, group culture, policies, and global economic forces, promote or undermine the health of populations. Students will also explore how social inequity indicators involving income, health insurance, and access to care inter-relate and often lead to negative health outcomes.

HLSC 423 Bluford Healthcare Leadership Institute Phase II Credits: 3

This course provides students opportunities to build upon and apply the healthcare knowledge learned during the first phase of the Bluford Healthcare Leadership Institute in an internship in a notable healthcare organization. Throughout the internship, students will be mentored by members of the organization's leadership team and be afforded unique opportunities to learn effective leadership practices, skills, and characteristics. Students will complete an internship project and at the conclusion of the internship will deliver their findings to the organization's leadership.

HLSC 430 Health Program Management Credits: 3

This course is designed to acquaint students with assessment, planning, implementation, and evaluation of health programs. Issues of health financing, health policy, health delivery, and population health will be explored. The course provides a broad introduction to key concepts in health program management, common issues, evidence-based tools, and usable strategies, regardless of the health settings. Vocabulary relevant to policy makers, managers, administrators, and consumers will be studied. Students will develop mock health programs using provided outlines and budgetary restrictions, while considering human resource restraints, climate, relevance of health issue, and readiness for change.

Prerequisites: HLSC 310.

HLSC 440 Ethics and Policy of Public Health Promotion Credits: 3

This course distinguishes biomedical ethics from public health ethics, highlighting the driving principle of justice in public health policy. Historical and present ethical issues will be explored within a variety of health based organizations and settings. The relationship of how ethics drives policy decisions and improves health outcomes will be discussed. The course will also examine how health policy is created in relationship to core ethical theories and public health justifications.

Prerequisites: HLSC 300.

HLSC 450 Urban Health Credits: 3

This course focuses on the unique health needs and outcomes of individuals and communities located within an urban core. Included in the course, are the specific ways in which health interventions can be delivered to urban populations to promote better health outcomes and quality of life. The course provides information on urban characteristics including crowding, poverty and crime in exacerbating the health and wellness needs of this historically underserved community.

Prerequisites: HLSC 300.

HLSC 460 Global Health Credits: 3

This course discusses the complexity of health in a global context. It is designed as an overview of the biological, social and environmental contributors to health and diseases in populations around the world. Course content will include case studies of various global organizational structures and systems relative to population health, selected infectious diseases, nutritional deficiencies and health effects of environmental change.

Prerequisites: HLSC 300.

HLSC 470 Technology, Marketing and Media in Health Credits: 3

This course will focus on past, present, and future trends in health marketing and messaging. Technology's role in marketing health will be explored. Marketing principles will be used to evaluate strategies to promote health behavior change and social policy. Course content will link current trends in consumer health and how these trends are marketed to the public. Examples include mobile apps and devices, personal health data collection, health data storage, and health risk assessment tools. Students will discuss the philosophical, social and legal issues in the use and abuse of health technology, health marketing, and health in the media.

Prerequisites: HLSC 440 (or co-requisite).

HLSC 476 Research Methods in Health Sciences Credits: 3

This course focuses upon the development of inquiry skills necessary to identify relevant research-based literature and apply findings from research to practice. Students will develop an understanding of basic research concepts and evidence based practice in addition to skills in finding, appraising, and using health related literature.

Prerequisites: HLSC 345, NURSE 345, or STAT 235.

HLSC 480 Leadership and Management in Health Professions Credits: 3

This course will provide the student with a theoretical foundation of leadership and management in health professions. The principles of authority, power, politics, decision making, and influence will be explored. Organizational philosophies will be examined within the context of current health issues. The leadership skills of negotiation, delegation, conflict resolution, coaching and mentoring will be discussed, as related to health professions. The role of communication will be examined across organization systems. The effect on gender and cultural diversity on communication will be discussed.

Prerequisites: HLSC 300.

HLSC 490 Special Topics Credits: 1-9

A course of study in a special area of interest in health sciences under individual faculty direction.

Prerequisites: Departmental consent.

HLSC 492 Health Sciences Specialty Course Credits: 3

This course provides students an opportunity to develop advanced knowledge and skills in health sciences. Concepts and topics covered throughout the course of the Bachelor of Health Sciences program will be revisited and practiced through a variety of applied assignments and experiences. Students will integrate examples and case studies from their Health Sciences Internship settings into the course.

Prerequisites: Departmental consent.

Co-requisites: HLSC 494.

HLSC 494 Health Science Internship Credits: 6

An experience-based internship for the senior student. Depending upon the health professions career selected, the student will complete a service learning, research, or problem-based experience under the guidance of a site supervisor within the agency or organization that is mutually agreed upon.

Prerequisites: Departmental consent.

Co-requisites: HLSC 492.

Nursing Courses

NURSE 101 Introduction to Nursing Credits: 2

This introductory two-hour course is designed to facilitate role socialization into professional nursing. Beginning with a brief historical overview of professional nursing, nursing is defined and the philosophical and practice standards of the profession are discussed. The student explores nursing's image and power bases in relationship to professional accountabilities and roles. The value and tenets of evidence-based care are emphasized and integrated with use of nursing process in professional, reflective decision-making. A review of educational paths in professional nursing leads the student into a comprehensive survey of the multiple roles, responsibilities, and requisite skills of the professional nurse today and in the future.

NURSE 120 Anatomy & Physiology I Credits: 4

This course examines the structure and function of the human body from the molecular to the organismal level as they interact among all body systems across the life span. Instructors also attempt to correlate course materials with the clinical aspects of the application of physiological knowledge. Co-requisite laboratory exercises provide practical application of theoretical concepts. In this first term of two-term course, molecular biology, biochemistry, cellular biology, and histology are studied as well as the integumentary, musculoskeletal, and nervous systems.

Prerequisites: Pre-Nursing or Bachelor of Health Sciences Student.

NURSE 125 Medical Terminology Credit: 1

This course is designed to provide the student with a foundation in medical terminology and the components of health records. Course content will include how medical terms are formed; how medical terms are applied to organs, body systems and pathological conditions; how common medical abbreviations are used; and how health records are organized and compiled.

NURSE 127 Drug Calculations Credit: 1

The drug calculation course is designed to introduce the student to methods of drug dosage calculation needed for medication administration in the health care setting. This course will review basic mathematical concepts, introduce medication specific terminology, discuss interpretation of medication orders, identify key elements of the medication label and enable the student to calculate appropriate and accurate drug dosages.

NURSE 160 Anatomy and Physiology II Credits: 4

This course is a continuation of NURSE 120. Co-requisite laboratory exercises provide practical application of theoretical concepts. Physiologic systems including endocrine, cardiovascular, immune, respiratory, digestive, renal, and reproductive are studied as well as embryology and genetics.

Prerequisites: Pre-Nursing or Bachelor of Health Sciences Student.

NURSE 220 Fundamental Concepts & Skills Credits: 6

This course focuses on fundamental concepts, skills, and techniques that provide a foundation for clinical practice. The beginning student will identify factors that may influence the human system and applies the nursing process in health care setting using basic nursing interventions.

Prerequisites: Pre-Licensure or Direct Admit Nursing Program Student.

NURSE 230 Health In Aging Credits: 2

This course focuses on the role of the nurse in promoting and maintaining the health of the older adult population. Evidence based nursing care of the older adult that includes physiological, psychological, pharmacological, and nutritional considerations as affected by theories on aging, socio-cultural influences, legal and ethical issues, and health care resources are explored. Nursing assessment, diagnoses, interventions, and outcomes specific to a diverse older adult population are discussed. Opportunities are provided for interaction with the older adult population.

Prerequisites: Pre-Licensure or RN to BSN Student.

NURSE 250 Health Assessment for Nursing Practice Credits: 3

This course is designed to provide a systematic approach to the physiological, psychological, sociocultural and developmental assessment of individuals emphasizing findings considered to be within normal limits. The health history is emphasized as a tool for assessing mental and physical status. This course is designed for pre-licensure students. This three credit hour course consists of two didactic and one credit hour of clinical/lab per week.

Prerequisites: Pre-Licensure or Direct Admit Nursing Program Student.

NURSE 252 Human Growth and Development Credits: 3

This course provides a basic introduction to the theory for human growth and development across the life span. Emphasis is placed upon the biological and the psychosocial aspects of growth and development. Content is organized in a modified chronological order dividing information into major stages of growth and development across the lifespan.

Prerequisite: Pre-Licensure Nursing Program Student.

NURSE 255 Spanish for Health Care Pre-Professionals Credits: 3

This course focuses on conversational Spanish, medical terminology in Spanish and written/read Spanish. This course will provide the student with basic knowledge that will allow basic communication with clients who speak/read/write Spanish. This is a fast-paced course and will require practice of the language outside of the classroom in order to master the material presented. Recommended preparation: SPANISH 110.

NURSE 256 Pharmacology Credits: 3

This is a course in pharmacology that builds on prior knowledge of anatomy, physiology, chemistry, microbiology and pathophysiology. The major focus of the course is the basic and clinical concepts of pharmacology in evidence-based care. This course covers drug knowledge in the areas of pharmacotherapeutics, pharmacodynamics, pharmacokinetics, adverse reactions and contraindications, therapeutics indications and nursing implications.

Prerequisites: NURSE 127, NURSE 220, NURSE 230, NURSE 250, and NURSE 395.

NURSE 262 Management of Adult Health I Credits: 5

This medical-surgical course focuses on utilization of the nursing process to the specific illnesses of the adult client in the acute care setting. High volume disease processes with associated nursing care are emphasized. The effects on the individual as a holistic system are explored. Skills are developed in caring for persons with biological, psychological and social system alterations to facilitate optimal client outcomes.

Prerequisites: NURSE 127, NURSE 220, NURSE 230, NURSE 250, and NURSE 395.

NURSE 315 Health Literacy Credit: 1

In this course participants will explore the fundamentals of health literacy and demonstrate the impact on health outcomes. Students will be introduced to tools that health care professionals can use to assess the health literacy of their patients/clients. Tools and resources to provide health information at the correct health literacy level will be presented. Students will explore interventions that can increase an individual's health literacy.

NURSE 326 Applied Physiology Credits: 3

In this course, clinical applications to physiologic concepts are highlighted and emphasized among all body systems across the life span. Discussion will include anatomical landmarks critical to health assessment and clinical manifestations related to physiological processes. This three credit hour course consists of two credit hours of didactic and one hour of lab work that will further demonstrate these concepts through dissection, laboratory experiments, and case studies.

Prerequisites: Departmental consent.

NURSE 342 Legal & Ethical Issues Credits: 2

This course is designed to investigate medical-legal issues and explore the implications that legal intervention and interpretation as well as litigation have on the scope of nursing practice and the delivery of patient care. Ethical standards of nursing practice and diverse individual and group values are explored, and various ethical systems, concepts and principles used in ethical decision making are introduced.

Prerequisites: Pre-Licensure Nursing Program Student.

NURSE 345 Quantitative Analysis In The Health Sciences Credits: 3

This course focuses upon the skills required for the utilization of scientific findings in evidence-based care. The conceptual basis of descriptive and the inferential statistics found in the properties of the normal distribution, comprise the core of these skills. Using the normal distribution as a structure for understanding descriptive and inferential procedures, the course presents information necessary to the selection, computation and interpretation of basic statistics relevant to evidence based-care in the health sciences. Discussions of variables, measurement and tabular and graphic presentation of data precede the development of computation skills.

Prerequisites: MATH 110 or MATH 116 or STAT 115 or MOTRMATH 110 or higher level math course; or ALEKS score of 61 or higher; or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher.

NURSE 360 Management of Mental Health Credits: 4

This course is designed to introduce psychiatric mental health nursing through the study of sound psychiatric nursing theory. This course will focus on the nursing process framework, and the establishment and maintenance of a therapeutic nurse-client relationship. Emphasis is placed on assessment, therapeutic communication, neurobiological theory, and pharmacology. Nursing interventions will focus on all aspects of client care, communication, client/family teaching, and community resources and their practical application in a variety of clinical settings.

Prerequisites: Pre-Licensure or Direct Admit Nursing Program Student.

NURSE 362 Management of Adult Health II Credits: 5

This medical-surgical course focuses on application of the nursing process to the delivery and the management of adult clients across the care continuum. This course builds on Adult Health I content to include high risk disease processes with associated nursing care. Emphasis is placed on the interaction between the client, family, nursing, and the environment to result in optimal client outcomes.

Prerequisites: Pre-Licensure or Direct Admit Nursing Program Student.

NURSE 364 Management of Maternal & Family Health Credits: 4

This course focuses on the application of the nursing process in the adaptation of the childbearing family. Emphasis is placed on adaptation during pregnancy, labor, birth and the postpartum period. Key concepts to be addressed include maternal, fetal, neonatal and family adaptation throughout the maternity cycle, common alterations during the cycle and culturally sensitive, family-centered nursing care. Maternal, fetal and neonatal physiology, pathophysiology and pharmacology will be addressed.

Prerequisites: Accelerated or Pre-Licensure or Direct Admit Program Student.

NURSE 366 Management of Child & Adolescent Health Credits: 4

This course focuses on the application of the nursing process in the care of the pediatric client. Emphasis is placed on providing developmentally appropriate care to healthy, acutely ill and chronically ill pediatric clients holistically within the context of a family system. Key concepts to be explored include age appropriate anatomy, physiology, pathophysiology, and pharmacology and their application to the nursing strategies of health assessment, health promotion, disease prevention, pain management, family-centered and culturally sensitive care.

Prerequisites: Accelerated or Pre-Licensure or Direct Admit Program Student.

NURSE 395 Pathophysiology Credits: 3

This course will focus on alterations in biological processes that affect the body's internal homeostasis. A conceptual approach will be used to emphasize general principles of pathophysiology. The etiology, pathogenesis, clinical manifestations, and sequelae of various alterations of human structure and function will be examined. Knowledge from the basic and clinical sciences will be integrated.

Prerequisites: Pre-Licensure or RN to BSN Nursing Program Student.

NURSE 401 Health Assessment for Clinical Practice Credits: 3

This course is designed to provide a systematic approach to the physiological, psychological, socio-cultural and developmental assessment of individuals emphasizing findings considered to be within normal limits. The health history is emphasized as a tool for assessing mental and physical status. This course is designed for students with previous health care education, including knowledge of biochemical functions of systems and concepts of normal. This course consists of guided self-study and on-site clinical practicum.

Prerequisites: RN-BSN or Graduate Nursing Program Student.

NURSE 403A Comparative Weight Loss I Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Specific topics that will be addressed include risks of overweight/obesity; common psychological issues for the overweight/obese; societal perceptions and barriers for overweight/obese individuals. This course consists of one hour of didactic work with one module per week for four weeks.

NURSE 403B Comparative Weight Loss II Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Comparison of common medically recommended diets and diet programs and their efficacy/risks; exercise requirements for weight loss and weight maintenance. This course consists of one hour of didactic education with one module per week for four weeks.

NURSE 403C Comparative Weight Loss 3 Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Comparison of pharmacologic weight loss options and their efficacy/risks; non-prescription medications/nutraceuticals for weight loss and their efficacy/risks; and bariatric surgeries and efficacy/risks. This course consists of one hour of didactic work with one module per week for four weeks.

NURSE 404 Introduction to Social Justice Credit: 1

This course is designed to increase a student's knowledge regarding personal and social biases based on race, ethnicity, culture, religion, age, sex, sexual orientation, social and economic status, political ideology, disability and how these entities contribute to social injustice. The focus of the course will center on issues involving diversity, prejudice and oppression that impacts social justice. During the course, students will be introduced to tools for developing social justice literacy in order to take action towards establishing a more just society.

NURSE 408 Gender, Health and Development in Senegal Credits: 3

This course examines women's economic empowerment, health education initiatives, philanthropy, and social entrepreneurship in West Africa and Senegal in particular. In the main city of Dakar we will visit indigenous and global nonprofits to study their policies and processes. The culture, both urban and rural, will be experienced in order to provide a unique perspective on the Senegalese and their culture.

NURSE 417 Information Systems and Technology for Improved Health Care Credits: 3

This course provides a basic introduction to health information technology across health care settings. Students will acquire an understanding of key concepts associated with health informatics and network models, systems and management strategies, health information strategic planning, clinical and public health application, data retrieval and analytics, public policy, research, and one's professional responsibility to protect electronic health care records.

NURSE 419 Introduction to Social Epidemiology Credit: 1

This course is designed to increase a student's knowledge of Social Epidemiology, which is the branch of epidemiology that studies the social determinants of health. Social processes will be explored that center on social networks, social support, social capital, social cohesion, and contributing ecological factors that influence health and wellness. Students will discover how social relationships and institutions, such as familial relationships, group culture, policies, and global economic forces, promote or undermine the health of populations. Students will also explore how social inequity indicators involving income, health insurance, and access to care inter-relate and often lead to negative health outcomes.

NURSE 462 Special Topics Credits: 2

This course is designed to explore current issues and trends influencing nursing practice. Economical, political, social and cultural issues are analyzed as they relate to interdisciplinary healthcare topics. Special Topics is aimed at preparing nursing students for immediate and long term milestones in their practice, which includes NCLEX licensure study, current clinical and practice issues, and exposure to advance nursing roles in practice and research.

Prerequisites: Accelerated or Pre-Licensure or Direct Admit Program Student.

NURSE 465 Management of Community and Public Health Nursing Credits: 4

This course focuses on applying the nursing process to the care of target community population and the individual. Emphasis is placed in health promotion and disease prevention. Discussion will include epidemiological, social, political, economic and cultural factors that influence the health of a population. The clinical components will consist of application of the nursing process to identify, prioritize, and meet the health needs of aggregates across the lifespan.

Prerequisites: Pre-Licensure or Direct Admit Program Student.

NURSE 467 Management of Critical & Emergent Care Credits: 5

This course focuses on applying the nursing process to the care of critically ill clients. Key concepts are: assimilation, integration, and prioritization of information to take decisive client-focused action. Students will manage appropriately the interface between client and technology so that a safe, respectful, and caring environment is established and maintained. Nursing knowledge of cardiovascular/hemodynamic monitoring and acute management of pulmonary, neurological, renal, gastrointestinal, shock, and traumatic emergencies is included.

Prerequisites: Pre-Licensure or Direct Admit Nursing Program Student.

NURSE 468 Effectiveness in Complex Health Systems Credits: 4

This leadership course focuses on effectiveness in complex health systems, by building upon acquired personal and interpersonal knowledge, skills and effectiveness in health outcomes. Organizational culture and systems, leadership and management theories, cultural competence, internal and external politics, and the impact of future managerial and societal paradigm changes on health care and health care delivery systems are presented. Knowledge of budgeting and health care finance, use of the legislative system, quality management, customer service, and leadership and management styles are explored.

Prerequisites: Pre-Licensure, Accelerated or Direct Admit Nursing Program Student.

NURSE 468A Effectiveness in Complex Health Systems I Credit: 1.5

This first part of two leadership courses focuses on effectiveness in complex health systems by building upon acquired personal and interpersonal knowledge, skills, and effectiveness in health outcomes. The role of the registered nurse in advocating for clients in the health care system as well as political and regulatory processes is explored.

NURSE 468B Effectiveness in Complex Health Systems II Credits: 2.5

This is the second part of two leadership courses and focuses on effectiveness in complex health systems by building upon acquired personal and interpersonal knowledge, skills, and effectiveness in health outcomes. Organizational culture and systems, leadership and management theories, cultural competence, and the impact of future managerial and societal paradigm changes on health care and health care delivery systems are presented. Knowledge of budgeting and health care finance, use of the legislative system, quality management, customer service, and leadership and management styles are explored.

NURSE 472 Clinical Internship Credits: 5

This is the final clinical application course designed to complement didactic content from the core-nursing component of the baccalaureate program. The student will integrate and apply knowledge acquired in didactic course work and from previous clinical experiences. Emphasis is placed on effectiveness in personal, interpersonal, human health, and complex health systems. In collaboration with preceptors from the clinical unit, students will manage direct care for clients in health care settings.

Prerequisites: Pre-Licensure or Direct Admit Nursing Program Student.

NURSE 476 Research Methods in Health Sciences Credits: 3

This course focuses upon the development of inquiry skills necessary to identify relevant research-based literature and apply findings from research to practice. Students will develop an understanding of basic research concepts and evidence based practice in addition to skills in finding, appraising, and using health related literature.

Prerequisites: NURSE 345, HLSC 345, or STAT 235.

NURSE 481 Block I: Tools for Personal Effectiveness Credits: 6

This is the first in the four-course sequence. The student will discover that the foundation for professional nursing practice is personal effectiveness. Personal effectiveness is contingent upon an understanding of the historical roots of the profession, the meaning of professionalism, image and power bases, professional standards, moral development, political role socialization and professional values. Personal effectiveness is enhanced through critical reflection of personal perspectives and biases, valuing and use of theory and research, critical thinking and decision-making, informatics' technology, the ability to manage time and stress, and the use of a career plan and informatics.

Prerequisites: RN-BSN Nursing Program Student.

NURSE 482 Block II: Tools for Interpersonal Effectiveness Credits: 3

This is the second in the four-course sequence. The student will discover that interpersonal effectiveness is a prerequisite to effective management of the care of humans and of teams. Interpersonal effectiveness is contingent on an understanding of professional value and caring, ethics in health care, legalities of practice, communication theories, and the dynamics of groups and teams. Interpersonal effectiveness is enhanced through the use of such skills as conflict resolution and negotiation, delegation, managing change, advocacy, team membership, group management, political awareness, technology utilization, and communication techniques. Content appropriate to these areas will be covered within this course.

Prerequisites: RN-BSN Nursing Program Student.

NURSE 483 Block III: Effectiveness in Human Health Outcomes Credits: 6

This is the third in a four-course sequence. It builds upon the personal and interpersonal skills acquired in the first two block courses and focuses on effectiveness in human health outcomes. The student will discover that effectiveness in human health outcomes is a primary goal in the delivery of an optimum continuum of health care that encompasses health promotion, disease prevention and illness care across the lifespan. Achieving effectiveness in human health outcomes across the wellness-illness continuum and the individual-to-community continuum is contingent on acquiring an understanding of epidemiology, levels of care, communicable disease control, case management, theories applicable to aggregate populations, cultural competence, evidence-based care, and information technology.

Prerequisites: RN-BSN Nursing Program Student.

NURSE 484 Block IV: Effectiveness in Complex Health Systems Credits: 6

This is the final course in the four-course sequence. Students will build upon the knowledge and skills acquired in the prior three course in order to examine the essentials of structure and designs, behavior and culture, synergy, workplace diversity, health care finance, and power and politics within complex health systems. Organizational theories, leadership, management and nursing's social responsibility in an emerging global health care environment will also be explored.

Prerequisites: RN-BSN Nursing Program Student.

NURSE 485 Application to Practice I Credits: 3

This is the first of two clinical application courses designed to complement didactic content from the four-course block sequence (NURSE 481 - NURSE 484). Students will integrate an increasingly complex knowledge base with an emphasis on developing effectiveness: personally, interpersonally, and in the health management of populations of clients within systems of community and professional organizations and practice settings. Student cohort groups, in collaboration with personnel from health related organizations and faculty, assess population health needs, identify outcomes and develop action plans based on real need. The practice experience learning processes and outcomes will be collective and provide solutions for the health care community.

Prerequisites: RN-BSN Nursing Program Student.

NURSE 486 Application to Practice II Credits: 3

This is the second of two Practicum application courses designed to complement didactic content from the four-course block sequence (NURSE 481 - NURSE 484) to integrate complex knowledge for personal and interpersonal development in the health management of populations of clients. Student cohort teams will apply new skills and knowledge to real issues and problems in the delivery of nursing care with an emphasis on teamwork performance and action plan implementation and outcome evaluation. The processes and outcomes of those experiences will be collaborative and provide solutions for the health care community.

Prerequisites: RN-BSN Nursing Program Student.

NURSE 490 Special Topics Credits: 1-9

A course of study in a special area of interest in nursing under individual faculty direction.

Prerequisites: RN-BSN or Graduate Nursing Program Student.

NURSE 490AP2 Special Topics Credits: 1-9

Special Topics

Prerequisites: RN-BSN or Graduate Nursing Program Student.

NURSE 5503A Comparative Weight Loss I Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Specific topics that will be addressed include risks of overweight/obesity; common psychological issues for the overweight/obese; societal perceptions and barriers for overweight/obese individuals.

NURSE 5503B Comparative Weight Loss 2 Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Common medically recommended diets and diet programs will be compared on the basis of their efficacy/risks; exercise requirements for weight loss, and weight maintenance.

Prerequisites: NURSE 5503A.

NURSE 5503C Comparative Weight Loss 3 Credit: 1

This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long and short term implications. Compare pharmacologic weight loss options and their efficacy/risks; non-prescription medications/nutraceuticals for weight loss and their efficacy/risks; and bariatric surgeries and efficacy/risks.

Prerequisites: NURSE 5503A.

NURSE 5508 Advanced Growth and Development Credit: 1

This course is designed to provide students with advanced comprehensive knowledge regarding the physical growth and psychosocial development from birth to 21 years of age within the context of the child's family and community. Analysis and interpretation of growth and development patterns will be examined as they relate to primary health care of children, birth to 21 years of age aiding in the determination of the health status.

NURSE 5509 Technical Foundations of Advanced Practice Credit: 1

This course will provide students with the advanced informatics skills necessary to develop an evidence-based reflective practice. Self-paced progressive modules will allow students to use advanced health care technologies to develop and apply informatics skills so that they can manage and communicate advanced clinical information and knowledge.

NURSE 5515NE Role of the Nurse Educator Credits: 2-3

This course will explore the role of the nurse educator within the academic, acute care, and outpatient settings. Emphasis will be on the development, evaluation, differences and implementation of the nurse educator in the functional roles. Students are introduced to the NLN Core Competencies of Nurse Educators to evaluate their own practice. Ethical and legal issues related to practice as a nurse educator are discussed.

NURSE 5516 Curriculum Development in Nursing Credits: 3

This course prepares the nurse educator to develop, review, and evaluate nursing curricula. Emphasis will be placed on theoretical foundations, principles of program evaluation, and issues in curriculum design.

Prerequisites: NURSE 5515NE.

NURSE 5517 Teaching Strategies in Nursing Credits: 2

This course examines principles and techniques in teaching nursing. Techniques concerning classroom management, writing objectives and implementing active teaching strategies are explored. Emphasis is placed on respecting the diverse learning needs of students in the educational environment.

Prerequisites: NURSE 5515NE.

Co-requisites: NURSE 5515NE.

NURSE 5526 Health Promotion Across the Lifespan Credits: 3

This course is designed to provide students with a strong knowledge base related to concepts of health promotion and health protection for clients across the life span. Clients are conceptualized as individuals, families and populations. An application of various developmental theories for the child, adult, older adult and family will provide the basis to individualize health-care needs for various age and family groups. Core concepts for the course include: theories of health and health promotion and protection, reasoned action, health belief model, epidemiology, disease and injury prevention, health education, growth and development, nutrition, and family systems theory.

Prerequisites: NURSE 5550 (or co-requisite).

NURSE 5527 Cultural Diversity & Values Credits: 3

This course explores how each individual's life context (social, political, historical, and economic) and culture construct their individual's values, beliefs and behaviors. Applying multi-disciplinary concepts and theory, the course expands students' basic knowledge of cultural diversity, approaches to culture and cultural competency, values and ethics, theories of moral development, cultural assessment skills, and ethical decision-making models for clinical practice. Ethical dilemmas created by differing cultural values and the role of health professionals in leading ethical decision-making are explored. Core concepts for the course include: cultural awareness, cultural knowledge, cultural skill, cultural encounter, values clarification, and ethical analysis.

NURSE 5528 Healthcare Policy & Advocacy Credits: 3

This course is designed to focus on the integral relationship between health care policy and advocacy. Content will include principles and processes related to U.S. health policy and politics in relation to the overall system and issues of cost, quality and access; interrelationships between policy, political trends, and quality of care and access at the point of service; elimination of health care disparities, ethical and obligatory values related to the role of the health care professional.

NURSE 5529 Ethics in Advanced Practice & Research Credits: 3

Advanced nursing practice, ethics, and research are intricately connected. This course is designed to explore the content necessary to apply ethical principles to complex issues encountered in advanced nursing practice. Essential ethical principles include assuring the common good through the continual presence of respect for human dignity, autonomy, beneficence, and distributive justice, as those apply to the integration of advanced practice and research. Graduate prepared nurses are responsible for impacting individual care, the care of populations, and environmental health, therefore advocacy for social justice and ethical health care policy are also discussed.

NURSE 5531 Graduate Pharmacology Specialty Credits: 2

This course builds on principles of pharmacology learned in Pharmacotherapeutics for Advanced Practice Nursing. This course focuses on principles and practices necessary for safe prescribing and medication management of a specialty population (e.g., pediatrics, acute care, mental health).

Prerequisites: NURSE 5548, NURSE 5549, NURSE 5550.

Co-Requisites: NURSE 5532.

NURSE 5532 Pediatric Acute Care I Credits: 3

This is the first of two courses in which the management of complex acute, critical, and chronically ill patients with urgent and emergent conditions is explored. The focus is on alterations in pathophysiology, advanced assessment, diagnosis, and collaborative management of infants, children and adolescents with selected episodic/chronic health problems in acute/critical care.

Prerequisites: NURSE 5548, NURSE 5549, NURSE 5544 NURSE 5547.

Co-requisites: NURSE 5534 NURSE 5531.

NURSE 5533 Pediatric Acute Care II Credits: 3

This is the second of two courses in which the management of complex acute, critical, and chronically ill patients with urgent and emergent conditions is explored. The focus is on alterations in pathophysiology, advanced assessment, diagnosis, and collaborative management of infants, children and adolescents with selected episodic/chronic health problems in acute/critical care.

Prerequisites: NURSE 5532 NURSE 5534.

Co-requisites: NURSE 5535.

NURSE 5534 Advanced Practice Clinical Practicum I (Pediatric Acute Care) Credits: 4

This practicum course focuses on the clinical management of the pathological alterations presented in the Pediatric Acute Care I course. The course is designed to provide clinical experience in the development and application of the roles of the pediatric acute care nurse practitioner. The clinical setting will be used for application and evaluation of pathophysiologic and psychosocial concepts in implementing and evaluating care in the clinical settings.

Prerequisites: NURSE 5544, NURSE 5547, NURSE 5548, NURSE 5549, NURSE 5564.

Co-requisites: NURSE 5531, NURSE 5532.

NURSE 5535 Advanced Practice Clinical Practicum II (Pediatric Acute Care) Credits: 4

The emphasis of this course is on the integration of theory, assessment, and advanced therapeutics in high acuity patient care. The student will gain the necessary management skills to provide specialized patient centered care across the entire pediatric age spectrum from complex chronic illness to physiologic deterioration and life threatening instability, including palliative and end of life care, while incorporating the family as a full partner in decision making.

Prerequisites: NURSE 5532, NURSE 5534.

Co-requisites: NURSE 5533.

NURSE 5544 Advanced Health Assessment Skills Credits: 2

This course provides a systematic approach to collection and documentation of advanced health/physical assessment, including the comprehensive history, physical, and psychological assessment of signs and symptoms, pathophysiological changes, psychosocial and cultural variations of the patient. The assessment should be conducted within the context of the family and community, incorporating cultural and developmental variations, and the needs of the patient.

Prerequisites: Undergraduate Health Assessment Course.

NURSE 5546 Foundations of Family Psychiatric Nursing Advanced Practice Credits: 3

This foundational course focuses on factors impacting mental health and the development of psychiatric disorders. The scope of practice and roles of the Psychiatric Mental Health Nurse Practitioner will be introduced. Both pharmacological and nonpharmacological therapeutic modalities will be explored. Comprehensive psychiatric evaluation skills will be developed. Attention will be given to the development of therapeutic relationships, assessment considerations across the lifespan, crisis evaluation and different types of diagnostic tools and approaches. Diagnostic reasoning skills will be applied to mental illness and students will begin to integrate assessment finding into diagnoses in the Diagnostic and Statistical Manual of Mental Disorders.

Prerequisites: NURSE 5547M.

Co-requisites: NURSE 5547M.

NURSE 5547 Diagnostic Reasoning/Advanced Assessment Credits: 3

This course emphasizes utilization of advanced health/physical assessment skills, interpretation of diagnostic testing and lab values, validation, documentation and analysis of findings through diagnostic reasoning to develop and process differential diagnosis.

Prerequisites: NURSE 5544.

NURSE 5547C Diagnostic Reasoning/Advanced Assessment-Children Credits: 3

This course emphasizes utilization of advanced health/physical assessment skills, interpretation of diagnostic testing and lab values, validation, documentation and analysis of findings through diagnostic reasoning to develop and process differential diagnosis. The course consists of two hours of didactic/ discussion and one hour of clinical/lab credit (45 clock hours).

Prerequisites: NURSE 5544.

NURSE 5547N Advanced Assessment of the Neonate Credits: 3

This course is designed to provide a systematic approach to advanced assessment of physiological, psychological, socio-cultural, developmental and spiritual assessment of the fetus, the mother during the prenatal period, and the neonate. This course builds on basic health assessment skills and emphasizes advanced assessment skills, diagnostic test interpretation, validation, documentation and analysis of perinatal, genetic and embryological factors impacting neonatal health and development.

Prerequisites: Admission into the MSN NNP program.

NURSE 5547NE Health Assessment & Clinical Reasoning for Nurse Educators Credits: 4

This course is designed to provide a systematic approach to teaching physiological, psychological, sociocultural, developmental and spiritual assessment. The course builds on basic health assessment skills and emphasizes: comprehensive assessment skills, interpretation of laboratory results, validation of findings, documentation and analysis of assessment findings; and teaching strategies – teaching methodologies, clinical application, and student evaluation.

Prerequisites: NURSE 401, NURSE 5548.

NURSE 5547PM Diagnostic Reasoning/Advanced Assessment Credits: 2

2 credit hours (1 didactic; 1 lab for a minimum of 45 contact/clock hours). This course is designed to provide a systematic approach to the advanced assessment of physiological, psychological, socio-cultural, developmental and spiritual assessment of individuals. The post-MSN student will build on previous advanced assessment skills and content with emphasis on adding advanced physical assessment skills, lab work interpretation, validation, documentation and analysis of assessment findings appropriate to their desired role area. Students will meet the same outcome standards of the track in which they are currently enrolled.

Prerequisites: Free-standing Health Assessment Course.

NURSE 5547W Diagnostic Reasoning/Advanced Assessment Credits: 3

This course emphasizes utilization of advanced health/physical assessment skills, interpretation of diagnostic testing and lab values, validation, documentation and analysis of findings through diagnostic reasoning to develop and process differential diagnosis. The course consists of two hours of didactic/ discussion and one hour of clinical/lab credit (45 clock hours).

Prerequisites: NURSE 5544.

NURSE 5548 Advanced Pathophysiology Across the Lifespan Credits: 3

Advanced pathophysiology is the study of the alterations of normal physiological functioning in cellular, tissue, organ and organ systems. These alterations form the basis for understanding a variety of pathophysiological conditions and the manifestations and impact of abnormal physiological functioning on clients across the life-span. Advanced pathophysiology deals with both generalized processes and major organ system dysfunctions. This course consists of three hours of lecture/discussion per week and individual self study.

NURSE 5548N Physiology/Pathophysiology Of The Neonate Credits: 2

Concepts of embryology, neonatal physiology and pathophysiology are used to provide an in-depth study of normal functioning and alteration of normal physiological functioning in cellular, tissue, organ, and organ systems. Alterations form the basis for understanding a variety of pathophysiological conditions and the manifestations and impact of abnormal physiological functioning on neonates. Both generalized processes and major system dysfunctions are addressed.

Prerequisites: Admission to the Neonatal Nurse Practitioner Track, NURSE 5548.

NURSE 5549 Pharmacology Across the Life Span for Advanced Nursing Practice Credits: 3

This is a course in clinical pharmacotherapeutics that builds on prior knowledge of drug classification, actions, interactions and adverse drug reactions. The major focus of the course is the pharmacotherapeutic prescribing of medications for primary health care management across the life span by advanced practice nurses. The Missouri laws for advanced practice nurse prescriptive authority will be addressed. This course consists of three hours of lecture/discussion/in-class clinical module work per week.

Prerequisites: NURSE 5548, NURSE 5549R.

NURSE 5549N Pharmacology for the Neonate Credits: 3

This course is designed to provide a systematic approach to advanced assessment of physiological, psychological, socio-cultural, developmental and spiritual assessment of the fetus, the mother during the prenatal period, and the neonate. This course builds on basic health assessment skills and emphasizes advanced assessment skills, diagnostic test interpretation, validation, documentation and analysis of perinatal, genetic and embryological factors impacting neonatal health and development.

Prerequisites: Admission into the MSN NNP program.

NURSE 5549R Pharmacokinetics & Pharmacodynamics: Application for Graduate-Prepared Nurses Credit: 1

This course builds on prior knowledge of anatomy, physiology, chemistry, microbiology, pathophysiology and pharmacology. Drug classes are reviewed in preparation for advanced clinical judgment. The principles for decision-making about drug selection, use and monitoring are explored. General principles of pharmacokinetics and pharmacodynamics are discussed. Pertinent patient education concerning select pharmacotherapeutics agents is reviewed.

Prerequisites: Admission to UMKC School of Nursing and Health Studies.

NURSE 5550 Theoretical Foundations in Nursing Credits: 3

This course focuses on critical analysis of theory and the utilization of various levels of nursing and related theories as a base for nursing at the graduate level. It further examines the inter-relationship of theory, research and practice in the development of a scientific body of nursing knowledge. The student will analyze methods by which knowledge is gained and validated. Students will synthesize several different theories from which to form the basis of their practice. Relationships of theory, practice and research will be discussed.

Prerequisites: Completion of BSN.

NURSE 5551B Pharmacology for Women's Health: Common Medical Conditions Credits: 2

This course in clinical pharmacology builds on current knowledge of drug classification, actions, interactions, and adverse drug reactions. The focus is the use of medications by advanced practice providers in the management of common medical conditions in women's health. Emphasis will be placed on the evidence based pharmacological management of women with medical conditions such as cardiovascular conditions, autoimmune disorders, diabetes, gastrointestinal conditions, lower urinary tract disorders, drugs that promote mental health, dermatological conditions, and an overview of chemotherapeutics. This four-week course consists of online discussion, case studies and quizzes.

Prerequisites: NURSE 5549.

NURSE 5555 Nursing Research Credits: 3

This course is designed to prepare graduate nursing students to utilize research findings in order to provide high quality health care and improve nursing practice. This knowledge includes fundamentals of research methods, procedures for the evaluation of research and the application of research findings to clinical practice and organizational decision making.

Prerequisites: NURSE 5550, a graduate level statistics course.

NURSE 5557 Qualitative Methods in Nursing Research Credits: 3

This course is designed to provide the student with the skills necessary to the understanding and conduct of qualitative research. Various methods, including ethnographic, phenomenologic, historic, grounded theory and aesthetic inquiry are presented and discussed. Emphasis is placed upon the appropriateness of each method for different research problems. This course consists of three hours of lecture/discussion per week.

Prerequisites: NURSE 5550, NURSE 5555.

NURSE 5558 Research Design Credits: 3

This course is designed to provide the student with experience in the development of a research proposal. Research skills acquired in previous courses will be synthesized to produce the components of a proposal.

Prerequisites: NURSE 5555.

NURSE 5559 Evaluation Methods in Nursing Credits: 2

This course examines principles of assessment and evaluation in nursing education. Techniques concerning formative and summative evaluation, test writing, clinical evaluation, and test item analysis will be explored. Emphasis is placed on respecting the diverse learning needs of the students in the educational environment.

Prerequisites: NURSE 5517.

NURSE 5564A Primary Care of Adults I Credits: 5

This course is designed to prepare nurse practitioner students to manage common health problems of adults. The focus is on developmentally appropriate preventive health care and management of common acute/episodic illnesses. Students will integrate role competencies, professional standards, and legal requirements essential to the NP role. Core content includes differential diagnosis, therapeutic management, adherence, anticipatory guidance, patient/family education, legal and professional issues, standards of practice, and advanced practice role competencies.

Prerequisites: NURSE 5526, NURSE 5548, NURSE 5550, NURSE 5547A and N5555.

Co-requisites: NURSE 5549.

NURSE 5564AG Advanced Practice Clinical Practicum I Credits: 4

Advanced Practice Clinical Practicum I.

NURSE 5564C Primary Care of Children I Credits: 5

This course is designed to prepare nurse practitioner students to manage common pediatric health problems. The focus is on evidence-based developmentally appropriate preventive health care and management of common acute/episodic illnesses. Students will integrate role competencies, professional standards, and legal requirements essential to the NP role. Core content includes differential diagnosis, therapeutic management, adherence, anticipatory guidance, patient/family education, legal and professional issues, standards of practice, and advanced practice role competencies. Clinical practice and clinical seminar comprise the clinical experience.

Prerequisites: NURSE 5526, NURSE 5547C, NURSE 5548, NURSE 5550.

Co-requisites: NURSE 5549, NURSE 5555.

NURSE 5564F Primary Care of Families I Credits: 5

This course is designed to prepare nurse practitioner students to manage common health problems across the life span. The focus is on developmentally appropriate preventive health care and management of common acute/episodic illnesses. Students will integrate role competencies, professional standards, and legal requirements essential to the NP role. Core content includes differential diagnosis, therapeutic management, adherence, anticipatory guidance, patient/family education, legal and professional issues, standards of practice, and advanced practice role competencies.

Prerequisites: NURSE 5526, NURSE 5547F, NURSE 5548, NURSE 5550.

Co-requisites: NURSE 5549.

NURSE 5564M Family Psychiatric Nursing Advanced Practice I Credits: 5

This course is designed to prepare students to manage psychiatric illness in individuals. Emphasis will be given to psychiatric disorders commonly encountered such as thought disorders, mood disorders, anxiety disorders, personality disorders and substance abuse. Special attention will be given to illnesses occurring in childhood and older age. Focus will be on strengthening mental health diagnostic skills and management of psychiatric illness in individuals. Students will learn to identify and treat short term mental health issues, chronic disorders and acute exacerbations. Psychotropic medication management skills will be developed. Students will begin their clinical hours during this course with a minimum of 165 in total. Patients seen in clinical settings will be across the lifespan.

Prerequisites: NURSE 5526, NURSE 5546, NURSE 5547M, NURSE 5548, NURSE 5550.

Co-requisites: NURSE 5549.

NURSE 5564N Neonatal Nursing I Credits: 3

This course integrates the physiologic, pharmacologic, and assessment skills and principles in determining appropriate care of the ill neonate. This course covers case management of respiratory, cardiovascular and neurologic disorders. Current research and evidenced-based practices are used as the course framework. The effects of critical conditions on the growth and development of the neonate, including subsequent chronic health problems as well as the short and long term consequences to the child's family are emphasized. The use of specific interventions and diagnostic procedures are demonstrated and applied in laboratory/clinical settings.

Prerequisites: NURSE 5549N.

Co-requisites: NURSE 5566N.

NURSE 5564NE Clinical for Nurse Educators Credits: 5

This clinical course provides students an opportunity to develop advanced knowledge and clinical skills in an acute care clinical setting. Clinical practice hours will be spent in a variety of settings providing the students the opportunity to provide clinical education and advanced patient care in a specialty population. The students demonstrate their clinical development and clinical reasoning skills by evaluating the process of nursing care (assessment, intervention/management, evaluation) from an evidenced-based perspective.

Prerequisites: All required courses except NURSE 5572 and NURSE 5598.

NURSE 5564W Primary Health Care of Women Credits: 5

This course is designed to prepare the woman's health nurse practitioner student to manage the primary health care of women. The course will focus on the etiology, symptomatology, diagnosis and management of gynecologic and non-gynecologic primary health care problems throughout the lifespan. Emphasis will be placed on caring for women within a holistic, collaborative framework and recognizing how the changing roles of women in today's society can affect their lives and their health status. Concepts, theories and evidence-based practice related to health promotion and maintenance, and illness prevention are addressed.

Prerequisites: NURSE 5526, NURSE 5547W, NURSE 5548, and NURSE 5550; NURSE 5549 and NURSE 5555 (pre or co-req).

NURSE 5566A Primary Care of Adult-Gerontology II Credits: 5

This course is designed to prepare adult-gerontology nurse practitioner (NP) students in the care and management of adults with chronic health problems. The focus is on the differentiation and therapeutic management of chronic health problems encountered in various health care settings. The course enables students to develop a research and theory based practice for disease state management of health care for adults. Core concepts: theories, grief and loss, chronicity and pain; and advanced nursing skills.

Prerequisites: NURSE 5549, NURSE 5564A.

NURSE 5566C Chronic Child Health Care (Clinical II) Credits: 5

This course is designed to apply knowledge and skill to advanced evidence-based nursing care of children experiencing complex/chronic health problems. The organizing framework is case management of chronic health states. Students will apply several theoretical models to acute and chronic conditions of children at different developmental stages representing various socioeconomic and cultural groups, in primary or specialized care settings. Core concepts are stress, coping, adaptation, pain management, grief, loss, nutritional support, ethical decision-making, and symptom management.

Prerequisites: NURSE 5549 and NURSE 5564C.

NURSE 5566F Primary Care of Families II Credits: 5

This course is designed to prepare family nurse practitioner (NP) students in the care and management of families with chronic health problems. The focus is on the differentiation and therapeutic management of chronic health problems encountered in various health care settings. The course enables students to develop a research and theory based practice for disease state management of health care for families. Core concepts: theories, grief and loss, chronicity and pain; and advanced nursing skills.

Prerequisites: NURSE 5549, NURSE 5564F.

NURSE 5566M Family Psychiatric Nursing Advanced Practice II Credits: 5

In this course, management of mental health problems will expand beyond the individual to include families, groups and the greater community. This course will emphasize development of psychotherapy skills by the advanced practice nurse. Theoretical foundations and intervention approaches for individuals, group and family therapies will be explored. Unique or modified approaches for pediatric and older adult populations will be covered. Students will be exposed to the common psychotherapy modalities and will identify which approaches they will adopt and utilize in psychotherapy clinical experiences. Clinical management will also expand from outpatient settings to include crisis evaluation and inpatient care.

Prerequisites: NURSE 5549, NURSE 5546, NURSE 5564M.

NURSE 5566N Neonatal Nursing II Credits: 3

This course integrates physiologic, pharmacologic, and assessment skills and principles determining appropriate care of the ill neonate. This course covers case management of gastrointestinal, renal, endocrine, hematologic, orthopedic, ophthalmologic, dermatologic and immune disorders.. Current research and evidenced-based practices are used as the course framework. The effects of critical conditions on the growth and development of the neonate, including subsequent chronic health problems as well as the short and long term consequences of the child's family are emphasized. The use of specific interventions and diagnostic procedures are demonstrated and applied in laboratory/clinical settings.

Prerequisites: NURSE 5549.

NURSE 5566W Care of the Childbearing Woman Credits: 5

This course is designed to prepare the woman's health nurse practitioner students in the care and management of the childbearing woman. The focus of the course is on the normal adaptation and pathologic alterations throughout the childbearing period. Emphasis is placed on management of women and families from preconception through the puerperium. Concepts, theories and evidence-based research related to the biopsychosocial and cultural aspects of childbearing are addressed. Core concepts include adaptation, stress and coping, grief and loss, pain and symptoms management.

Prerequisites: NURSE 5564W.

NURSE 5572 Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function in an advanced practice nursing role. The focus of this intensive clinical practicum is on the synthesis and application of previous theory and clinical courses under the guidance of a preceptor. Students will be expected to apply advanced clinical decision-making skills and evidence-based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include advanced nursing practice, functional role responsibilities, ethical, legal and health policy issues, and activities with the emphasis on their relationship to patient outcomes. The patient systems for this experience include individuals and families within the context of community.

Prerequisites: All required courses except NURSE 5598, NURSE 5599, and electives.

NURSE 5572II Preceptorship II Credits: 5

This course provides opportunities to apply knowledge and skills from advanced nursing role, theory, research and neonatal clinical courses to the advanced therapeutic management of high-risk neonates. This is the second of two preceptorship courses which builds upon acquired clinical skills of NURSE 5572NI and can be taken concurrently or in consecutive semesters. Emphasis is placed on therapeutic measures within a conceptual framework or model applying findings from research relevant to comprehensive care of neonates. The client system will be the neonate and family.

Co-requisites: NURSE 5572NI.

NURSE 5572M Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function in a psychiatric advanced practice nursing role. The focus of this intensive clinical practicum is on the synthesis and application of previous theory and clinical courses under the guidance of a preceptor. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include advanced nursing practice, functional role responsibilities, ethical, legal and health policy issues, consultation/collaboration and activities with the emphasis on their relationship to patient outcomes. A minimum of 330 clinical hours is required. Patients seen in clinical settings will be across the lifespan.

Prerequisites: All required courses except NURSE 5598.

NURSE 5572NE Synthesis Practicum for Nurse Educators Credits: 3

3 Credit Hours (3 clinical for a minimum of 180 contact/clock hours). This course provides the student a concentrated, experiential opportunity to function in the role as nurse educator. Core concepts include functional role responsibilities, teaching strategies and theory utilization. Emphasis is placed on professional role development and the concept of life-long learning.

Prerequisites: All required courses except NURSE 5598.

NURSE 5572NI Preceptorship I Credits: 5

This course provides opportunities to apply knowledge and skills from advanced nursing role, theory, research and neonatal clinical courses to the advanced therapeutic management of high-risk neonates. This is the first of two preceptorship courses. The other course, NURSE 5572II, can be taken concurrently or in consecutive semesters. Emphasis is placed on therapeutic measures within a conceptual framework or model applying findings from research relevant to comprehensive care of neonates. The client system will be the neonate and family.

Prerequisites: NURSE 5564N, NURSE 5566N.

NURSE 5581A Simulation in Healthcare-State of the Science, Ethical, and Theoretical Foundations Credit: 1

This course provides an introduction to principles, ethics, and theory guiding simulation education in healthcare. Emphasis is on analysis of the evidenced-based research related to simulation, and regulatory processes through interprofessional discussions.

NURSE 5581B Simulation in Healthcare-Development and Curricular Integration Credit: 1

This course introduces students to simulation center design, scenario development, and curriculum integration. Through inter-professional collaboration, students will examine the process of developing simulations and developing realistic, measurable objectives.

NURSE 5581C Simulation in Healthcare-Debriefing and Evaluation Methods Credit: 1

This course prepares students to evaluate learning in the simulation environment and facilitate debriefing. Evaluation methods based on simulation learning domains and objectives are explored.

NURSE 5583A Accreditation in Nursing Education –Procedural Overview and Accreditation Credit: 1

The course provides a foundational understanding of the accreditation process for the Accreditation Commission for Education in Nursing (ACEN) and Commission on Collegiate Nursing Education (CCNE). Procedural overview includes discussion on the accreditation self-study process, standards, on-site evaluation, and the accreditation decision-making process and accreditation. Emphasis will be placed on guidelines for assessment of student learning outcomes and preparation for continuing review.

NURSE 5583B Accreditation in Nursing Education –Accreditation Commission for Education in Nursing (ACEN) Credit: 1

This course builds upon foundational principles of accreditation by exploring the process as related to the Accreditation Commission for Education in Nursing (ACEN). Emphasis is placed on how to implement the accreditation process to successfully complete a self-study report.

Prerequisites: NURSE 5583A.

NURSE 5583C Accreditation in Nursing Education –Commission on Collegiate Nursing Education (CCNE) Credit: 1

This course builds upon foundational principles of accreditation by exploring the process as related to the Commission on Collegiate Nursing Education (CCNE). Emphasis is placed on how to implement the accreditation process to successfully complete a self-study report.

Prerequisites: NURSE 5583A.

NURSE 5587 Research Utilization in Nursing Credits: 3

This course will prepare nurses to implement a research utilization model to validate practice. The theoretical basis for research utilization and practical instances of its application in nursing will be examined. Opportunities will be provided to develop a research utilization plan to address a clinical area of practice.

Prerequisites: NURSE 5550, NURSE 5555.

NURSE 5590 Directed Scholarly Activity Credits: 1-2

This course provides individualized experiences to prepare the student for their comprehensive examination.

Prerequisites: Permission of the instructor.

Co-requisites: Completion of core course requirements.

NURSE 5597A Independent Study in Nursing/Patient Care-Elective Credits: 1-6

Guided study of selected topics and/or areas in nursing and/or patient care.

Prerequisites: NURSE 5550.

NURSE 5597AHA Independent Study in Nursing Credits: 1-6

NURSE 5597AS Independent Study In Nursing Credits: 1-6

Independent Study In Nursing

NURSE 5597B Independent Study in Nursing/Patient Care-Equivalent Credits: 1-6

Guided study of selected topics and/or areas in nursing and/or patient care.

Prerequisites: NURSE 5550.

NURSE 5597EPR Independent Study in Nursing Credits: 1-6

NURSE 5597HA Independent Study in Nursing Credits: 1-6

NURSE 5597LS Independent Study In Nursing Credits: 1-6

NURSE 5597P1 Independent Study in Nursing Credits: 1-6

NURSE 5597P2 Independent Study in Nursing Credits: 1-6

NURSE 5597PCF Independent Study In Nursing Credits: 1-6

NURSE 5597PF Independent Study In Nursing Credits: 1-6

NURSE 5597PN Independent Study Nursing Credits: 1-6

NURSE 5597ST Independent Study In Nursing Credits: 1-6

NURSE 5597WLA Indep Study in Nursing Credits: 1-6

Indep Study in Nursing

NURSE 5597WLB Indep Study in Nursing Credits: 1-6

Indep Study in Nursing

NURSE 5597WLC Indep Study in Nursing Credits: 1-6

Indep Study in Nursing

NURSE 5598 Directed Research Credits: 1-6

Individual research project for students to utilize beginning research skills in designing and conducting independent studies under the direction of the faculty.

Prerequisites: NURSE 5550, NURSE 5555.

NURSE 5599 Research Thesis Credits: 1-9

Individual study under the direction of a member of the faculty leading to the preparation and oral defense of a thesis.

Prerequisites: NURSE 5550, NURSE 5555.

NURSE 5601 Clinical Institute I Credit: 1

1 credit hour (1 didactic) This course provides an introduction to the knowledge and skills essential to becoming a graduate student. Students utilize theory, evidence based practice/research, and clinical expertise to become expert practitioners in their population foci. Content includes relevant UMKC policies and procedures, technology utilization to conduct library literature searches, access to course content on electronic platforms, and planning for success in graduate school. The literature review search progresses to application of the content, through written and verbal communication. Techniques building on critical thinking skills to start clinical diagnostic reasoning skills are introduced along with graduate school expectations and outcomes.

Prerequisites: Admission to the MSN or DNP programs.

NURSE 5602 Healthcare Systems & Leadership Credits: 3

This course focuses on the DNP as leader within the complex health care industry. Utilizing information technology, an in-depth study of the socio-political, economic, cultural and historical background of the American health care system the system of health professions will form the foundation for exploration of leadership needs the DNP leadership role.

Prerequisites: Admission to the DNP program.

NURSE 5603 Research Institute I Credits: 2

This course will provide a hands-on introduction to the process of becoming a research scientist. Content will include the responsible conduct of research, its core element, the emerging guideline, relevant UMKC policies and procedures, and the impact to the Researcher in his/her day-to-day activities. This course also includes literature reviews, scholarly writing, technology in the Research process, developing a program of scholarship and effective time management.

Prerequisites: Admission to the PhD program at the School of Nursing and Health Studies.

NURSE 5604 Research Institute II Credits: 2

This course will provide interactive sessions to develop skills necessary for the synthesis of research findings, the identification of funding sources and the initiation of the grant writing process. Also included will be the opportunity to develop and present research findings in multiple venues.

Prerequisites: NURSE 5603, Completion of 6 credit hours of PhD coursework.

NURSE 5607NA Health Care Policy and Leadership for the Nurse Anesthetist Credits: 2

This course provides an in-depth study of the health care policy process, emphasizing ways that Doctor of Nursing Practice (DNP) prepared Certified Registered Nurse Anesthetists (CRNAs) can incorporate health policy advocacy into their practice. The content prepares DNP CRNAs to be effective, innovative leaders in nurse anesthesia and health care. Students will participate in a leadership experience in one of four areas: education, research, administration, or politics.

Prerequisites: Active status in both UMKC SoNHS BSN-DNP NA program and the TMC School of Nurse Anesthesia.

NURSE 5608 Theory Development I Credits: 3

The philosophical underpinnings of nursing and the theoretical development of nursing science will be explored in this course. The discipline of nursing and the relationship between nursing theory, research, and practice will be discussed. Students will analyze nursing and non-nursing theories for research or clinical questions. Students will identify a theoretical framework to guide their research or evidence-based practice project.

Prerequisites: Twelve credit hours of graduate level course work, including NURSE 5550 and NURSE 5555, or their equivalents.

NURSE 5610 Theory Development in Nursing II Credits: 3

Nursing and non-nursing models, frameworks and theories will be analyzed and critically evaluated. Philosophical tenants will be debated. Students will identify the range of applicable theories for their area of research. Appropriate application of theories to independent and dependent variables, mediators and moderators, cofactors, correlates and outcomes will be explored. Students will develop concepts, hypotheses, and research goals that utilize an identified theory for nursing research.

Prerequisites: NURSE 5608.

NURSE 5611 Healthcare Economics & Quality Credits: 3

This course focuses on the principles of, and complex relationship between, cost and efficiency and effectiveness and health care quality outcomes. Economic perspectives and needs from industry, organizations, providers and consumers will all be examined. Throughout the course, issues regarding the inextricable link between cost and quality within the complex healthcare environment will be examined and addressed, with emphasis on DNP nurse intervention and leadership.

Prerequisites: Admission to the DNP program.

NURSE 5612 Statistics I Credits: 3

This graduate statistics online course is designed for students in the graduate programs. The course provides a comprehensive understanding of: describing data, logic of sampling, and test statistics; hypothesis testing, type 1 and type 2 errors; power; one-way ANOVA (analysis of variance); planned comparison, post-hoc tests and trend analysis; factorial ANOVA; repeated measures designs and mixed randomized repeated designs; simple and multiple regression; and ANCOVA (analysis of co-variance).

Prerequisites: Upper division undergraduate statistics course.

NURSE 5613 Application of Evidence-based Practice I Credits: 3

This course is designed to provide an analytic and systematic approach to evaluate evidence-based research and guidelines used in clinical practice. The course builds on methods of evidence-based practice (EBP), theoretical foundations, ethical principles, research design, and statistical analyses. The student will develop an evidence-based approach to address a clinical question and to construct an integrative literature review. In the course, an EPB project is designed to provide quality health care. The project plan incorporates the integrative literature review, scientific methods, outcome measurement, and data analysis.

Prerequisites: NURSE 5555, NURSE 5608.

NURSE 5614 Health Policy & Ethics Credits: 2

This course examines health policy and ethics as they intersect with other public policies. Legal, financial, and ethical issues associated with policy development and evaluation are critically examined.

Prerequisites: Admission into the Ph.D. in Nursing Program.

NURSE 5615NA Chemistry and Physics for the Nurse Anesthetist Credits: 3

This course is designed to provide the nurse anesthesia student a foundational knowledge needed for the provision of anesthesia. This course will review elements of general, organic, and biochemistry pertinent to understanding structure, characteristics and basic mechanisms of metabolic pathways and pharmacology routinely administered during the anesthetic period. Pertinent laws and principles of physics will be presented. The student will be prepared to apply pertinent laws and principles of physics to the provision of anesthesia services.

Prerequisites: Acceptance into School of Nurse Anesthesia Program.

NURSE 5616NA Anesthesia Crisis Resource Management Credit: 1

This course is designed for the graduate nurse anesthesia student to optimize their expert clinical judgement during low-frequency, high-acuity anesthesia crisis events. The history, importance, and theory of patient safety during dynamic anesthetic situations will be discussed, as well as specific skills and practices that improve performance. The goal of this course is for the student to develop knowledge and skills of Anesthesia Crisis Resource Management (ACRM) prior to graduation.

Prerequisites: NURSE 5619NA3.

NURSE 5617 Application of Evidence-based Practice II Credits: 3

This course is designed to provide an analytic and systematic approach to incorporation of evidence-based research into clinical practice. The course builds on the underpinnings of evidence-based practice (EBP) including theoretical foundations, ethical and cultural principles, quality, policy and economic considerations, design and methods, and statistical analysis of outcomes. In this course, the student will use the integrated literature review and principles of human subject protection to develop an evidence-based practice project proposal and submit the proposal for approval. Support for the EBP improvement plan includes technology and information systems.

Prerequisites: NURSE 5613.

NURSE 5617B Application of Evidence-based Practice II Credits: 3

In this course, the student will use the integrated literature review and principles of human subject protection to develop an evidence-based practice (EBP) project proposal. Students will collaborate with a site in preparation for the project. Support for the EBP improvement plan includes technology and information systems.

Prerequisites: NURSE 5617.

NURSE 5619NA1 Principles of Nurse Anesthesia Practice I Credits: 2

This course introduces the nurse anesthesia student to concepts necessary to plan and execute safe individualized anesthetics. Content includes assessment of co-morbid conditions and patient populations in anesthesia, appropriate plans of care, anesthetic techniques, prevention of complications, fluid management, monitoring and utilization of anesthesia equipment. Fundamental concepts and techniques essential to clinical anesthesia practice focus on theoretical, practical and professional considerations involved in the administration of general anesthesia, conscious sedation and regional anesthesia, inside and outside the operating room. Content includes evidence based student led conferences, anesthetic literature, morbidity and mortality, inter-disciplinary and intra-disciplinary conferences and use of informatics systems.

Prerequisites: NURSE 5619NAB.

NURSE 5619NA2 Principles of Nurse Anesthesia II Credits: 3

This course is designed to provide the nurse anesthesia student a broad knowledge base in multiple concepts, topics and techniques. This course builds on concepts learned in Principles I and delineates techniques of anesthesia management that are considered more situation specific with specialized diagnostic and anesthetic procedures. Primarily focused on patients and existing co-morbidities, the course intensively covers more advanced concepts and principles of anesthetic management including neurosurgical, thoracic, vascular and trauma procedures. Content includes evidence based student led morbidity and mortality conferences, inter-disciplinary and intra-disciplinary conferences, use of informatics systems and simulation based learning.

Prerequisites: NURSE 5619NA1.

NURSE 5619NA3 Principles of Nurse Anesthesia Practice III Credits: 3

The course covers advanced concepts and principles of anesthetic management with emphasis on cardio-thoracic anesthesia and anesthetic emergencies. The course builds on Principles I and II and focuses more on critical thinking, skill development, specific procedures utilized in anesthetic practice including advanced airway techniques and placement of invasive monitoring modalities as well as crisis management in anesthesia. Content includes evidence based student led conferences, utilization of anesthetic literature, morbidity and mortality, inter-disciplinary and intra-disciplinary conferences, use of medical informatics systems and simulation based learning.

Prerequisites: NURSE 5619NA2.

NURSE 5619NAB Basic Principles of Nurse Anesthesia Practice Credits: 2

This course is designed to build on topics introduced in orientation and provides the student with the knowledge needed to begin the delivery of anesthesia. This course encompasses a variety of topics including pharmacology and equipment utilized in the provision of anesthesia, airway anatomy and management, commonly administered fluid, colloids, non-colloids, and blood products and an overview of anesthesia and trauma. Lecture topics will be assimilated into high fidelity simulation scenarios to prepare the student for clinical residency courses.

Prerequisites: NURSE 5619NAO.

NURSE 5619NAO Orientation to Nurse Anesthesia Practice Credits: 2

This course is designed to give the first year nurse anesthesia student a broad field orientation to anesthesia topics. The course will provide a foundation of knowledge for the safe practice of anesthesia. This will be an initial introduction to the art and science of anesthesia. The course content will include: patient assessment of cardiac status for anesthesia, anesthetic equipment and workplace safety. The anesthesia machine is incorporated into the learning process to reinforce principles introduced in class. Institutional policies/procedures will be reviewed along with interprofessional communication skills. Education regarding personal wellness and substance abuse risks will be discussed.

Prerequisites: Admission into the DNP-NA program.

NURSE 5620 Advanced Practice V - DNP Clinical Credits: 5

This course is designed to increase the clinical expertise of the student by fostering the development of a specific area of focus. It allows the student to investigate specific procedures, skills or clinical knowledge that will be later utilized in the DNP practicum course. The course is designed to be self-directed allowing the student to focus on her/his own specific clinical interests and/or area of expertise. This five credit hour course consists of one credit hour of didactic and four credit hours of clinical (120 hours).

Prerequisites: All DNP coursework except NURSE 5624.

NURSE 5621A Clinical III Credits: 4

This course will provide students with the opportunity to apply knowledge from previous graduate courses to advanced primary care nursing of adults and geriatrics. The focus is to demonstrate refined advanced assessment, diagnosis, and treatment skills in clinical practice as appropriate in areas of specialization related to multiple disease processes associated in the care of adults and geriatrics. This practice will be based on the application of evidence in the biophysical, psychosocial, behavioral, sociopolitical, cultural, economic, interprofessional practice and nursing science arenas.

Prerequisites: NURSE 5564A- Ambulatory Care Of Adults

NURSE 5621C Clinical III Credits: 4

This course will provide students with the opportunity to apply knowledge from previous graduate courses to advanced primary care nursing of children. The focus is to demonstrate refined advanced assessment, diagnosis, and treatment skills in clinical practice as appropriate in areas of specialization related to multiple disease processes associated in the care of children. This practice will be based on the application of evidence in the biophysical, psychosocial, behavioral, sociopolitical, cultural, economic, interprofessional practice and nursing science arenas.

Prerequisites: NURSE 5566C.

Co-requisites: NURSE 5617B.

NURSE 5621F Clinical III Credits: 4

This course will provide students with the opportunity to apply knowledge from previous graduate courses to advanced primary care nursing of individuals and families. The focus is to demonstrate refined advanced assessment, diagnosis, and treatment skills in clinical practice as appropriate in areas of specialization related to multiple disease processes associated in the care of individuals and families. This practice will be based on the application of evidence in the biophysical, psychosocial, behavioral, sociopolitical, cultural, economic, interprofessional practice and nursing science arenas.

Prerequisites: NURSE 5566F.

Co-requisites: NURSE 5617B.

NURSE 5621W Clinical III Credits: 4

This course will provide students with the opportunity to apply knowledge from previous graduate courses to advanced primary care nursing of women. The focus is to demonstrate refined advanced assessment, diagnosis, and treatment skills in clinical practice as appropriate in areas of specialization related to multiple disease processes associated in the care of women. This practice will be based on the application of evidence in the biophysical, psychosocial, behavioral, sociopolitical, cultural, economic, interprofessional practice and nursing science arenas.

Prerequisites: NURSE 5566W.

Co-requisites: NURSE 5617B.

NURSE 5622 Statistics II Credits: 3

This graduate statistics on-line course is designed to provide a conceptual understanding of the statistical procedures associated with: advanced multiple regression; moderators and mediators in multiple regression; path analysis; logistic regression; factor analysis; MANCOVA; MANOVA; cluster analysis; and canonical correlation.

Prerequisites: NURSE 5612.

NURSE 5623A Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function at the highest level of advanced nursing practice. The focus is on the synthesis and application of previous theory, primary care, and specialty clinical courses. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include integrated nursing science with knowledge of ethical, legal, and health policy issues.

Prerequisites: NURSE 5621A.

Co-requisites: NURSE 5629.

NURSE 5623C Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function at the highest level of advanced nursing practice. The focus is on the synthesis and application of previous theory, primary care, and specialty clinical courses. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include integrated nursing science with knowledge of ethical, legal, and health policy issues.

Prerequisites: NURSE 5621C.

Co-requisites: NURSE 5629.

NURSE 5623F Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function at the highest level of advanced nursing practice. The focus is on the synthesis and application of previous theory, primary care, and specialty clinical courses. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include integrated nursing science with knowledge of ethical, legal, and health policy issues.

Prerequisites: NURSE 5621F.

Co-requisites: NURSE 5629.

NURSE 5623M Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function at the highest level of advanced nursing practice. The focus is on the synthesis and application of previous theory, mental health care, and specialty clinical courses. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include integrated nursing science with knowledge of ethical, legal, and health policy issues.

Prerequisites: NURSE 5621M.

Co-requisites: NURSE 5629.

NURSE 5623W Advanced Nursing Practice: Synthesis Practicum Credits: 5

This course is a concentrated, experiential, supervised clinical opportunity to function at the highest level of advanced nursing practice. The focus is on the synthesis and application of previous theory, primary care, and specialty clinical courses. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include integrated nursing science with knowledge of ethical, legal, and health policy issues.

Prerequisites: NURSE 5621W.

Co-requisites: NURSE 5629.

NURSE 5624 Advanced Practice VI-DNP Practicum Credits: 5

This course is designed to synthesize all previous coursework through the implementation and evaluation of a "tangible and deliverable academic product that is derived from the practice immersion experience" (DNP essentials, p.20). Individual student work may take a variety of forms, but will include the elements of evidence evaluation and utilization, systems analysis, and dissemination of best practice information.

Prerequisites: NURSE 5620.

NURSE 5627NA Regional Anesthesia Credit: 1

This course is designed for graduate nurse anesthesia students to review anatomy, pharmacodynamics, pharmacokinetics and physiological effects of local anesthetics and to learn techniques to administer various types of regional anesthesia.

Prerequisites: NURSE 5619NAB.

NURSE 5628NA1 Advanced Physical Health Assessment for the Nurse Anesthetist I Credits: 2

This is the first of a two course series that will present the various elements required to perform a systematic assessment with an emphasis on the patient preparing to undergo anesthesia throughout the lifespan. Integration of in-depth health history, physical and psychological signs and symptoms, diagnostic testing, pathophysiologic changes, psychosocial, and cultural characteristics of the individual are emphasized. Professional documentation and communication of findings will be practiced. The student will integrate knowledge and advanced assessment skills to perform a comprehensive pre-anesthesia assessment.

Prerequisites: NURSE 5619NA0.

Co-requisites: NURSE 5619NAB.

NURSE 5628NA2 Advanced Physical Health Assessment for the Nurse Anesthetist II Credit: 1

This is the second of a two course series. This course will integrate the student's knowledge and skills to work effectively and efficiently within the healthcare team to formulate an anesthesia plan of care which takes into consideration assessment findings related to underlying pathology, life circumstance, culture, and ethnicity. Content will include advanced diagnostic testing pertinent to the patient preparing for anesthesia. Assessment skills and critical thinking will be refined through clinical experiences. This course consists of 0.5 credit hours of didactic and 0.5 credit hours of clinical (45 hours).

Prerequisites: NURSE 5628NA1.

NURSE 5629 Clinical Institute III Credits: 3

This course is designed to synthesize all previous course work. The students will utilize education, knowledge and experiences to complete their final DNP project data collection and evaluation of a "tangible and deliverable academic product that is derived from the practice immersion experience" (AACN Essentials 2006, p. 20). Individual student work may take a variety of forms, but will include the multi-faceted elements required of evidence evaluation and utilization, systematic analysis, and dissemination of project data to support best practice.

Prerequisites: NURSE 5617B, NURSE 5621.

Co-requisites: NURSE 5623.

NURSE 5630 Health Care Systems Credits: 3

This course is a guided, in-depth exploration, analysis and evaluation of selected health care systems literature. Other nursing literature will be reviewed as appropriate.

Prerequisites: Admission into Ph.D. in Nursing program.

NURSE 5631 State of the Science Credits: 3

This course is a guided in-depth exploration of literature on a selected focus area. Appropriate contextual system literature will be reviewed as appropriate. Scholarly writing for a variety of contexts will be presented.

Prerequisites: Admission into a doctoral program and completion of a doctoral level theory course or permission of instructor

NURSE 5632 Health Restoration & Support Credits: 3

This course is a guided, in-depth exploration, analysis and evaluation of selected health restoration support literature. Other nursing literature will be reviewed as appropriate.

Prerequisites: Admission into Ph.D. in Nursing program.

NURSE 5636NA Obstetrical Anesthesia Credit: 1

This course is designed to provide the graduate nurse anesthesia student with a broad knowledge base in the field of obstetrical anesthesia. Anatomy and physiology of pregnancy, co-morbidities in the pregnant patient and anesthesia procedures for the pregnant patient will be presented. Lecture topics will be assimilated into high fidelity simulation scenarios to prepare the student for clinical residency courses.

Prerequisites: NURSE 5619NA1.

Co-requisites: NURSE 5619NA2.

NURSE 5637 Healthcare Outcomes and Epidemiology Credits: 2-3

This course is an application of basic epidemiologic principles. This course provides the foundation for assessment and evaluation of health outcomes in a variety of populations, clinical settings, and systems. Concepts introduced include fundamentals of epidemiology, determinants of health, screening, outbreak investigation, and disease surveillance. The course includes content on descriptive and analytic epidemiology. CRNA students enroll for 2-credits; all other DNP students are required to enroll for 3-credits.

Prerequisites: NURSE 5612 or equivalent.

NURSE 5638NA1 Pharmacology of Anesthesia I Credit: 1

The course is the first in a two semester sequence designed to provide the graduate nurse anesthesia student with the knowledge of pharmacology and the human physiologic responses to pharmacologic agents when administered to the patient perioperatively.

Prerequisites: NURSE 5619NA3.

NURSE 5638NA2 Pharmacology of Anesthesia II Credits: 2

This course is the second in a two semester sequence designed to provide the graduate nurse anesthesia student with the knowledge of pharmacology and the human physiologic responses to pharmacologic agents when administered to the patient perioperatively.

Prerequisites: NURSE 5638NA1.

NURSE 5640NA Pediatric Anesthesia Credit: 1

This course is designed for the graduate nurse anesthesia student to learn anatomy and physiology specific to the pediatric patient. The most common pathophysiologic states found in the pediatric surgical patient will be discussed as well as fluid management and pharmacology as it relates to the pediatric patient. The goal of this pediatric course is to give the student the basic knowledge of pediatric anesthesia as a foundation, prior to their pediatric clinical rotation.

Prerequisites: NURSE 5619NA2.

Co-requisites: NURSE 5619NA3.

NURSE 5641NA Acute and Chronic Pain Management Credits: 2

The student will develop a basic understanding of pain management as it relates to the field of anesthesia. Relevant anatomy, physiology, and pharmacology will be reviewed to evaluate the risks, benefits, and options of various pain management approaches. Students will be required to demonstrate proficiency in regional anesthesia techniques and management of pain in patients of all ages and varying stages of wellness.

Prerequisites: Nurse 5619NA1, Nurse 5619NA2.

NURSE 5642NA Comprehensive Review Credit: 1

This is a comprehensive review course that covers all areas of anesthesia, as well as all anesthesia techniques. This course will discuss normal physiology and pathophysiology of all organ systems and how various anesthesia techniques and pharmacology affect these systems. The student will be equipped with the knowledge of how to choose appropriate anesthetic techniques for various disease states and surgical procedures.

Prerequisites: NURSE 5619NA2.

Co-requisites: NURSE 5619NA3.

NURSE 5643NA Professional Practice for the Nurse Anesthetist Credits: 2

This course is designed to explore a range of non-clinical issues in nurse anesthesia practice. Students will gain an appreciation of the professional ideals of the Doctor of Nursing Practice (DNP) prepared Certified Registered Nurse Anesthetist (CRNA) through both online and on-site group discussion. In addition, students will attend professional meetings including: Student Registered Nurse Anesthetist (SRNA) Leadership Luncheon, Missouri Association of Nurse Anesthetists (MoANA) Lobby Day; Wellness in the Workplace, an event highlighting the risks of chemical dependency in nurse anesthesia practice; and one additional state or national professional meeting.

Prerequisites: Active status in both the UMKC SONHS DNP-NA Track and TMC School of Nurse Anesthesia.

NURSE 5650NA1 Clinical Anesthesia I Credits: 0

The first of three clinical anesthesia practicums designed to provide the nurse anesthesia student simulated learning and complete hands on, supervised clinical practice on adult patients. The foci are skill development and safe anesthetic practice throughout the perioperative period. Students are assigned day experiences and call shifts at Truman Medical Center. Experiences progress in acuity and include, but are not limited to, general, gynecological, orthopedic, oral maxillary facial, urologic, dental, ophthalmic and endoscopic procedures. Core content includes formulation and management of perianesthesia plan of care, utilization of technology, application of EBP, technical skill development and advanced practice role competencies.

Prerequisites: NURSE 5650NA0, NURSE 5619NAB.

NURSE 5650NA2 Clinical Anesthesia II Credits: 0

The second of three clinical anesthesia practicums designed to provide the nurse anesthesia student simulated learning and complete hands on, supervised clinical practice on adult patients. The foci are skill development and safe anesthetic practice throughout the perioperative period. Students are assigned day experiences and call shifts at Truman Medical Center. Experiences progress in acuity and include, but are not limited to, general, gynecological, orthopedic, oral maxillary facial, urologic, dental, ophthalmic and endoscopic procedures. Core content includes formulation and management of perianesthesia plan of care, utilization of technology, application of EBP, technical skill development and advanced practice role competencies.

Prerequisites: NURSE 5650NA1.

NURSE 5650NA3 Clinical Anesthesia III Credits: 0

The third of three clinical anesthesia practicums designed to provide the nurse anesthesia student simulated learning and complete hands on, supervised clinical practice on adult patients. The foci are skill development and safe anesthetic practice throughout the perioperative period. Students are assigned day experiences and call shifts at Truman Medical Center. Experiences progress in acuity and include, but are not limited to, general, gynecological, orthopedic, oral maxillary facial, urologic, dental, ophthalmic and endoscopic procedures. Core content includes formulation and management of perianesthesia plan of care, utilization of technology, application of EBP, technical skill development and advanced practice role competencies.

Prerequisites: NURSE 5650NA2.

NURSE 5650NA4 Clinical Anesthesia IV Credits: 0

This course is the first of a three semester nurse anesthesia residency/practicum designed to provide concentrated, experiential, supervised, high acuity, perioperative experiences. The focus is on the synthesis and application of all previous courses. Students will be expected to apply advance clinical decision-making skills and evidence-based practice guidelines to the assessment, management and evaluation of complex procedures and patients across the lifespan. Students attend specialty rotations at up to 9 different sites. Core concepts include nurse anesthesia practice, technical skill development, integration of technology and evidence based practice to the patient and/or healthcare system, and ethical, legal and professional issues.

Prerequisites: NURSE 5619NA3 and NURSE 5650NA3.

NURSE 5650NA5 Clinical Anesthesia V Credits: 0

This course is the second of a three semester nurse anesthesia residency/practicum designed to provide concentrated, experiential, supervised, high acuity, perioperative experiences. The focus is on the synthesis and application of all previous courses. Students will be expected to apply advance clinical decision-making skills and evidence-based practice guidelines to the assessment, management and evaluation of complex procedures and patients across the lifespan. Students attend specialty rotations at up to 9 different sites. Core concepts include nurse anesthesia practice, technical skill development, integration of technology and evidence based practice to the patient and/or healthcare system, and ethical, legal and professional issues.

Prerequisites: NURSE 5650NA4.

NURSE 5650NA6 Clinical Anesthesia VI Credits: 0

This course is the third of a three semester nurse anesthesia residency/practicum designed to provide concentrated, experiential, supervised, high acuity, perioperative experiences. The focus is on the synthesis and application of all previous courses. Students will be expected to apply advance clinical decision-making skills and evidence-based practice guidelines to the assessment, management and evaluation of complex procedures and patients across the lifespan. Students attend specialty rotations at up to 9 different sites. Core concepts include nurse anesthesia practice, technical skill development, integration of technology and evidence based practice to the patient and/or healthcare system, and ethical, legal and professional issues.

Prerequisites: NURSE 5650NA5.

NURSE 5650NAO Clinical Anesthesia Orientation Credits: 0

Orientation to clinical practice during which students participate in hands on, supervised clinical practices and simulated clinical learning experiences. Students orient to the Hospital, OR, and Anesthesia department. Clinical education focus is on safe anesthetic practice and skill development throughout the entire perioperative period. Experiences include basic airway management, equipment procurement, anesthesia assessment process, induction and emergence from anesthesia. Clinical orientation experiences include multiple patient populations, ages and sub specialties within anesthesia practice.

Prerequisites: NURSE 5619NAO.

Co-requisites: NURSE 5619NAB.

NURSE 5659NA Health Systems, Economics and Quality in Nurse Anesthesia Practice Credits: 2

This course is designed to introduce the nurse anesthesia student to the fundamental principles of healthcare economics and healthcare systems. The effects of economics will be discussed from a broad viewpoint and from the various perspectives of anesthesia care delivery models. This course will also discuss the impact of quality indicators on anesthesia practice. The course will begin with a leadership summit and continue with online content and discussion forums.

Prerequisites: NURSE 5674NA1.

NURSE 5661NA1 Anesthesia & Co-Existing Diseases I Credits: 2

This course is the first in a two semester series designed to provide senior nurse anesthesia students with the knowledge of pathophysiology of various disease states and their anesthesia implications.

Prerequisites: NURSE 5619NA3.

NURSE 5661NA2 Anesthesia & Co-Existing Diseases II Credit: 1

This course is the second in a two semester series designed to provide senior nurse anesthesia students with the knowledge of pathophysiology of various disease states and their anesthesia implications.

Prerequisites: NURSE 5661NA1.

NURSE 5662 Psychometrics Credits: 3

This course focuses on application of psychometric theories and practices related to instrumentation in nursing research. The basic methodologies and techniques for constructing, testing, and evaluating instruments will be discussed and applied by students. Content will focus on theoretical foundations of measurement, item construction, instrument design, item analysis, validity and reliability assessment. Criteria for evaluating existing instruments will also be discussed.

Prerequisites: NURSE 5612; NURSE 5622; NURSE 5668.

NURSE 5666 Designing Nursing Research Credits: 3

This doctoral level course directs the student to develop research writing skills necessary for developing their dissertation and future program of research. Critical analyses of methodologies and design are accomplished. The strengths and weakness of various research designs (non-experimental, quasi-experimental, experimental and randomized clinical trial) are evaluated via in-depth discussions.

Prerequisites: NURSE 5610, NURSE 5612, NURSE 5622, NURSE 5662, NURSE 5668, NURSE 5670.

NURSE 5668 Quantitative Research Credits: 3

Quantitative research methods used to build nursing's body of knowledge are explored. Experimental, quasi-experimental, and correlational designs and clinical trials are analyzed. Emphasis is placed on design, data generation, analysis, and dissemination of findings. Issues pertaining to the use of quantitative methods will also be explored.

Prerequisites: NURSE 5610, PSYCH 5516.

NURSE 5670 Qualitative Research Methods Credits: 3

Qualitative research methods used to build nursing's body of knowledge are explored in this seminar course. Emphasis is placed on design, data generation and analysis, and dissemination of findings. Issues regarding qualitative research are identified and analyzed.

Prerequisites: Admission to the Nursing Ph.D. program.

NURSE 5671 Advanced Qualitative Research and Mixed Methods Credits: 3

This graduate level course is designed for students who have had an introduction to qualitative research methods and want to pursue more in-depth study of these methodologies, with emphasis on a chosen methodology that they hope to use in their own research. Appropriateness of methodological choice in relation to research question, application of theory, rhetorical style and author presence, and criteria for judging quality will be among the topics explored for various methodologies and data generation (collection) and data analysis skills will be practiced. The course will also acquaint students with the growing literature on mixed methods research.

Prerequisites: Admission to the Nursing Ph.D. program, an introductory qualitative research course.

NURSE 5674NA1 Scholarly Project in Nurse Anesthesia I Credits: 3

This is the first in a series of four courses that culminate in a scholarly project in nurse anesthesia that demonstrates the scholarship of integration and application. This is a distance education course. The student will identify a complex problem in their area of interest and expertise, design, implement, and evaluate an innovative solution to this problem. The student will use the breadth of knowledge and scholarship skills gained through their program of study to improve practice and/or patient outcomes. It validates the student's ability to translate research evidence into practice. This project lays the foundation for future scholarship.

Prerequisites: NURSE 5555.

NURSE 5674NA2 Scholarly Project in Nurse Anesthesia II Credits: 2

This is the second in a series of four courses that culminate in a scholarly project in nurse anesthesia that demonstrates the scholarship of integration and application. This is a distance education course. The student will identify a complex problem in their area of interest and expertise, design, implement, and evaluate an innovative solution to this problem. The student will use the breadth of knowledge and scholarship skills gained through their program of study to improve practice and/or patient outcomes. It validates the student's ability to translate research evidence into practice. This project lays the foundation for future scholarship.

Prerequisites: NURSE 5674NA1.

NURSE 5674NA3 Scholarly Project in Nurse Anesthesia III Credits: 2

This is the third in a series of four courses that culminate in a scholarly project in nurse anesthesia that demonstrates the scholarship of integration and application. This course is a face-to-face course. The student will identify a complex problem in their area of interest and expertise, design, implement, and evaluate an innovative solution to this problem. The student will use the breadth of knowledge and scholarship skills gained through their program of study to improve practice and/or patient outcomes. It validates the student's ability to translate research evidence into practice. This project lays the foundation for future scholarship.

Prerequisites: NURSE 5674NA2.

NURSE 5674NA4 Scholarly Project in Nurse Anesthetist IV Credits: 2

This is the fourth in a series of four courses that culminate in a scholarly project in nurse anesthesia that demonstrates the scholarship of integration and application. This course is a face-to-face course. The student will identify a complex problem in their area of interest and expertise, design, implement, and evaluate an innovative solution to this problem. The student will use the breadth of knowledge and scholarship skills gained through their program of study to improve practice and/or patient outcomes. It validates the student's ability to translate research evidence into practice. This project lays the foundation for future scholarship.

Prerequisites: NURSE 5674NA3.

NURSE 5696 Pre-Dissertation Credits: 1-2

This course is individually directed research leading to the preparation of a doctoral dissertation.

Prerequisites: Permission of the instructor.

Co-requisites: Completion of the comprehensive examination.

NURSE 5697A Special Topics Nursing Elective Credits: 1-6

This course consists of the guided study of special topics in areas of nursing theory and/or research.

Prerequisite: Admission into PhD in Nursing Program

NURSE 5697APP Special Topics Nursing Credits: 1-6**NURSE 5697AR Special Topics Nursing Credits: 1-6****NURSE 5697B Special Topics Nursing-Equivalent Credits: 1-6**

This course will cover guided study of course equivalent topics in areas of nursing theory and/or research.

Prerequisites: Admission into Ph.D. in Nursing program.

NURSE 5697CI Special Topics Nursing Credits: 1-6**NURSE 5697CP Special Topics Nursing Credits: 1-6****NURSE 5697CR Special Topics Credits: 1-6**

This course will cover guided study of course equivalent topics in areas of nursing theory and/or research.

Prerequisites: Admission into Ph.D. in Nursing program.

NURSE 5697DP Special Topics Nursing Credits: 1-6

NURSE 5697HER Special Topics in Nursing Credits: 1-6

NURSE 5697RD Special Topics Nursing Credits: 1-6

NURSE 5697SHA Special Topics-Nursing Credits: 1-6
Special Topics-Nursing

NURSE 5697SHB Special Topics Nursing Credits: 1-6
Special Topics Nursing

NURSE 5697SHC Special Topics Nursing Credits: 1-6
Special Topics Nursing

NURSE 5697WLA Special Topics in Nursing Credits: 1-6
Special Topics in Nursing

NURSE 5697WLB Special Topics in Nursing Credits: 1-6
Special Topics in Nursing

NURSE 5697WLC Special Topics in Nursing Credits: 1-6
Special Topics in Nursing

NURSE 5699 Dissertation Research Credits: 1-12

Individual directed research leading to preparation and completion of doctoral dissertation.

NURSE 5899 Required Graduate Enrollment Credit: 1

Academic Regulations in the School of Nursing & Health Studies

Students in UMKC's School of Nursing and Health Studies (SoNHS) are expected to be familiar with the contents of the UMKC General Catalog and UMKC School of Nursing and Health Studies Policies & Procedures Manual and comply with the provisions pertaining to their level of study. The UMKC General Catalog outlines the minimum academic regulations and degree requirements. The UMKC School of Nursing and Health Studies may adopt additional and/or more stringent requirements for admission, retention and degrees that take priority over the Catalog's minimum regulations to provide students with the best possible preparation for successful completion of licensure examinations. All policies are reviewed annually. Policy changes become effective the fall following the approved change. Students will be notified via UMKC e-mail if there are exceptions to the effective date. These policies and procedures can be found in the School of Nursing and Health Studies Policies and Procedures Manual located at <http://sonhs.umkc.edu/wp-content/uploads/2014/10/policy-procedure.pdf>.

Students must also be familiar with the Nursing Honor Code found at <http://sonhs.umkc.edu/wp-content/uploads/2014/10/honor-code.pdf>.

Performance standards may be influenced annually by various regulatory agency requirements and subject to change. Students will be notified in writing within 24 hours of mandated changes. Students admitted the BSN program prior to any mandated change will not be held to the new requirements.

Academic and Professional Behavior

Students in the School of Nursing and Health Studies abide by the University of Missouri Student Conduct Code (http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.010_standard_of_conduct/) (listed in the appendices of this catalog) and by the School of Nursing and Health Studies Honor Code (<http://sonhs.umkc.edu/wp-content/uploads/2014/10/honor-code.pdf>). The Standards of Professional and Ethical Behavior detailed in the honor code have been developed to guide students who are enrolled at all levels with the UMKC SoNHS, including undergraduate and graduate students, and are designed to assure accountability for the professional and ethical standards of the nursing profession.

STUDENT CONCERNS – ALL PROGRAMS

During the semester, if a student has concerns about their course, the student should follow the steps listed below:

1. Contact the instructor directly to set up a meeting. This meeting should be in person or by telephone.
2. If the issues are not resolved satisfactorily for the student, the student should then consult with the course coordinator if the course is a team-taught course.
3. If the issues are not resolved satisfactorily for the student, then the student should first make an appointment with the program director.
4. If issues are not resolved, the student may meet with the Associate Dean for Students.
5. If the issue remains unresolved they may meet with the Dean for the School of Nursing and Health Studies. The Dean's decision is considered final.
6. If the student's concerns are related to perceived discrimination, the student should refer to UMKC's Student Grievance Process. This process may be found on the UMKC website at: <https://catalog.umkc.edu/special-notice/equal-opportunity-guidelines/discrimination-grievance-procedure-for-students/> and process flowchart can be found at: http://info.umkc.edu/saem/wp-content/uploads/2015/10/Grievance_Flow_ChartRevised.pdf. If the student's concerns are related to grades and those are not resolved upon completion of the course, the student may pursue a Grade Appeal.

See the School of Nursing Policy and Procedures for Grade Appeal located on the School of Nursing webpages at <http://sonhs.umkc.edu/wp-content/uploads/2014/10/policy-procedure.pdf>.

7. No other sequences, procedures or avenues of discourse are acceptable for consideration or issues arising in individual courses.

TIME LIMIT ON SCIENCE COURSES – UNDERGRADUATE PROGRAMS

BSN Pre-Licensure (PL) & Accelerated Track (AT): Students applying to the BSN pre-licensure and accelerated track must have science course requirements completed within the past five academic years prior to beginning courses within the nursing major. For example, if students begin Nursing course work Fall Semester 2010, then science courses completed Fall Semester 2005 or later will be accepted. Pre-requisite science courses include Chemistry or Bio-Chemistry; Anatomy & Physiology; and Microbiology with a grade of B- or better.

RN-BSN: Students applying to the RN-BSN program and working as RN's do not have a time limit on their science courses.

Bachelor Health Studies: At the time of graduation, Anatomy & Physiology and Nutrition must be no more than 10 years old.

CRIMINAL BACKGROUND CHECK AND DRUG SCREENING – ALL CLINICAL PROGRAMS

- An offer for admission to a School of Nursing and Health Studies clinical program is contingent on findings from the criminal background screen and drug test. All screens and tests must be free of discrepancies. If results indicate discrepancies, an offer for admission will be immediately rescinded.
- Once students are admitted into a clinical program, they are required to provide information and make payment to a SoNHS selected company, for a Criminal Background Check. If the results of this check show that the student has a pending or recent (within the last three years) criminal conviction for an offense involving narcotics, alcohol, crimes against persons or abuse/neglect, the student will be dismissed from the program.

CLINICAL DRESS & PROFESSIONAL APPEARANCE – ALL PROGRAMS

School of Nursing and Health Studies has a clinical dress and professional appearance that is located in the SoNHS policy and Procedure. Standards for dress and appearance are more conservative so that it is acceptable in all clinical, community, and professional settings. Dress code standards apply to all clinical, laboratory, simulation, and UMKC sponsored events where the uniform is worn.

Undergraduate and graduate programs have specific and different requirements. Please refer to the School of Nursing and Health Studies Policy and Procedure Manual.

Accreditation

The Baccalaureate, Master's, and DNP programs at the UMKC School of Nursing and Health Studies are accredited by the Commission on Collegiate Nursing Education, One Dupont Circle, NW, Suite 530, Washington, DC 20036, (202) 887-6791.

Academic Programs Offered

Please visit the School of Nursing and Health Studies' website at <http://sonhs.umkc.edu> for more specific program information and plans of study for the following nursing programs.

Bachelor of Science in Nursing (BSN)

- Accelerated Track (for students with a previous bachelor's degree) (69 credit hours)
- Pre-licensure Track (128 credit hours)
- RN-BSN Track/RN-BSN Completion (120 credit hours)

Master of Science in Nursing (MSN)

- Nurse Educator (41 credit hours)

Master of Science in Nursing - Nursing Practice (MSN NP)

- Acute Care Pediatric Nurse Practitioner (52 credit hours)
- Adult Gerontology Nurse Practitioner (46 credit hours)
- Family Nurse Practitioner (46 credit hours)
- Neonatal Nurse Practitioner (45 credit hours)
- Pediatric Nurse Practitioner (46 credit hours)
- Psychiatric Mental Health Nurse Practitioner (46 credit hours)
- Women's Health Nurse Practitioner (46 credit hours)

Bachelor of Science in Nursing to Doctor of Nursing Practice (BSN-DNP)

- Adult Gerontology Nurse Practitioner (74 credit hours)
- Certified Registered Nurse Anesthetist (73 credit hours)
- Family Nurse Practitioner (74 credit hours)
- Pediatric Nurse Practitioner (74 credit hours)
- Women's Health Nurse Practitioner (74 credit hours)

Post-MSN Certificate Options

- Acute Care Pediatric Nurse Practitioner (16 credit hours)
- Adult Gerontology Nurse Practitioner (18 credit hours)
- Family Nurse Practitioner (18 credit hours)
- Neonatal Nurse Practitioner (24 credit hours)
- Nurse Educator Post Master's Certificate Program (12 credit hours)
- Pediatric Nurse Practitioner (18 credit hours)
- Psychiatric Mental Health Nurse Practitioner (16 credit hours)
- Women's Health Nurse Practitioner (18 credit hours)

Post Master's APRN to Doctor of Nursing Practice (MSN-DNP) (31 credit hours)

MSN-DNP NP New Emphasis (or Foci) (62 credit hours)

- Adult Gerontology Nurse Practitioner
- Family Nurse Practitioner
- Neonatal Nurse Practitioner
- Pediatric Nurse Practitioner (Acute or Primary Care track)
- Psychiatric Mental Health Nurse Practitioner
- Women's Health Nurse Practitioner

APRN MSN-DNP 2nd NP Emphasis (or Foci) (43-45 credit hours)

- Adult Gerontology Nurse Practitioner
- Family Nurse Practitioner
- Neonatal Nurse Practitioner
- Pediatric Nurse Practitioner (Acute or Primary Care track)
- Psychiatric Mental Health Nurse Practitioner
- Women's Health Nurse Practitioner

BSN-PhD in Nursing (73 credit hours)

MSN-PhD in Nursing (61 credit hours)

Admissions

UMKC's Office of Admissions is located in room 120, Administrative Center, 5115 Oak St. All applicants should complete the UMKC application for admission. Applications and transcripts should be mailed to the UMKC Office of Admissions, 120 Administrative Center, 5100 Rockhill Road, Kansas City, MO 64110-2499. Go to <http://www.umkc.edu/admissions/>

All nursing programs offered by the UMKC School of Nursing and Health Studies (SoNHS) require supplemental application materials. It is recommended that applicants review the requirements for undergraduate and graduate degree programs on the UMKC School of Nursing and Health Studies website to access supplemental application materials and review application deadline dates. All application materials must be received by the stated deadline for the specific program. Applications received after these dates may or may not be reviewed depending on available space. The UMKC SoNHS website can be found at: <http://sonhs.umkc.edu/>.

Once admitted, all official University communication is conducted via UMKC e-mail.

Bachelor of Health Sciences

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Apply knowledge from physical, biological, behavioral, business, and social aspects of health into inter-professional practice.
- Create (plan, implement, and evaluate) evidence-based health programs relevant to targeted populations and desired health outcomes.
- Demonstrate professional conduct, and strong interpersonal skills in their chosen career path.
- Identify the specific challenges, and opportunities of improving health outcomes and reducing health disparities in diverse and urban environments.

Bachelor of Health Sciences (BHS) Mission

Supporting the SoNHS' mission to prepare the health professional workforce in improving health outcomes, the purpose of the Bachelor of Health Sciences program is to prepare graduates for a wide variety of careers in health or to pursue post-graduate education. Through an innovative combination of coursework, service learning, volunteerism, and a senior year internship, students will apply theoretical concepts in evidence-based health programming and health policy development into diverse community settings.

What is a Bachelor of Health Sciences?

With a comprehensive science-based curriculum, the Bachelor of Health Sciences degree combines urban-focused coursework in health policy, health program development, health and wellness, and population health outcomes. With a combination of coursework, service learning, volunteerism, and a senior year internship, students will apply theoretical concepts in evidence-based health programming and policy development in community settings. The UMKC BHS Degree Program offers a comprehensive curriculum designed to prepare students for a wide variety of careers in health or to pursue post-graduate education. The program is offered through the UMKC School of Nursing & Health Studies and includes coursework in the physical, biological, behavioral, business and social aspects of health.

Minor Options

The BHS requires completion of 120 credits of coursework, which includes elective coursework. Students are urged to align those elective classes within a targeted area of specialization. These minor options may enhance your marketability in the workplace.

MINORS

MINOR IN PUBLIC HEALTH

MINOR IN EXERCISE SCIENCE

What can I do with a Bachelor of Health Sciences?

The UMKC BHS Degree Program is the perfect choice for students who are interested in a career in health focusing on health prevention, health promotion, population health, and health behavior change. UMKC is offering the BHS Degree in response to the growing workforce demand for health professionals in a variety of areas including, personal health and wellness, social determinants of health, occupational health and safety, community

health, and environmental health. Graduates may find career options in government settings, non-for profit organizations, community health centers, workplace health and wellness companies, and health promotion organizations.

Student Organization

BHS Society is a student organization centered around the health sciences field of study. The goals of this organization are to promote philanthropy within the community, advocate health education, and cultivate leadership among members.

Progression Policy

Students in the BHS program must earn a minimum grade of “C-” in all Health Sciences and CHEM 206 (or equivalent). They must earn a minimum grade of “D-” in non-Health Sciences courses. For a full list of courses and the required grade, refer to the Major Map.

This means that a grade below a “C-” in a Health Sciences/CHEM 206, or below a “D-” in a non-Health Sciences course will need to be repeated to earn a passing grade.

If a student’s cumulative GPA falls below 2.0, the student will be placed on Academic Probation. To be removed from Academic Probation, students must achieve a cumulative GPA of 2.0 within the next two successive semesters (if enrolling in summer classes, summer is included).

Students must be removed from Academic Probation within the next two successive semesters or they will be Academically Dismissed.

Students whose semester cumulative GPA falls below 2.0 must enroll in HLSC 100 Student Success Strategies. Students must successfully complete this one-hour course in addition to earning a cumulative GPA of 2.0 before being returned to good academic standing. This one-hour course is offered each fall and spring.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	

POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Other Program Requirements

Code	Title	Credits
CHEM 206	Human Nutrition	3
Foreign Language ¹		3
HLSC 120	Anatomy & Physiology I	4
HLSC 160	Anatomy and Physiology II	4
MATH 110	Precalculus Algebra (or MATH 116 or higher; or STAT 115 or MOTRMATH 110; or ACT Math Sub-score of 28 or higher; or SAT Math sub-score of 660 or higher; satisfies GE Math Pathway)	3
PSYCH 210	General Psychology	3
Total Credits		20

¹ Contact BHS Academic Advisor for alternative ways to satisfy the foreign language requirement.

Major Requirements

Code	Title	Credits
HLSC 101	Introduction to Health Sciences	2
HLSC 110	Personal Wellness	3
HLSC 125	Medical Terminology	1
HLSC 200	First Aid / CPR	1
HLSC 230	Health Issues in Aging	3
HLSC 252	Human Growth and Development	3
HLSC 300	Diversity in Health	3
HLSC 310	Healthcare Systems	3
HLSC 325	Human Sexuality	3
HLSC 345	Quantitative Analysis in the Health Sciences	3
or STAT 235	Elementary Statistics	
HLSC 410	Epidemiology	3
HLSC 430	Health Program Management	3
HLSC 440	Ethics and Policy of Public Health Promotion	3
HLSC 450	Urban Health	3
HLSC 460	Global Health	3
HLSC 470	Technology, Marketing and Media in Health	3
HLSC 476	Research Methods in Health Sciences	3
HLSC 480	Leadership and Management in Health Professions	3
HLSC 492	Health Sciences Specialty Course ¹	3
HLSC 494	Health Science Internship ¹	6
Total Credits		58

¹ BHS students are restricted to 15 credit hours during the semester in which their internship is completed.
BHS students are restricted to only one HLSC degree-required course, in addition to HLSC 492 and HLSC 494 during the semester in which their internship is completed.

Code	Title	Credits
General Electives		12

Minimum GPA: 2.0

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
HLSC 101 ^{CC}		2 HLSC 110	3
HLSC 120		4 HLSC 160	4
HLSC 125		1 MATH 110, 116, or STAT 115 ^{CC}	3
GEFSE 101 ^{CC}		3 ENGLISH 225	3
ENGLISH 110		3 Foreign Language Requirement (110 or higher)	3
GECRT-SS 101		3	
		16	16

Second Year

Fall Semester	Credits	Spring Semester	Credits
HLSC 230		3 HLSC 252	3
PSYCH 210		3 HLSC 345	3
GECRT-SC 101		3 CHEM 206	3
COMM-ST 110, 140, or 277		3 GECRT-AH 101	3
HISTORY 101, 102, or POL-SCI 210		3 GECDV 201	3
		15	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
HLSC 300		3 HLSC 430	3
HLSC 310		3 HLSC 440	3
HLSC 325		3 HLSC 450	3
GECUE 201		3 HLSC 476	3
General Elective		3 HLSC 200	1
		General Elective	3
		15	16

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
HLSC 410		3 HLSC 492	3
HLSC 460		3 HLSC 494	6
HLSC 470		3 General Elective	3
HLSC 480		3	
General Elective		3	
		15	12

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

Health Sciences Building, UMKC Hospital Hill Campus 2464 Charlotte St, Kansas City MO 64108 sonhs.umkc.edu/academics/bhs/ (<http://sonhs.umkc.edu/academics/bhs/>) bhs@umkc.edu

Bachelor of Science in Nursing

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

There are three options available to complete a Bachelor of Science in Nursing (BSN) degree:

- Pre-Licensure (4 Year traditional program in nursing for students who want to obtain a BSN and do not possess a previous bachelor's degree or RN license)
- Accelerated (2nd degree option for students who possess a bachelor's degree in another discipline, do not possess an RN license and want to obtain a BSN)
- RN-BSN (BSN Completion Program for students who are currently licensed registered nurses (RNs), possess an associate's degree or diploma in nursing and want to obtain a BSN). Enrollment may be full or part-time.

BSN Pre-licensure (4 Year Traditional Program in Nursing)

Student Learning Outcomes

Students graduating from this program will:

- incorporate knowledge from arts, humanities and sciences in the planning and provision of professional nursing care;
- demonstrate Personal Effectiveness as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Critical Thinking, Professional Valuing/Caring, and Professional Role Development;
- demonstrate Interpersonal Effectiveness as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Communication, Teaching/Learning, and Technology Utilization;
- demonstrate Effectiveness in Human Health Outcomes as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Health Promotion and Disease Prevention and Evidence-Based Care; and
- demonstrate Effectiveness Within Complex Health Systems as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Leadership/Management, Global Perspectives, and Health Care Systems and Policy.

Undergraduate baccalaureate nursing education is designed to prepare a nurse generalist who demonstrates responsibility, accountability and critical thinking. The nurse generalist uses a comprehensive approach to health care and can meet diversified health concerns of individuals, families and communities at all stages of development. The UMKC School of Nursing and Health Studies offers an innovative program in the management of health.

Admissions

Students begin the BSN Pre-licensure program as Bachelor of Health Sciences (BHS) Pre-Nurse students. Refer to Major Map for additional details.

The Direct Admissions Program has additional requirements, please see below.

Students fulfill all prerequisite courses prior to enrolling in nursing courses.

Students must earn a grade of B- or better in all pre-requisite courses required for admission to the nursing program. Students who receive a grade of less than B- may repeat these courses. Nursing courses may not be attempted more than twice. The only nursing courses that may be taken prior to admission into the nursing program are NURSE 101, NURSE 120, NURSE 125, NURSE 160, NURSE 252 and/or NURSE 345. Students who wish to take nursing courses after notification of admission to the nursing program the summer before beginning the clinical major may do so but the SoNHS Policies & Procedures for BSN PL and AT Program will apply. A 2.75 GPA for **all** courses required in the nursing program attempted or earned, and maintain a minimum cumulative GPA of 2.75 each semester.

Once admitted to the nursing program, or prior to, students must achieve a grade of C or better in all general education courses and a B- or better in all nursing courses.

Once courses in Phase I are completed, an application is submitted to the BSN-PL program, Applications are due each January to begin the following fall semester, The remaining pre-requisite courses must be completed in the following spring semester in order to begin the BSN Clinical Program in the following fall semester, if an offer of admission is issued.

Procedure for Application to the Nursing Major

- Admission to UMKC
- Submission of the School of Nursing and Health Studies Application materials which are posted in November on the School of Nursing and Health Studies website
- The SoNHS Appointed Committee reviews all applications to the Nursing Major

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

A minimum grade of C must be achieved in all required general education courses prior to or while admitted to the nursing program in order to continue progression in the nursing program. A grade of less than C (C-, D+, D, F, and NR) or Audit/AT is not satisfactory for progression.

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Program Prerequisites

A minimum grade of B- is required for each pre-requisite course. Students taking pre-requisites or admitted to the nursing program must achieve a grade of B- or better in all courses. Minimum nursing GPA is 2.75. A grade of less than B- (C+, C, C-, D+, D, F, NR and) or Audit/AT is not satisfactory for progression into the nursing program.

Code	Title	Credits
BIOLOGY 112	Microbiology and Living	3
CHEM 115 & 115L	Elements Of Chemistry I and Elements Of Chemistry, Laboratory I (or any CHEM+LAB course) ¹	5
HLSC 101	Introduction to Health Sciences ²	2
MATH 110	Precalculus Algebra (or higher; satisfies Math Pathway)	3
NURSE 101	Introduction to Nursing	2
NURSE 120	Anatomy & Physiology I	4
NURSE 160	Anatomy and Physiology II	4
Total Credits		23

¹ The courses Anatomy & Physiology, Chemistry with lab and Microbiology **CANNOT BE OLDER THAN FIVE YEARS** from when you are beginning the clinical program.

² Waived if student has 60+ credit hours and a 3.5+ GPA.

Professional Degree Requirements

The remaining courses below are clinical courses ONLY and will be completed by the student once formally accepted into the clinical major (six semesters-3 years long): You must be accepted into the three-year clinical program to begin these courses. Nursing courses may not be attempted more than twice. The only nursing courses that may be taken prior to admission into the nursing program are NURSE 101, NURSE 120, NURSE 125, NURSE 160, NURSE 252 and/or NURSE 345. A three-credit hour foreign language is required for the degree and can be taken at any time prior to graduation. Students who wish to take nursing courses after notification of admission to the nursing program the summer before beginning the clinical major may do so but the SoNHS Policies & Procedures for BSN PL and AT Program will apply. A 2.75 GPA for all courses required in the nursing program attempted or earned, and maintain a minimum cumulative GPA of 2.75 each semester.

Once admitted to the nursing program, students must achieve a grade of C or better in all general education courses and a B- or better in all nursing courses. Students must obtain a final grade of 80% or higher in order to progress in the nursing program. Students must also earn a 78% or higher on the combined average of the course examinations (defined as "Tests" and "Final Exams") in order to progress in the nursing program. Students who receive a grade of less than B- may repeat these courses. Nursing courses may not be attempted more than twice.

Code	Title	Credits
CHEM 206	Human Nutrition	3
NURSE 125	Medical Terminology	1
NURSE 127	Drug Calculations	1
NURSE 220	Fundamental Concepts & Skills	6
NURSE 230	Health In Aging	2
NURSE 250	Health Assessment for Nursing Practice	3
NURSE 252	Human Growth and Development	3
NURSE 256	Pharmacology	3
NURSE 262	Management of Adult Health I	5
NURSE 342	Legal & Ethical Issues	2
NURSE 345	Quantitative Analysis In The Health Sciences	3
NURSE 360	Management of Mental Health	4
NURSE 362	Management of Adult Health II	5
NURSE 364	Management of Maternal & Family Health	4
NURSE 366	Management of Child & Adolescent Health	4
NURSE 395	Pathophysiology	3
NURSE 462	Special Topics (Healthcare)	2
NURSE 465	Management of Community and Public Health Nursing	4
NURSE 467	Management of Critical & Emergent Care	5
NURSE 468	Effectiveness in Complex Health Systems	4
NURSE 472	Clinical Internship	5

NURSE 476	Research Methods in Health Sciences	3
Total Credits		75

Graduation with a BSN degree does not guarantee licensure. Students must successfully complete the NCLEX exam and apply for licensure with their state's Board of Nursing to obtain a license as a registered nurse.

Minimum GPA: 2.75

Total Credit Hours: 128

Direct Admit Program

The UMKC School of Nursing and Health Studies (SONHS) offers the Direct Admit Program for outstanding high school students who intend to enter UMKC as freshmen. Eligible students are offered direct admission into the Pre-Licensure Bachelor of Science in Nursing (B.S.N.) Program as freshmen, allowing them to be pre-admitted to the clinical major.

BENEFITS

- Early assurance of admission to the clinical program, if criteria are met and maintained.
- Clinical supplemental application waived.

Anyone who does not meet Direct Admit eligibility requirements during their senior year of high school may still apply to the Pre-Licensure B.S.N. Program during their first or second year of college using the clinical supplemental application, depending on how long it takes to complete prerequisites.

- Opportunity for early interaction with current clinical students through involvement in the Student Nurses' Association (SNA).
- Opportunity to assist with SONHS events (i.e. White Coat Ceremony, pinning, commencement, etc.)

ELIGIBILITY REQUIREMENTS

- Meet UMKC freshmen admission criteria
- Composite ACT score of 27 or higher (or equivalent SAT Composite score)

DIRECT ADMIT APPLICATION

1. Complete the online Direct Admit application at:

<http://sonhs.umkc.edu/admissions/undergraduate-admissions/>

DIRECT ADMIT PROGRESSION TO CLINICAL MAJOR CRITERIA

Direct Admit students will progress to the clinical program as long as academic progression requirements are met, as listed below:

1. Maintain cumulative GPA and individual semester GPA of 2.75 or higher
2. Maintain nursing prerequisite GPA of 2.75 or higher (cumulative of first five prerequisite courses listed below)
3. Complete all Pre-Licensure B.S.N. prerequisite courses with a grade of B- or better on the first attempt.

Please note: If either the cumulative/semester GPA requirement or pre-requisite course grade of B- or better on first attempt is not achieved the Direct Admission status will be revoked and the student will need to apply to the Pre-Licensure program using the admission requirements listed above.

Accelerated (AT); (2nd Degree option for students with a previous bachelor's degree)

Student Learning Outcomes

Students graduating from this program will:

- incorporate knowledge from arts, humanities and sciences in the planning and provision of professional nursing care;
- demonstrate Personal Effectiveness as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Critical Thinking, Professional Valuing/Caring, and Professional Role Development;
- demonstrate Interpersonal Effectiveness as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Communication, Teaching/Learning, and Technology Utilization;
- demonstrate Effectiveness in Human Health Outcomes as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Health Promotion and Disease Prevention and Evidence-Based Care; and
- demonstrate Effectiveness Within Complex Health Systems as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Leadership/Management, Global Perspectives, and Health Care Systems and Policy.

Undergraduate baccalaureate nursing education is designed to prepare a nurse generalist who demonstrates responsibility, accountability and critical thinking. The nurse generalist uses a comprehensive approach to health care and can meet diversified health concerns of individuals, families and

communities at all stages of development. The UMKC School of Nursing and Health Studies offers an innovative program in the management of health.

Admissions

Students must have completed a bachelor's degree from a regionally accredited institution by July 1st of the year of application.

Students fulfill all prerequisite courses prior to enrolling in nursing courses. If students complete prerequisites at UMKC they enroll as Bachelor of Health Sciences (BHS) Accelerated (AT) students (Phase I).

Students must earn a grade of B- or better in all pre-requisite courses required for admission to the nursing program. Students who receive a grade of less than B- may repeat these courses. Nursing courses may not be attempted more than twice.

Once admitted to the nursing program, students must achieve a grade of C or better in all general education courses and a B- or better in all nursing courses.

Once prerequisite courses are completed, an application is submitted to the BSN-AT program, Applications are due each January to begin the following fall semester, The remaining pre-requisite courses must be completed in the following spring semester in order to begin the BSN Clinical Program in the following fall semester, if an offer of admission is issued.

The only nursing courses that may be taken prior to admission into the nursing program are NURSE 101 (<https://catalog.umkc.edu/search/?P=NURSE%20101>), NURSE 120 (<https://catalog.umkc.edu/search/?P=NURSE%20120>), NURSE 125 (<https://catalog.umkc.edu/search/?P=NURSE%20125>), NURSE 160 (<https://catalog.umkc.edu/search/?P=NURSE%20160>), NURSE 252 (<https://catalog.umkc.edu/search/?P=NURSE%20252>) and/or NURSE 345 (<https://catalog.umkc.edu/search/?P=NURSE%20345>). Students who wish to take nursing courses after notification of admission to the nursing program the summer before beginning the clinical major may do so but the SoNHS Policies & Procedures for BSN PL and AT Program will apply.

Criteria for Admission to Nursing Major

- Admission to UMKC
- Students must have completed a bachelor's degree from an accredited institution by the end of the spring semester of the year of application
- Students must maintain a 2.75 GPA each semester for all courses required in the nursing program attempted or earned
- Satisfactory completion of all pre-requisite courses by the end of the spring semester of the year of application. Refer to Time Limit on Science Courses Policy (science courses taken must be no older than five years). Completed courses must include: Chemistry w/lab, Microbiology, Anatomy & Physiology with lab, Nutrition, and Human Growth & Development Across the Lifespan.

Procedure for Application to the Nursing Major

- Complete UMKC application and send ALL official transcripts and fees to:
University of Missouri-Kansas City
Office of Admissions
- Submission of the School of Nursing and Health Studies Application materials, which are posted in November, on the School of Nursing and Health Studies website
- The Student Affairs Committee reviews all applications to the Nursing Major

Program Requirements

Program Prerequisites

A minimum grade of B- is required for each pre-requisite course. Students taking pre-requisites or admitted to the nursing program must achieve a grade of B- or better in all courses. Minimum nursing GPA is 2.75. A grade of less than B- (C+, C, C-, D+, D, F, NR) or Audit/AT is not satisfactory for progression in the nursing program.

Code	Title	Credits
BIOLOGY 112	Microbiology and Living	3
CHEM 115 & 115L	Elements Of Chemistry I and Elements Of Chemistry, Laboratory I (or any CHEM+LAB course)	5
CHEM 206	Human Nutrition	3
NURSE 120	Anatomy & Physiology I	4
NURSE 160	Anatomy and Physiology II	4
NURSE 252	Human Growth and Development	3
Total Credits		22

Professional Degree Requirements

The remaining courses below are clinical courses and must be completed by the student once formally accepted into the clinical major (five semesters long): You must be accepted into the clinical program to begin these courses.

Once admitted to the nursing program, students must achieve a grade of C or better in all general education courses and a B- or better in all nursing courses. Students must obtain a final grade of 80% or higher in order to progress in the nursing program. Students must also earn an 78% or higher on the combined average of the course examinations (defined as "Tests" and "Final Exams") in order to progress in the nursing program. Students who receive a grade of less than B- may repeat these courses. Nursing courses may not be attempted more than twice.

Additional academic requirements, and policies and procedures are located in the School of Nursing and Health Studies Policies and Procedures Manual (<http://sonhs.umkc.edu/wp-content/uploads/2014/10/policy-procedure.pdf>). Please refer to this document.

Code	Title	Credits
NURSE 125	Medical Terminology	1
NURSE 127	Drug Calculations	1
NURSE 220	Fundamental Concepts & Skills	6
NURSE 230	Health In Aging	2
NURSE 250	Health Assessment for Nursing Practice	3
NURSE 256	Pharmacology	3
NURSE 262	Management of Adult Health I	5
NURSE 342	Legal & Ethical Issues	2
NURSE 345	Quantitative Analysis In The Health Sciences	3
NURSE 360	Management of Mental Health	4
NURSE 362	Management of Adult Health II	5
NURSE 364	Management of Maternal & Family Health	4
NURSE 366	Management of Child & Adolescent Health	4
NURSE 395	Pathophysiology	3
NURSE 462	Special Topics	2
NURSE 465	Management of Community and Public Health Nursing	4
NURSE 467	Management of Critical & Emergent Care	5
NURSE 468	Effectiveness in Complex Health Systems	4
NURSE 472	Clinical Internship	5
NURSE 476	Research Methods in Health Sciences	3
Total Credits		69

Graduation with a BSN degree does not guarantee licensure. Students must successfully complete the NCLEX exam and apply for licensure with their state's Board of Nursing to obtain a license as a registered nurse.

Minimum GPA: 2.75

Total Credit Hours: 91

RN-BSN (BSN Completion Program for students who are current RNs)

Student Learning Outcomes

Students graduating from this program will:

- incorporate knowledge from arts, humanities and sciences in the planning and provision of professional nursing care.
- demonstrate Personal Effectiveness as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Critical Thinking, Professional Valuing/Caring, and Professional Role Development.
- demonstrate Interpersonal Effectiveness as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Communication, Teaching/Learning, and Technology Utilization.
- demonstrate Effectiveness in Human Health Outcomes as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Health Promotion and Disease Prevention and Evidence-Based Care.
- demonstrate Effectiveness Within Complex Health Systems as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Leadership/Management, Global Perspectives, and Health Care Systems and Policy.

Undergraduate baccalaureate nursing education is designed to prepare a nurse generalist who demonstrates responsibility, accountability and critical thinking. The nurse generalist uses a comprehensive approach to health care and can meet diversified health concerns of individuals, families and communities at all stages of development. The UMKC School of Nursing and Health Studies offers an innovative program in the management of health.

Admission

- **Applicants applying to the RN-BSN program must have a Nursing diploma or Associates degree in nursing from a regionally accredited college or university, with a nursing program that is accredited by a nationally recognized nursing accrediting agency (CCNE or ACEN)**
- Graduation from a state board of nursing – approved school of nursing. Applicants requesting admission to the BSN program who are graduates of diploma or non-accredited A.D.N. programs may be admitted on provisional status.
- Current unencumbered licensure as a registered nurse with licensure in the jurisdiction where clinical study is to be conducted. The license must remain unencumbered throughout the program. A student whose license becomes encumbered while in the program will be dismissed.
- Minimum cumulative GPA of 2.5 (on a 4.0 scale) from the basic school of nursing and all previous and subsequent college coursework. Students applying with a cumulative GPA ranging from 2.0 to 2.499 may be admitted on probation based on review of individual circumstances.
- Open and rolling admission program. Students may apply for any semester (fall, spring or summer) and once admitted, can enroll in courses as determined by their plan of study.
- Applicants from approved associate-level RN degree programs may be provisionally admitted to the RN-BSN program prior to securing licensure. If admitted as degree-seeking students, these applicants must provide documentation of a valid, unencumbered RN license prior to the end of their first term of enrollment in the RN-BSN program. For information regarding currently approved programs, contact the UMKC Nursing department.

Additional details regarding the admission process for applicants to the RN-BSN program can be found in the School of Nursing & Health Studies Policy & Procedure Manual at: sonhs.umkc.edu/wp-content/uploads/2014/10/policy-procedure.pdf. (<http://sonhs.umkc.edu/current-students/>)

Procedure for Application to the Nursing Major for RN-BSN:

- Apply using the general UMKC application & the RN-BSN Supplemental Application (Please note: The RN-BSN Supplemental Application is housed within the general UMKC application).

Additional requirements:

- Valid, current and unencumbered RN license. If NCLEX results are pending, students must submit proof of licensure prior to the first nursing course (N481). Note: an unencumbered RN license must be maintained throughout the program.

Additional Notifications

State regulations require that UMKC be authorized to offer online degrees in the state where a student resides while enrolled in the program. UMKC is currently authorized to offer online programs in the states listed on the UMKC Online webpage: <http://online.umkc.edu/state-authorization/>. If you are in one of the online programs and there is a possibility that you would relocate to another state while enrolled in the program, you must notify your academic advisor or the program director immediately. Note that regulations in that state may stipulate additional or specific requirements that may prohibit or limit your ability to enroll in or complete the online degree through UMKC.

Required General Education Coursework

Students must complete 50 credit hours in general education coursework.

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE; Satisfied in program requirements below)		
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (Satisfied in program requirements below)		
Math Pathway (choose one of the following)		3
MATH 116	Mathematics For Liberal Arts	
STAT 115	Statistical Reasoning	
MATH 110	Precalculus Algebra	
MATH 120	Precalculus	
Any 200-level MATH or STAT course		
ACT Sub-score of 28 or higher; or SAT Sub-score of 660 or higher		
Critical Thinking in Arts & Humanities (GECRT-AH)		3

Critical Thinking in Natural & Physical Sciences (GECRT-SC)	3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)	3
Culture & Diversity Course (GECDV; Satisfied in program requirements below)	
Civic & Urban Engagement Course (GECUE; Satisfied in program requirements below)	
Total Credits	18

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions."

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.
- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Code	Title	Credits
Additional coursework:		29

These courses are required for graduation and not for admission into the RN-BSN program.

*If you have already earned a bachelor's degree or an associate of arts degree from a regionally accredited college, you are exempt from the above general education courses.

A minimum grade of C is required in all general education, science and nursing courses in order to progress in the nursing program. A grade of less than C (C-, D+, D, F, NR) or Audit/AT is not satisfactory for progression.

Professional Degree Requirements

Lower Division Nursing courses

The lower division component of the RN-BSN track requires 28 credit hours of coursework which may be obtained in one of two ways:

- By transfer coursework from an associate degree program accredited by a nationally recognized nursing accrediting body;
- Successful passage of the National Council Licensure Examination (NCLEX).

Students requesting admission to the BSN program who are graduates of diploma or non-National League for Nursing (NLN) accredited Associates Degree in Nursing (ADN) programs may be admitted on provisional status. Upon completion of Nurse 481 - Block I: Tools for Personal Effectiveness (6 credit hours) and Nurse 482 - Block II: Tools for Interpersonal Effectiveness (3 hours) with a grade of C or better and a minimum semester GPA of 2.75, 28 hours of credit by NCLEX exam will be added to the UMKC transcript and the provisional status will be removed.

Upper Division Nursing courses

The upper division nursing courses below (400 level - 36 hours) are required to be completed through UMKC. Students must have a minimum cumulative GPA of 2.75 for all college credit attempted or earned coursework to enroll in any 200-level or higher nursing course. A semester GPA of 2.75 must be maintained to progress in the nursing curriculum.

Code	Title	Credits
NURSE 345	Quantitative Analysis In The Health Sciences	3
NURSE 395	Pathophysiology	3
NURSE 401	Health Assessment for Clinical Practice	3
NURSE 417	Information Systems and Technology for Improved Health Care	3
NURSE 476	Research Methods in Health Sciences	3
NURSE 481	Block I: Tools for Personal Effectiveness (satisfies GEFSE course)	6
NURSE 482	Block II: Tools for Interpersonal Effectiveness (satisfies GE Oral Communications requirement)	3
NURSE 483	Block III: Effectiveness in Human Health Outcomes (satisfies GECUE course)	6
NURSE 484	Block IV: Effectiveness in Complex Health Systems (satisfies GECDV course)	6
NURSE 485	Application to Practice I	3
NURSE 486	Application to Practice II	3
Total Credits		42

Minimum GPA: 2.75

Total Credit Hours: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

Pre-Licensure program

First Year

Fall Semester	Credits	Spring Semester	Credits
NURSE 101 ^{CC}		2 HLSC 101	2
NURSE 120 ^{CC}		4 NURSE 160 ^{CC}	4
CHEM 115 & 115L		5 BIOLOGY 112	3
GEFSE 101		3 MATH 110	3

ENGLISH 110	3	ENGLISH 225	3
		GECRT-SS 101	3
	17		18

Second Year

Fall Semester	Credits	Spring Semester	Credits
NURSE 127		1 NURSE 252	3
NURSE 220		6 NURSE 256	3
NURSE 230		2 NURSE 262	5
NURSE 250		3 CHEM 206	3
NURSE 395		3 COMM-ST 110 or 277	3
NURSE 125		1	
	16		17

Third Year

Fall Semester	Credits	Spring Semester	Credits
NURSE 345		3 NURSE 360	4
NURSE 364		4 NURSE 362	5
NURSE 366		4 GECRT-SC 101	3
GECRT-AH 101		3 GECDV 201	3
HISTORY 101, 102, or POL-SCI 210		3	
	17		15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
NURSE 342		2 NURSE 462	2
NURSE 465		4 NURSE 468	4
NURSE 467		5 NURSE 472	5
NURSE 476		3 GECUE 201	3
	14		14

Total Credits: 128

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Early and continuous enrollment in Foreign Language through completion of level required for degree program is recommended. *(The Foreign Language placement exam is highly recommended to ensure placement in the correct course level.)*
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

School of Nursing & Health Studies Student Services Office

816-235-1700

nurses@umkc.edu

sonhs.umkc.edu/academics/bsn/ (<http://sonhs.umkc.edu/academics/bsn/>)

Bachelor of Science in Public Health

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students graduating from this program will:

- Apply foundational knowledge of the science of public health to analyze and address public health issues in the community.
- Students will transmit foundational knowledge of public health in both interpersonal and formal communications.
- Students will integrate, synthesize and apply knowledge through cumulative and experiential activities
- Create evidence-based public health programs relevant to the needs of communities.

Bachelor of Science in Public Health (BSPH) Mission

The Bachelor of Science in Public Health (BSPH) program aims to support the SoNHS' mission in preparing the health professional workforce in improving health outcomes. The mission is to develop public health leaders in practice and research for diverse careers and post-graduate education. Through an innovative combination of coursework, service learning, volunteerism, and a senior year evidence-based public health capstone, students will apply theoretical concepts in evidence-based programming and health policy development to attain the highest standards of health and well-being of diverse populations.

Minor Options

The BSPH requires completion of 120 credits of coursework, which includes elective coursework. Students are urged to align those elective classes within a targeted area of specialization. These minor options may enhance your marketability in the workplace.

MINOR IN EXERCISE SCIENCE

Student Organization

BHS Society is a student organization centered around the health sciences field of study. The goals of this organization are to promote philanthropy within the community, advocate health education, and cultivate leadership among members.

Admissions

The structure of the BSPH program is based upon the extensive experience the SoNHS has with structuring nursing and health sciences programs. Students will complete 120 hours as required by UMKC for degree completion. Provisionally admitted students may not be admitted to the program. Transfer students must have a GPA of 2.5 or better. Students must maintain a 2.5 GPA to remain in the Bachelor of Science in Public Health. Academic advisors will assist students pursuing a BSPH in maximizing appropriate transfer credits ensuring a streamlined path through the program.

Progression Policy

Students in the BSPH program must earn a minimum grade of “C-” in all Public Health, Health Sciences, and Science and Math requirements (BIOLOGY 108/BIOLOGY 108L, BIOLOGY 112, BIOLOGY 218, CHEM 206, and MATH 110 or higher). They must earn a minimum grade of “D-” in non-Public Health/Health Sciences courses. For a full list of courses and the required grade, refer to the Major Map.

This means that a grade below a “C-” in a Health Sciences/Public Health/Science and Math requirements or below a “D-” in a non-Public Health/Health Sciences course will need to be repeated to earn a passing grade.

If a student’s cumulative GPA falls below 2.5, the student will be placed on Academic Probation. To be removed from Academic Probation, students must achieve a cumulative GPA of 2.5 within the next two successive semesters (if enrolling in summer classes, summer is included).

Students must be removed from Academic Probation within the next two successive semesters or they will be Academically Dismissed.

Program Requirements

UMKC Essentials

Code	Title	Credits
First Semester Experience Course (GEFSE)		3
Written Communication:		
ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Oral Communication (choose one of the following):		3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	
COMM-ST 140	Principles Of Communication	
COMM-ST 212	Argumentation And Debate (offered via dual credit only)	
COMM-ST 277	Interpersonal Communication	
Math Pathway (satisfied in major requirements below)		
Critical Thinking in Arts & Humanities (GECRT-AH)		3
Critical Thinking in Natural & Physical Sciences (GECRT-SC)		3
Critical Thinking in Social & Behavioral Sciences (GECRT-SS)		3
Culture & Diversity Course (GECDV)		3
Civic & Urban Engagement Course (GECUE)		3
Total Credits		27

Constitution Course Requirement

Section 170.011.1 of the Missouri Revised Statutes, 2015, states that all candidates for a degree issued by a college or university in the state of Missouri must have “satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the state of Missouri, and in American history and American institutions.”

Courses at UMKC that satisfy this state requirement are:

Code	Title	Credits
Choose one of the following:		3
CJC 364	The Supreme Court And The Criminal Process	
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
HONORS 230	Honors American Government	
POL-SCI 210	American Government	
Total Credits		3

There are a few other ways this requirement can be satisfied for students transferring to UMKC:

- Take an equivalent course from the list above at a regionally accredited institution.
- Earn credit for one of the above courses through AP, IB, or CLEP.
- Take a course that directly satisfies the Missouri Constitution Requirement at another Missouri institution.
- Have a previous bachelors degree (or higher) from a regionally accredited institution.

- Have an Associate of Arts degree from a regionally accredited institution.
- Complete the 42 Hour Core at a Missouri institution and have it listed on the official transcript.

Code	Title	Credits
Science and Math Requirements		
BIOLOGY 108 & 108L	General Biology I and General Biology I Laboratory	4
BIOLOGY 218	Introductory Anatomy	3
BIOLOGY 112	Microbiology and Living	3
CHEM 206	Human Nutrition	3
MATH 110	Precalculus Algebra (or higher; or STAT 115 or MOTRMATH 110; or ACT Math sub-score of 28 or higher; or SAT Math sub-score of 660 or higher; satisfies GE Math Pathway)	3
Total Credits		16

Code	Title	Credits
Major Requirements		
PBHL 158	Public Health Principles	3
PBHL 245	Qualitative Research Methods for Public Health	3
PBHL 358	Environmental Public Health	3
PBHL 335	Historical and Contemporary Issues in Public Health	3
PBHL 445	Core Competencies in Health Education	3
PBHL 458	Communicable Disease Investigation	3
PBHL 496	Evidence-Based Public Health Capstone & Seminar	6
HLSC 110	Personal Wellness	3
HLSC 300	Diversity in Health	3
HLSC 310	Healthcare Systems	3
HLSC 345	Quantitative Analysis in the Health Sciences	3
or STAT 235	Elementary Statistics	
HLSC 410	Epidemiology	3
HLSC 430	Health Program Management	3
HLSC 440	Ethics and Policy of Public Health Promotion	3
HLSC 450	Urban Health	3
HLSC 460	Global Health	3
HLSC 470	Technology, Marketing and Media in Health	3
HLSC 476	Research Methods in Health Sciences	3
HLSC 480	Leadership and Management in Health Professions	3
Total Credits		60

Code	Title	Credits
General Electives (Suggestions Below)		14
ACCTNG 210	Introduction To Financial Accounting	
CJC 101	Introduction To Criminal Justice	
CJC 351	Policing In The Community	
ECON 201	Introduction to Economics I	
HLSC 200	First Aid / CPR	
HLSC 315	Health Literacy	
HLSC 490	Special Topics (Social Justice)	
SOCIOL 337	Community Development In Urban America	
UPD 260	History Of Planning And Urban Design	
UPD 280	Land Use Planning	
UPD 340	Neighborhood And Community Development	
UPD 420	Transportation Planning	

Minimum GPA: 2.5

Total Credits: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major. Please see the tab above to view the major map for this program.

UMKC's Transfer Guides (<https://www.umkc.edu/admissions/transfer-guides.html>) provide detailed guidance on recommended transfer coursework, plans of study, transfer timelines, and transfer contact information. To ensure a seamless transfer experience, students are encouraged to work with both their community college advisor and a UMKC advisor when planning their coursework.

UMKC's PlanMyDegree 'Audit' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree audit system provides an individual evaluation of all degree requirements (General Education, Degree Specific, Major Specific, etc.) for students' officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. This evaluation is used to certify all graduation requirements.

UMKC's PlanMyDegree 'Plans' (<https://www.umkc.edu/registrar/academic-programs/plan-my-degree.html>) degree planning tool enables students to develop a personalized semester by semester plan of study towards completion of degree requirements for student's officially recorded (Office of Registration and Records) and "what if" exploratory plans of study. Update and edit your full plan to degree completion each term and confirm accuracy each semester with your Academic Advisor(s).

Major Map

Four Year Graduation Plan - Courses & Critical Benchmarks for First Time College Students:

UMKC's Major Maps are detailed, undergraduate four-year course outlines that inform students on the classes they should take and when to take them. Outlines are updated yearly. Graduate students should visit their program's individual school for program outlines.

The following is a sample course of study. Your path to graduation may vary based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning, and placement in Mathematics. You are responsible for checking prerequisites to any courses. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement.

First Year

Fall Semester	Credits	Spring Semester	Credits
PBHL 158 ^{CC}		3 BIOLOGY 108 & 108L (or BIOLOGY 109 & BIOL 109L)	4
HLSC 110		3 HLSC 345	3
MATH 110 or STAT 115		3 HLSC 310	3
GEFSE 101 ^{CC}		3 ENGLISH 225	3
ENGLISH 110		3 GECRT-SS 101	3
		15	16

Second Year

Fall Semester	Credits	Spring Semester	Credits
PBHL 335		3 PBHL 245	3
PBHL 358		3 CHEM 206	3
BIOLOGY 218		3 GECRT-AH 101	3
COMM-ST 110, 140, or 277		3 GECUE 201	3
GECRT-SC 101		3 HISTORY 101, 102, or POL-SCI 210	3
General Elective (HLSC 315 recommended)		2	
		17	15

Third Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 112		3 PBHL 458	3
HLSC 410		3 HLSC 440	3
HLSC 430		3 HLSC 450	3
HLSC 300 ^{CC}		3 HLSC 476	3
GECDV 201		3 General Elective	3
		15	15

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
PBHL 445		3 PBHL 496	6
HLSC 460		3 General Elective	3
HLSC 470		3 General Elective	3
HLSC 480		3	
General Elective		3	
		15	12

Total Credits: 120

CC Critical Courses provide feedback regarding major fit and help indicate likelihood of successful completion of chosen academic program and degree.

Recommendations to Maintain Progress toward 4-Year Degree Completion

- Completion of the First Semester Experience (FSE) course in first term.
- Early completion of Written Communication, Oral Communication, and Math Pathway requirements.
- Maintain the minimum GPA required for academic Good Standing for your degree program.
- Completion at least 15 credit hours toward degree each regular semester. *(Students may use the summer to ensure completion of 30 hours per academic year or to lighten Fall and Spring course loads.)*
- Enrollment in Critical Courses as listed on the Major Map is recommended in order to maintain timely progress and completion of prerequisite coursework.
- Regular consultation with Academic Advisor(s) for program(s) of study is strongly recommended and may be required for some degree programs..

Advising Contact Information

Health Sciences Building, UMKC Hospital Hill Campus
 2464 Charlotte St, Kansas City MO 64108
<http://sonhs.umkc.edu/academics/bsph/> umkcbhs@umkc.edu

Doctor of Nursing Practice Program

BSN-DNP

Student Learning Outcomes

Students graduating from this program will:

- Synthesize research-based evidence to create, implement, evaluate, and translate into practice
- Serve as leaders in nursing and health care by effecting organizational and/or public policy development
- Demonstrate expert knowledge, values, and skills to improve health outcomes in a specialized area and/or population foci of nursing
- Demonstrate expertise in increasingly complex practice, leadership, and/or faculty roles.

Program Options

Core Coursework for the Nurse Practitioners

Code	Title	Credits
NURSE 5526	Health Promotion Across the Lifespan	3
NURSE 5527	Cultural Diversity & Values	3
NURSE 5528	Healthcare Policy & Advocacy	3
NURSE 5529	Ethics in Advanced Practice & Research	3
NURSE 5544	Advanced Health Assessment Skills	2
NURSE 5547	Diagnostic Reasoning/Advanced Assessment	3
NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5549	Pharmacology Across the Life Span for Advanced Nursing Practice	3
NURSE 5549R	Pharmacokinetics & Pharmacodynamics: Application for Graduate-Prepared Nurses	1
NURSE 5550	Theoretical Foundations in Nursing	3
NURSE 5555	Nursing Research	3
NURSE 5601	Clinical Institute I	1
NURSE 5602	Healthcare Systems & Leadership	3
NURSE 5608	Theory Development I	3
NURSE 5611	Healthcare Economics & Quality	3
NURSE 5613	Application of Evidence-based Practice I	3
NURSE 5617	Application of Evidence-based Practice II	3
NURSE 5617B	Application of Evidence-based Practice II	3
NURSE 5629	Clinical Institute III	3
NURSE 5637	Healthcare Outcomes and Epidemiology	3
Total Credits		55

Acute Care Pediatric Nurse Practitioner Option

Code	Title	Credits
NURSE 5531	Graduate Pharmacology Specialty	2
NURSE 5532	Pediatric Acute Care I	3
NURSE 5533	Pediatric Acute Care II	3
NURSE 5534	Advanced Practice Clinical Practicum I (Pediatric Acute Care)	4
NURSE 5535	Advanced Practice Clinical Practicum II (Pediatric Acute Care)	4
NURSE 5564C	Primary Care of Children I	5
NURSE 5566C	Chronic Child Health Care (Clinical II)	5
NURSE 5621C	Clinical III	4
NURSE 5623C	Advanced Nursing Practice: Synthesis Practicum	5
Total Credits		35

Adult Gerontology Acute Care Nurse Practitioner Option

Not accepting students into this program for the 2020-2021 academic year.

Code	Title	Credits
NURSE 5531	Graduate Pharmacology Specialty	2
NURSE 5544AG	Adult-Gerontology Acute Care I	3
NURSE 5547AG	Adult-Gerontology Acute Care II	3
NURSE 5564AG	Advanced Practice Clinical Practicum I	4
NURSE 5566AG	Advanced Practice Clinical Practicum II	4
Total Credits		16

Dual Adult Gerontology Acute Care/Adult Gerontology Primary Care Nurse Practitioner Option

Not accepting students into this program for the 2020-2021 academic year.

Code	Title	Credits
NURSE 5531	Graduate Pharmacology Specialty	2
NURSE 5564A	Primary Care of Adults I	5
NURSE 5566A	Primary Care of Adult-Gerontology II	5
NURSE 5617A	Application of Evidence-based Practice II	1

NURSE 5617B	Application of Evidence-based Practice II	3
NURSE 5564A	Primary Care of Adults I	5
NURSE 5566A	Primary Care of Adult-Gerontology II	5
NURSE 5621A	Clinical III	4
NURSE 5623A	Advanced Nursing Practice: Synthesis Practicum	5
Total Credits		35

Adult Gerontology Nurse Practitioner (AGNP)

Code	Title	Credits
NURSE 5564A	Primary Care of Adults I	5
NURSE 5566A	Primary Care of Adult-Gerontology II	5
NURSE 5621A	Clinical III	4
NURSE 5623A	Advanced Nursing Practice: Synthesis Practicum	5
Total Credits		19

Family Nurse Practitioner Option (FNP)

Code	Title	Credits
NURSE 5564F	Primary Care of Families I	5
NURSE 5566F	Primary Care of Families II	5
NURSE 5621F	Clinical III	4
NURSE 5623F	Advanced Nursing Practice: Synthesis Practicum	5
Total Credits		19

Nurse Anesthetists (CRNA) Coursework

Code	Title	Credits
BIOLOGY 5510	Gross Anatomy for Nurse Anesthetists	3
BIOLOGY 5510L	Gross Anatomy for Nurse Anesthetists	1
BIOLOGY 5539	Mammalian Physiology	4
BIOLOGY 5540	Pathophysiology	4
PHARM 5520	Pharmacology II	4
PHARM 5530	Pharmacology III	4
NURSE 5555	Nursing Research	3
NURSE 5607NA	Health Care Policy and Leadership for the Nurse Anesthetist	2
NURSE 5612	Statistics I	3
NURSE 5615NA	Chemistry and Physics for the Nurse Anesthetist	3
NURSE 5616NA	Anesthesia Crisis Resource Management	1
NURSE 5619NA1	Principles of Nurse Anesthesia Practice I	2
NURSE 5619NA2	Principles of Nurse Anesthesia II	3
NURSE 5619NA3	Principles of Nurse Anesthesia Practice III	3
NURSE 5619NAB	Basic Principles of Nurse Anesthesia Practice	2
NURSE 5619NAO	Orientation to Nurse Anesthesia Practice	2
NURSE 5628NA1	Advanced Physical Health Assessment for the Nurse Anesthetist I	2
NURSE 5628NA2	Advanced Physical Health Assessment for the Nurse Anesthetist II	1
NURSE 5636NA	Obstetrical Anesthesia	1
NURSE 5637	Healthcare Outcomes and Epidemiology	2
NURSE 5638NA1	Pharmacology of Anesthesia I	1
NURSE 5638NA2	Pharmacology of Anesthesia II	2
NURSE 5640NA	Pediatric Anesthesia	1
NURSE 5641NA	Acute and Chronic Pain Management	2
NURSE 5642NA	Comprehensive Review	1
NURSE 5643NA	Professional Practice for the Nurse Anesthetist	2
NURSE 5650NA1	Clinical Anesthesia I	0

NURSE 5650NA2	Clinical Anesthesia II	0
NURSE 5650NA3	Clinical Anesthesia III	0
NURSE 5650NA4	Clinical Anesthesia IV	0
NURSE 5650NA5	Clinical Anesthesia V	0
NURSE 5650NA6	Clinical Anesthesia VI	0
NURSE 5650NAO	Clinical Anesthesia Orientation	0
NURSE 5659NA	Health Systems, Economics and Quality in Nurse Anesthesia Practice	2
NURSE 5661NA1	Anesthesia & Co-Existing Diseases I	2
NURSE 5661NA2	Anesthesia & Co-Existing Diseases II	1
NURSE 5674NA1	Scholarly Project in Nurse Anesthesia I	3
NURSE 5674NA2	Scholarly Project in Nurse Anesthesia II	2
NURSE 5674NA3	Scholarly Project in Nurse Anesthesia III	2
NURSE 5674NA4	Scholarly Project in Nurse Anesthesist IV	2
Total Credits		73

Pediatric Nurse Practitioner Option (PNP)

Code	Title	Credits
NURSE 5564C	Primary Care of Children I	5
NURSE 5566C	Chronic Child Health Care (Clinical II)	5
NURSE 5621C	Clinical III	4
NURSE 5623C	Advanced Nursing Practice: Synthesis Practicum	5
Total Credits		19

Women's Health Nurse Practitioner Option (WHNP)

Code	Title	Credits
NURSE 5564W	Primary Health Care of Women	5
NURSE 5566W	Care of the Childbearing Woman	5
NURSE 5621W	Clinical III	4
NURSE 5623W	Advanced Nursing Practice: Synthesis Practicum	5
Total Credits		19

APRN MSN-DNP

Student Learning Outcomes

Graduates of the DNP program will be prepared to:

1. Synthesize research-based evidence to create, implement, evaluate, and translate into practice
2. Serve as leaders in nursing and health care by effecting organizational and/or public policy development
3. Demonstrate expert knowledge, values, and skills to improve health outcomes in a specialized area and/or population foci of nursing
4. Demonstrate expertise in increasingly complex practice, leadership, and/or faculty roles.

Program Course Requirements

Pre-requisite Coursework

Code	Title	Credits
NURSE 5550	Theoretical Foundations in Nursing	3
NURSE 5555	Nursing Research	3
NURSE 5612	Statistics I	3
Total Credits		9

Core Coursework

Code	Title	Credits
NURSE 5528	Healthcare Policy & Advocacy	3
NURSE 5602	Healthcare Systems & Leadership	3
NURSE 5608	Theory Development I	3

NURSE 5611	Healthcare Economics & Quality	3
NURSE 5613	Application of Evidence-based Practice I	3
NURSE 5617	Application of Evidence-based Practice II (DNP Clinical)	3
NURSE 5620	Advanced Practice V - DNP Clinical	5
NURSE 5624	Advanced Practice VI-DNP Practicum	5
NURSE 5637	Healthcare Outcomes and Epidemiology	3
Total Credits		31

Facilities

The University of Missouri-Kansas City has extensive educational facilities on the Volker campus combined with the health care educational facilities and the School of Nursing and Health Studies offices on Hospital Hill campus. Facilities include libraries, resource centers, audiovisual resources, data processing and science information specialists. The affiliated clinical facilities include Truman Medical Center, Children's Mercy Hospital and nearly 100 community-wide facilities in the Kansas City metro area.

Financial Assistance

The School of Nursing and Health Studies offers a range of scholarships, traineeships and other funds for both full- and part-time graduate and undergraduate nursing students. Students who complete the Free Application for Federal Student Aid (FAFSA) are eligible for the following:

- Brisley Phillips Scholarship
- Chuck and Glo Curtis Scholarship
- Claudene L. Iwig Scholarship
- General Hospital Memorial Scholarship
- Goppert Scholarship
- Helen Blond Scholarship
- John S. Waggoner Memorial Nursing Scholarship
- Laura Larkin Dexter Scholarship
- RN - BSN Scholarship
- Susie Sinton Scholarship

Other funds may be available for students demonstrating financial need. Applications for nursing scholarships are considered after submission of the FAFSA. Priority deadline for that submission is February 1. Further information about applications and qualifications for any of these funds may be obtained from the School of Nursing and Health Studies Student Services Office, room 1410, 2464 Charlotte Street, Kansas City, MO 64108-2718.

History

In 1973-74, a graduate nursing program was started under the aegis of the School of Graduate Studies. On Nov. 16, 1979, the Board of Curators approved a proposal to establish a school of nursing at the University of Missouri-Kansas City. In 1981, following a developmental period, two new curricula were implemented. These were an upper-division baccalaureate degree for registered nurses and a revised master's degree program for clinical nurse specialists. In 1992, the Board of Curators approved the offering of an inter-campus, cooperative doctoral program in nursing (Ph.D. N.D.). The doctoral curricula was implemented on the Kansas City campus in the Fall Semester of 1995. In 2000, the Board of Curators approved the offering of a pre-licensure baccalaureate degree program beginning in the Fall Semester of 2001. The Board of Curators approved the Doctor of Nursing Practice (DNP) program which began in 2007 and graduated its first post-master's class in December 2008. A name change to the School of Nursing and Health Studies was approved in February 2013 following the opening of the Bachelor of Health Sciences (BHS) began in the fall of 2011. The Masters level Nurse Practitioner tracks were re-opened in Fall 2016 and Post MSN Certificate Program was opened in 2017. In 2018, the Bachelor of Public Health (BSPH) and Masters level Acute Care Pediatric Nurse Practitioner track were opened and began enrolling students in the spring 2018.

International Students

The School of Nursing and Health Studies coordinates recruitment, retention and continuing advisement for nursing students from abroad in cooperation with the University's Office of International Student Affairs. In addition to the English proficiency examination (TOEFL), all graduates of foreign schools of nursing must complete the Commission on Graduates of Foreign Nursing Schools (CGFNS) qualifying examinations. This will enable registered nurses applying to the School of Nursing and Health Studies to take the National Council Licensure Examinations (NCLEX) for licensure as a registered nurse in Missouri. Students who are registered nurses must also send official transcripts to the CGFNS to determine degree equivalencies. Information about specific requirements for admission and progression may be obtained from the School of Nursing and Health Studies Student Services Office. The School of Nursing and Health Studies retains the right to assess the level of current clinical skills prior to enrollment in clinical coursework.

Master of Science in Nursing (M.S.N.)

Student Learning Outcomes

Students graduating from this program will:

- Implement skills and strategies to advance professional nursing and health across populations and settings.
- Integrate theory and research in evidence-based nursing and teaching practice.
- Serve as a leader in unit and organizational based change.

Degree Requirements

Students have the option to attend full-time or part-time. Nurse practitioner students choosing to attend full-time must begin in a summer semester.

Core Courses Required of all Students

Code	Title	Credits
NURSE 5526	Health Promotion Across the Lifespan	3
NURSE 5527	Cultural Diversity & Values	3
NURSE 5528	Healthcare Policy & Advocacy	3
NURSE 5550	Theoretical Foundations in Nursing	3
NURSE 5555	Nursing Research	3
Total Credits		15

Acute Care Pediatric Nurse Practitioner Option

Additional Required Courses

Code	Title	Credits
NURSE 5529	Ethics in Advanced Practice & Research	3
NURSE 5531	Graduate Pharmacology Specialty	2
NURSE 5532	Pediatric Acute Care I	3
NURSE 5533	Pediatric Acute Care II	3
NURSE 5534	Advanced Practice Clinical Practicum I (Pediatric Acute Care)	4
NURSE 5535	Advanced Practice Clinical Practicum II (Pediatric Acute Care)	4
NURSE 5544	Advanced Health Assessment Skills	2
NURSE 5547	Diagnostic Reasoning/Advanced Assessment	3
NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5549	Pharmacology Across the Life Span for Advanced Nursing Practice	3
NURSE 5549R	Pharmacokinetics & Pharmacodynamics: Application for Graduate-Prepared Nurses	1
NURSE 5564C	Primary Care of Children I	5
NURSE 5601	Clinical Institute I	1
Total Credits		37

Adult Gerontology Nurse Practitioner Option

Additional Required Courses

Code	Title	Credits
NURSE 5549	Pharmacology Across the Life Span for Advanced Nursing Practice	3
NURSE 5564A	Primary Care of Adults I	5
NURSE 5566A	Primary Care of Adult-Gerontology II	5
NURSE 5572	Advanced Nursing Practice: Synthesis Practicum	5
NURSE 5601	Clinical Institute I	1
NURSE 5544	Advanced Health Assessment Skills	2
NURSE 5547A		3
NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5549R	Pharmacokinetics & Pharmacodynamics: Application for Graduate-Prepared Nurses	1

NURSE 5529	Ethics in Advanced Practice & Research	3
Total Credits		31

Adult-Gerontology Acute Care Nurse Practitioner Option

Not accepting students into this program for the 2020-2021 academic year.

Additional Required Courses

Code	Title	Credits
NURSE 5529	Ethics in Advanced Practice & Research	3
NURSE 5544	Advanced Health Assessment Skills	2
NURSE 5547	Diagnostic Reasoning/Advanced Assessment	3
NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5549	Pharmacology Across the Life Span for Advanced Nursing Practice	3
NURSE 5549R	Pharmacokinetics & Pharmacodynamics: Application for Graduate-Prepared Nurses	1
NURSE 5598	Directed Research	3
NURSE 5601	Clinical Institute I	1
NURSE 5637	Healthcare Outcomes and Epidemiology	3
NURSE 5531	Graduate Pharmacology Specialty	2
NURSE 5544AG		3
NURSE 5547AG		3
NURSE 5564AG		4
NURSE 5566AG		4
Total Credits		38

Certified APRN Option

All students must present evidence of current APRN certification prior to program admission.

Students must possess an unencumbered Registered Nurse license prior to admission.

Code	Title	Credits
NURSE 5526	Health Promotion Across the Lifespan	3
NURSE 5527	Cultural Diversity & Values	3
NURSE 5528	Healthcare Policy & Advocacy	3
NURSE 5547	Diagnostic Reasoning/Advanced Assessment	3
NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5549	Pharmacology Across the Life Span for Advanced Nursing Practice	3
NURSE 5550	Theoretical Foundations in Nursing	3
NURSE 5555	Nursing Research	3
NURSE 5597PN	Independent Study Nursing	2
NURSE 5601	Clinical Institute I	1
NURSE 5612	Statistics I	3
Total Credits		30

Family Nurse Practitioner Option

Additional Required Courses

Code	Title	Credits
NURSE 5549	Pharmacology Across the Life Span for Advanced Nursing Practice	3
NURSE 5564F	Primary Care of Families I	5
NURSE 5566F	Primary Care of Families II	5
NURSE 5572	Advanced Nursing Practice: Synthesis Practicum	5
NURSE 5601	Clinical Institute I	1
NURSE 5544	Advanced Health Assessment Skills	2
NURSE 5547	Diagnostic Reasoning/Advanced Assessment	3
NURSE 5548	Advanced Pathophysiology Across the Lifespan	3

NURSE 5549R	Pharmacokinetics & Pharmacodynamics: Application for Graduate-Prepared Nurses	1
NURSE 5529	Ethics in Advanced Practice & Research	3
Total Credits		31

Neonatal Nurse Practitioner Option

Additional Required Courses

Code	Title	Credits
NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5548N	Physiology/Pathophysiology Of The Neonate	2
NURSE 5549N	Pharmacology for the Neonate	3
NURSE 5547N	Advanced Assessment of the Neonate	3
NURSE 5564N	Neonatal Nursing I	3
NURSE 5566N	Neonatal Nursing II	3
NURSE 5572NI	Preceptorship I	5
NURSE 5572II	Preceptorship II	5
Total Credits		27

Nurse Educator Option

Additional Required Courses

Code	Title	Credits
NURSE 5515NE	Role of the Nurse Educator	2
NURSE 5516	Curriculum Development in Nursing	3
NURSE 5517	Teaching Strategies in Nursing	2
NURSE 5544	Advanced Health Assessment Skills	2
NURSE 5559	Evaluation Methods in Nursing	2
NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5549R	Pharmacokinetics & Pharmacodynamics: Application for Graduate-Prepared Nurses	1
NURSE 5564NE	Clinical for Nurse Educators	5
NURSE 5572NE	Synthesis Practicum for Nurse Educators	3
One of the following:		3
NURSE 5598	Directed Research	
NURSE 5558	Research Design	
Total Credits		26

Pediatric Nurse Practitioner Option

Additional Required Courses

Code	Title	Credits
NURSE 5549	Pharmacology Across the Life Span for Advanced Nursing Practice	3
NURSE 5564C	Primary Care of Children I	5
NURSE 5566C	Chronic Child Health Care (Clinical II)	5
NURSE 5572	Advanced Nursing Practice: Synthesis Practicum	5
NURSE 5601	Clinical Institute I	1
NURSE 5544	Advanced Health Assessment Skills	2
NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5547C	Diagnostic Reasoning/Advanced Assessment-Children	3
NURSE 5529	Ethics in Advanced Practice & Research	3
NURSE 5549R	Pharmacokinetics & Pharmacodynamics: Application for Graduate-Prepared Nurses	1
Total Credits		31

Psychiatric Mental Health Nurse Practitioner Option

Additional Required Courses

Code	Title	Credits
NURSE 5601	Clinical Institute I	1
NURSE 5544	Advanced Health Assessment Skills	2
NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5549R	Pharmacokinetics & Pharmacodynamics: Application for Graduate-Prepared Nurses	1
NURSE 5546	Foundations of Family Psychiatric Nursing Advanced Practice	3
NURSE 5547	Diagnostic Reasoning/Advanced Assessment	3
NURSE 5549	Pharmacology Across the Life Span for Advanced Nursing Practice	3
NURSE 5564M	Family Psychiatric Nursing Advanced Practice I	5
NURSE 5566M	Family Psychiatric Nursing Advanced Practice II	5
NURSE 5572M	Advanced Nursing Practice: Synthesis Practicum	5
Total Credits		31

Women's Health Nurse Practitioner Option

Additional Required Courses

Code	Title	Credits
NURSE 5549	Pharmacology Across the Life Span for Advanced Nursing Practice	3
NURSE 5564W	Primary Health Care of Women	5
NURSE 5566W	Care of the Childbearing Woman	5
NURSE 5572	Advanced Nursing Practice: Synthesis Practicum	5
NURSE 5601	Clinical Institute I	1
NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5544	Advanced Health Assessment Skills	2
NURSE 5547	Diagnostic Reasoning/Advanced Assessment	3
NURSE 5549R	Pharmacokinetics & Pharmacodynamics: Application for Graduate-Prepared Nurses	1
NURSE 5529	Ethics in Advanced Practice & Research	3
Total Credits		31

Total Credit Hours for the Degree: 47

Minor in Health Sciences

Student Learning Outcomes

Students graduating from this program will:

- Students will be able to apply knowledge from behavioral, business, and social aspects of health into inter-professional practice.
- Students will be able to create (plan, implement, and evaluate) evidence-based health programs relevant to targeted populations and desired health outcomes.
- Students will demonstrate professional conduct, and strong interpersonal skills in their chosen career path.
- Students will be able to identify the specific challenges, and opportunities of improving health outcomes and reducing health disparities in diverse and urban environments.

Students earning a Minor in Health Sciences must earn a minimum grade of "C-" in all Health Sciences courses. This means that a grade below a "C-" in a Health Sciences course will need to be repeated to earn a passing grade.

Program Requirements

Code	Title	Credits
HLSC 101	Introduction to Health Sciences	2
HLSC 300	Diversity in Health	3
HLSC 410	Epidemiology	3
HLSC 430	Health Program Management	3
HLSC 440	Ethics and Policy of Public Health Promotion	3
HLSC 470	Technology, Marketing and Media in Health	3
Plus one of the following three courses:		3

HLSC 450	Urban Health	
HLSC 460	Global Health	
HLSC 480	Leadership and Management in Health Professions	
Total Credits		20

Minor in Public Health

Student Learning Outcomes

Students graduating from this program will:

- Apply knowledge of the science of public health into inter-professional practice.
- Create (plan, implement and evaluate) evidence-based public health programs relevant to the needs of the community.
- Demonstrate professional conduct, strong inter-professional skills, and knowledge of the roles and scope of practice of public health providers in accordance with the Council on Linkages Competencies initial level of competencies for public health.
- Identify the specific challenges and opportunities in a population based approach to improving the health of the public.

Students earning a Minor in Public Health must earn a minimum grade of "C-" in all Health Sciences courses. This means that a grade below a "C-" in a Health Sciences course will need to be repeated to earn a passing grade.

Program Requirements

Code	Title	Credits
HLSC 345	Quantitative Analysis in the Health Sciences	3
HLSC 410	Epidemiology	3
HLSC 440	Policy and Ethics in Health	3
PBHL 158	Public Health Principles	3
PBHL 358	Environmental Public Health	3
PBHL 445	Core Competencies in Health Education	3
PBHL 458	Communicable Disease Investigation	3
Total Credits		21

Nurse Educator Certificate

Student Learning Outcomes

Students graduating from this program will:

- Implement skills and strategies to advance professional nursing and health across populations and settings
- Synthesize teaching/learning theories and research
- Design curriculum to address the diverse learning needs of students in the educational environment.

Program Description

Hands-on experience in objective writing, teaching, clinical instructing, test writing and student management are offered through educational experiences provided by master educators.

Completion of the program meets the educational requirements to be eligible for the NLN CNE Certification Exam. There are four courses required for the program with a total of 12 credit hours. All courses must be completed within three years.

Note: Students are responsible for arranging their clinical preceptor (<http://sonhs.umkc.edu/wp-content/uploads/2014/10/preceptor-agreement.pdf>) and site for the Practicum course. It is the student's responsibility to maintain clinical eligibility to practice during the program. It is recommended that the student become comfortable in the clinical setting in preparation for Practicum.

Program Admission Requirements

In addition to the admission requirements for UMKC, the requirements for admission into the NEC program are:

- MSN from an accredited nursing program
- Submission of current resume or curricula vitae
- Copy of current licensure as a registered nurse with licensure in the jurisdiction where clinical study is to be conducted

The Post-Master's NE Certificate Program Courses

Code	Title	Credits
NURSE 5515NE	Role of the Nurse Educator	2
NURSE 5516	Curriculum Development in Nursing	3
NURSE 5517	Teaching Strategies in Nursing	2
NURSE 5572NE	Synthesis Practicum for Nurse Educators (Preceptorship Course)	3
NURSE 5559	Evaluation Methods in Nursing	2

Organizations

Student Nurses Association (SNA)

Membership in the Student Nurses Association (SNA) is automatic for all students admitted to and enrolled in the School of Nursing and Health Studies nursing degree programs. Students admitted into pre-nursing are encouraged to attend all meetings. Officers and representatives to the school's standing committees are elected annually. Council meetings and special events are held periodically throughout the academic year.

Sigma Theta Tau International, Lambda Phi Chapter

This international nursing honor organization is designed to recognize and encourage superior scholarship and leadership achievements in nursing. Students are eligible for consideration as junior and senior undergraduate students and as continuing graduate students. Membership, based on integrity and scholarship, is by invitation only. The induction of new members is held each spring.

Nursing Alumni Association

All students at the School of Nursing and Health Studies qualify for membership in the Nursing Alumni Association. Objectives of the alumni association are to provide mentoring to the student body and garner support for the school. Meetings are held periodically and officers are elected each spring by the Nursing Alumni Board.

BHS Society

The BHS Society is a student organization centered around the health sciences field of study. The goals of this organization are to promote philanthropy within the community, advocate health education, and cultivate leadership among members.

Ph.D. in Nursing

Student Learning Outcomes

Students graduating from this program will:

- Develop the science of nursing through rigorous, original research
- Steward the discipline through dissemination of scholarly work
- Educate the next generation of nurses and add to the global community of scholars.

Program Requirements

BSN-PhD/Pre-requisite Coursework

Code	Title	Credits
NURSE 5527	Cultural Diversity & Values	3
NURSE 5528	Healthcare Policy & Advocacy	3
NURSE 5550	Theoretical Foundations in Nursing	3
NURSE 5555	Nursing Research	3

PhD Core Coursework

Code	Title	Credits
NURSE 5603	Research Institute I	2
NURSE 5604	Research Institute II	2
NURSE 5608	Theory Development I	3
NURSE 5610	Theory Development in Nursing II	3
NURSE 5612	Statistics I	3
NURSE 5622	Statistics II	3

NURSE 5631	State of the Science	3
NURSE 5668	Quantitative Research	3
NURSE 5670	Qualitative Research Methods	3
NURSE 5666	Designing Nursing Research	3
MEDB 5561	Responsible Conduct of Research	3
Collateral Coursework in Research Project Area:		18
NURSE 5662	Psychometrics	
NURSE 5699	Dissertation Research	12
NURSE 5590	Directed Scholarly Activity	1-2

Post-MSN Nurse Practitioner Certificates

UMKC offers post-master's nurse practitioner certificate programs for students who possess an M.S.N. or D.N.P. and who wish to pursue a nurse practitioner certificate in a specialty area of care (tracks) without completing another degree. Please refer to the Graduate Admissions (<http://sonhs.umkc.edu/admissions/graduate-admissions/>) page on the SoNHS website for more information regarding admission and required materials.

The sample plans of study listed represent the minimum required courses. Based on previous course work, additional courses may be required as determined by each certification board*. After admission is confirmed, a gap analysis and individualized program of study will be completed and developed based on previous course work. The following courses are the usual prerequisite graduate level course work (or equivalent) to be completed prior to or as part of the certificate program of study. These courses may be from your MSN graduate program or completed at UMKC with your certificate hours. Completion of Post-MSN Nurse Practitioner certificates meets the educational requirements to be eligible to sit for the national accreditation exam in that area.

*Minimum requirements from certification boards include the following:

Advanced pathophysiology
 Advanced pharmacology/applied pharmacology
 Advanced health assessment across the lifespan
 Diagnostic Reasoning for the APRN
 Health promotion

The certificate options available are listed below:

- Post-MSN Acute Care Pediatric Nurse Practitioner Certificate
- Post-MSN Family Nurse Practitioner Certificate
- Post-MSN Neonatal nurse Practitioner Certificate
- Post-MSN Pediatric Nurse Practitioner Certificate
- Post-MSN Psychiatric Mental Health Nurse Practitioner Certificate
- Post-MSN Women's Health Nurse Practitioner Certificate

Post-MSN Acute Care Pediatric Nurse Practitioner Certificate

Student Learning Outcomes

Students graduating from this program will:

- Implement skills and strategies to advance professional nursing and health across acute care pediatric populations and settings.

Post-MSN Acute Care Pediatric Nurse Practitioner (21 credit hours)

Code	Title	Credits
NURSE 5531	Graduate Pharmacology Specialty	2
NURSE 5532	Pediatric Acute Care I	3
NURSE 5533	Pediatric Acute Care II	3
NURSE 5534	Advanced Practice Clinical Practicum I (Pediatric Acute Care)	4
NURSE 5535	Advanced Practice Clinical Practicum II (Pediatric Acute Care)	4
NURSE 5564C	Primary Care of Children I	5
Total Credits		21

Post-MSN Family Nurse Practitioner Certificate

Student Learning Outcomes

Students graduating from this program will:

- Implement skills and strategies to advance professional nursing and health across populations and settings.
- Integrate theory and research in evidence-based nursing practice.
- Serve as a leader in unit and organization-based change.

Post-MSN Family Nurse Practitioner (18 credit hours)

Code	Title	Credits
NURSE 5549	Pharmacology Across the Life Span for Advanced Nursing Practice	3
NURSE 5564F	Primary Care of Families I	5
NURSE 5566F	Primary Care of Families II	5
NURSE 5572	Advanced Nursing Practice: Synthesis Practicum	5
Total Credits		18

Post-MSN Neonatal Nurse Practitioner Certificate

Student Learning Outcomes

Students graduating from this program will:

- Implement skills and strategies to advance professional nursing and health across populations and settings.

Post-MSN Neonatal Nurse Practitioner Certificate (24 credit hours)

Code	Title	Credits
NURSE 5548N	Physiology/Pathophysiology Of The Neonate	2
NURSE 5549N	Advanced Assessment of the Neonate	3
NURSE 5547N	Advanced Assessment of the Neonate	3
NURSE 5564N	Neonatal Nursing I	3
NURSE 5566N	Neonatal Nursing II	3
NURSE 5572NI	Preceptorship I	5
NURSE 5572II	Preceptorship II	5
Total Credits		24

Post-MSN Pediatric Nurse Practitioner Certificate

Student Learning Outcomes

Students graduating from this program will:

- Implement skills and strategies to advance professional nursing and health across pediatric populations and settings.

Post-MSN Pediatric Nurse Practitioner (18 credit hours)

Code	Title	Credits
NURSE 5549	Pharmacology Across the Life Span for Advanced Nursing Practice	3
NURSE 5564C	Primary Care of Children I	5
NURSE 5566C	Chronic Child Health Care (Clinical II)	5
NURSE 5572	Advanced Nursing Practice: Synthesis Practicum	5
Total Credits		18

Post-MSN Psychiatric Mental Health Nurse Practitioner Certificate

Student Learning Outcomes

Students graduating from this program will:

- Implement skills and strategies to advance professional nursing and health across populations and settings.

Post-MSN Psychiatric Mental Health Nurse Practitioner (18 credit hours)

Code	Title	Credits
NURSE 5546	Foundations of Family Psychiatric Nursing Advanced Practice	3
NURSE 5564M	Family Psychiatric Nursing Advanced Practice I	5
NURSE 5566M	Family Psychiatric Nursing Advanced Practice II	5
NURSE 5572	Advanced Nursing Practice: Synthesis Practicum	5
Total Credits		18

Post-MSN Women's Health Nurse Practitioner Certificate

Student Learning Outcomes

Students graduating from this program will:

- Implement skills and strategies to advance professional nursing and health across women's health populations and settings.

Post-MSN Women's Health Nurse Practitioner (18 credit hours)

Code	Title	Credits
NURSE 5549	Pharmacology Across the Life Span for Advanced Nursing Practice	3
NURSE 5564W	Primary Health Care of Women	5
NURSE 5566W	Care of the Childbearing Woman	5
NURSE 5572	Advanced Nursing Practice: Synthesis Practicum	5
Total Credits		18

Post-MSN Adult Gerontology Nurse Practitioner Certificate

Student Learning Outcomes

Students graduating from this program will:

- Implement skills and strategies to advance professional nursing and health across adult/geriatric populations and settings.

Post-MSN Adult Gerontology Nurse Practitioner (18 credit hours)

Code	Title	Credits
NURSE 5549	Pharmacology Across the Life Span for Advanced Nursing Practice	3
NURSE 5564A	Primary Care of Adults I	5
NURSE 5566A	Primary Care of Adult-Gerontology II	5
NURSE 5572	Advanced Nursing Practice: Synthesis Practicum	5
Total Credits		18

School of Pharmacy

Health Sciences Building (<http://www.umkc.edu/virtualtour/hsb.asp>)

Hospital Hill Campus

2464 Charlotte Street

(816) 235-1609

Fax: (816) 235-5190

(816) 235-1613 (Student Affairs)

Fax: (816) 235-5562 (Student Affairs)

pharmacy@umkc.edu

pharmacy.umkc.edu (<http://pharmacy.umkc.edu/>)

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Paul O. Gubbins

History

Originally organized in 1885 as the Pharmaceutical Department of the University of Kansas City, the school was reorganized and reincorporated in 1898 as the Kansas City College of Pharmacy and Natural Science. In 1943, this forerunner of the present school joined the University of Kansas City as its third professional school.

When the University of Kansas City was incorporated into the University of Missouri System in 1963, the School of Pharmacy became the only state-supported pharmacy school in Missouri. In October 2010, the school commemorated 125 years of excellence in pharmaceutical education, research and service.

The School of Pharmacy is a member of the American Association of Colleges of Pharmacy (AACP). The doctor of pharmacy program is accredited by the Accreditation Council for Pharmacy Education (ACPE). Information about ACPE can be found at <https://www.acpe-accredit.org/>.

Degrees Offered

The School of Pharmacy offers the advanced professional degree of doctor of pharmacy. In addition, the School of Pharmacy participates in the School of Graduate Studies Interdisciplinary Ph.D. program with emphasis areas in pharmaceutical sciences and pharmacology and toxicology.

The UMKC School of Pharmacy currently has three Pharm.D. program sites: the UMKC campus site (Kansas City), the UMKC School of Pharmacy at the University of Missouri (Columbia) site, and the UMKC School of Pharmacy at Missouri State University (Springfield). The Pharm.D. program is a single program with multiple locations. All students at each site are enrolled through UMKC and graduate from UMKC. The required curriculum is the same for all students enrolled in the UMKC Pharm.D. program. Students located at distant sites are enrolled in the same required classes as students on the Kansas City campus. The same program policies and procedures apply to all students in the Pharm.D. program, regardless of program site.

Students interested in or that are currently pursuing Interdisciplinary Ph.D. programs of study should consult the School of Graduate Studies section of this catalog for degree requirements and other academic regulations applicable to the degree program.

Advising Systems

Student Support - Academic and Faculty Advising

Upon entry into the doctor of pharmacy program, each student is assigned a faculty advisor who serves as a mentor throughout the program. If students are experiencing difficulties, whether academic or personal, or if seeking more in-depth information about the curriculum or career paths, they should seek counsel from their faculty advisor. It is important that students keep in contact with their faculty advisor throughout the program as they will monitor their progress and success.

Academic advisors in the Pharmacy Office of Student Affairs also work closely with early assurance, pre-pharmacy and current pharmacy students to provide assistance during the application and admission process, ensuring proper admission requirements and matriculation procedures are met. After entry, academic advisors assist students through subsequent enrollment and progression requirements and through final graduation completion. Academic advisors act as liaisons to various campus services and departments of the campus community and can link students with resources to address any academic or personal issues. Professional staff in the Office of Student Affairs also serve as advisors to individual classes and to the Pre-pharmacy Society in addition to assisting pharmacy student organization and class officers.

Both the academic and faculty advisors are familiar with sources of assistance and will help students seek the best solutions to their issues and concerns. Building a strong relationship with both advisors is strongly encouraged. Students that encounter academic difficulty during the program should meet with their advisors for guidance and for help in smooth transitions.

The School of Pharmacy offers a variety of services to assist students in support of the academic experience. For more information visit: <http://pharmacy.umkc.edu/student-affairs/> and <http://pharmacy.umkc.edu/pharm-d/advising/#main-content>.

Libraries

The University Libraries provide the full spectrum of information services to support study and research in pharmacy. For additional information, consult the University Libraries section of this catalog.

Student Affairs

The School of Pharmacy offers a variety of services to assist students in support of their academic experience.

Student services, which are available not only through the School of Pharmacy but throughout the University, are outlined in the Division of Student Affairs section of this catalog.

Student Involvement

Student Government

The student body annually elects an Executive Council for student pharmacists. The name of this primary council is Pharmacy Student Council (PSC). This body supports individual pharmacy students, student organizations, and the student body at the Kansas City, Columbia, and Springfield locations. The PSC is dedicated to representing the views, ideas, and concerns of the student body. This council consists of a president, administrative vice president, executive vice president, student government association senators, student activity fee committee representative and student council liaisons from each pharmacy campus location.

The Script

The Script, a pharmacy student-administered newsletter, is published several times each semester. Its purpose is to inform the student body, as well as the faculty and staff of student activities and achievements, announce available opportunities and report on developments affecting student life. Articles and calendar items are welcomed from any pharmacy student, student organization, faculty or staff member.

Student Organizations

The UMKC School of Pharmacy hosts a number of very active pharmacy student organizations. The following organizations are recognized by the UMKC Office of Student Involvement. UMKC students routinely win local, regional and national awards for their outstanding community service activities, leadership efforts, and commitment to patient care. General descriptions of each organization can be found under the Pharmacy Student Organizations section of the Pharmacy School website at: <http://pharmacy.umkc.edu/pharm-d/student-organizations> (<http://pharmacy.umkc.edu/pharm-d/student-organizations/>).

- Academy of Managed Care Pharmacy (AMCP)
- American Association of Pharmaceutical Scientists (AAPS)
- American Pharmacists Association Academy of Student Pharmacists (APhA-ASP)
- Black Student Pharmacists Organization (BSPO)
- College of Psychiatric and Neurologic Pharmacists (CPNP)
- Kappa Epsilon (KE)
- Kappa Psi (KY)
- National Community Pharmacists Association (NCPA)
- Pharmaceutical Sciences Graduate Student Association (PSGSA)
- Pharmacy Student Council (PSC)
- Phi Lambda Sigma Leadership Society (PLS)
- Pre-Pharmacy Society
- Public Health Organization (PHO)
- Rho Chi Society (RH)
- Student College of Clinical Pharmacy (SCCP)
- Student Society of Health-System Pharmacists (SSHP)
- Student National Pharmaceutical Association (SNPhA)

State Licensure Requirements

Students planning to practice the profession of pharmacy are required to satisfy the licensure requirements of the state in which they intend to practice. Licensure requirements vary, therefore, information concerning these requirements should be obtained by contacting the board of pharmacy of the state concerned.

Students accepted and enrolled in the doctor of pharmacy curriculum are required to obtain a valid Intern Pharmacist License issued by the Missouri Board of Pharmacy in order to fully participate in and continue through the curriculum. In addition, enrolled students must also obtain intern pharmacist professional liability insurance and keep insurance current through the duration of the program. The Missouri Intern Pharmacist License and professional liability insurance must remain current and valid through the last Advanced Pharmacy Practice Experience. Successful completion of all portions of the curriculum, both credit and non-credit requirements, are necessary for a student to meet graduation requirements and accrue sufficient internship hours toward pharmacist licensure eligibility.

All UMKC Pharm.D. students must read and adhere to the UMKC School of Pharmacy Student Intern Pharmacist License and Intern Liability Policy (<http://pharmacy.umkc.edu/pharm-d/internship-and-licensure-information/>) as posted on the School of Pharmacy website.

The state of Missouri requires that an applicant for pharmacist licensure be 21 years of age, a graduate of an ACPE accredited school of pharmacy approved by the state's board of pharmacy and have on file with the board proof of obtaining a minimum number of internship hours in a retail/community or hospital pharmacy practice setting under the supervision of a registered pharmacist/preceptor. Refer to the Missouri Board of Pharmacy and the National Association of Boards of Pharmacy websites for the most up-to-date information as requirements can change at any time.

Career Applications

Doctor of Pharmacy Careers

A number of graduates choose to practice in community and hospital pharmacy practice settings, but a wide variety of career possibilities in the pharmacy profession are available. Pharmacists have a great spectrum of practice environments to choose from in which their professional skills can be applied. Career information can be found through any of the national pharmacy professional associations. For information about these opportunities, see <http://pharmacy.umkc.edu/pharm-d/faqs/>

The doctor of pharmacy program also provides an appropriate academic base for students wishing to enter graduate study in the pharmaceutical sciences, pharmacology, toxicology, chemistry, biology, business, and/or public health. Others have gone on to pursue degrees in medicine, dentistry, or law.

Postgraduate training in the form of a residency and optional fellowship is recommended for all doctor of pharmacy graduates seeking advanced career opportunities in industry or academia.

- Academic Regulations and Requirements
- Doctor of Pharmacy (p. 1941)
- Pharmacy (PHARM 7000) Courses (p. 193)
- Doctor of Philosophy
 - Interdisciplinary Ph.D. in Pharmaceutical Sciences and Pharmacology (p. 1946) and Toxicology
- Graduate Pharmacy (PHARM 5000) Courses (p. 193)

Faculty

Mostafa Z. Badr professor emeritus of pharmacology and pharmaceutical sciences; B.S., M.S. (Cairo University, Egypt); Ph.D. (University of Louisville).

Kylie Barnes; clinical associate professor of pharmacy practice and administration; PharmD (St. Louis College of Pharmacy).

Sarah Billings; clinical assistant professor of pharmacy practice and administration; Pharm.D. (St. Louis College of Pharmacy).

Brandi L. Bowers; clinical assistant professor of pharmacy practice and administration; Pharm.D. (University of Arkansas For Medical Sciences).

Wayne M. Brown; associate professor emeritus of pharmacy practice and administration; B.S. (Medical College of South Carolina); M.S., Ph.D. (University of Mississippi).

Angela Brownfield; clinical associate professor of pharmacy practice and administration and assistant director, experiential programs; Pharm.D. (St. Louis College of Pharmacy).

Patrick J. Bryant; clinical professor of pharmacy practice and administration and director, UMKC Drug Information Center; Pharm.D. (University of Nebraska Medical Center).

Kun Cheng^{2,3}; professor of pharmacology and pharmaceutical sciences; B.S., M.S. (China Pharmaceutical University, China); M.S. (National University of Singapore, Singapore); Ph.D. (University of Tennessee).

Lisa Cillessen; clinical assistant professor of pharmacy practice and administration; Pharm.D. (Ohio State University).

Kelly Cochran; clinical associate professor of pharmacy practice and administration; Pharm.D. (Butler University).

Sarah R. Cox; clinical assistant professor of pharmacy practice and administration; Pharm.D. (Butler University).

Glenn H. Eberhart professor emeritus of pharmacology and pharmaceutical sciences; B.S. (University of Denver); M.S., Ph.D. (University of California).

Elizabeth Englin; clinical assistant professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Simon H. Friedman^{2,3}; professor of pharmacology and pharmaceutical sciences; B.S. (Massachusetts Institute of Technology); Ph.D. (University of California, San Francisco).

Maqual Graham; associate dean academic affairs, school of pharmacy, and professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Paul Gubbins; associate dean, school of pharmacy, professor of pharmacy practice and administration; PharmD (University of Illinois at Chicago College of Pharmacy).

William G. Gutheil^{2,3}; professor of pharmacology and pharmaceutical sciences; B.S. (California Polytechnic State University); Ph.D. (University of Southern California).

Kendall Guthrie; clinical assistant professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Jamie Hall; clinical assistant professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Jeremy P. Hampton; clinical associate professor of pharmacy practice and administration; B.S. (Rockhurst University); Pharm.D. (University of Missouri-Kansas City).

Karen L. Hardinger; clinical professor of pharmacy practice and administration and director, assessment; Pharm.D. (University of Kansas).

Kathryn Holt; clinical assistant professor of pharmacy practice and administration; Pharm.D. (Medical University of South Carolina).

Orisa J. Igwe^{2,3}; professor of pharmacology and pharmaceutical sciences; B.S. (Northeast Louisiana University); M.S. (University of Kentucky); Ph.D. (University of Cincinnati).

Thomas P. Johnston^{2,3}; professor of pharmacology and pharmaceutical sciences; B.S., Ph.D. (University of Minnesota).

Barbara Kasper; clinical assistant professor of pharmacy practice and administration; Pharm.D. (South Dakota State University).

Maureen E. Knell; clinical professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Chi H. Lee^{2,3}; professor of pharmacology and pharmaceutical sciences; B.S. (Seoul National University, South Korea); M.S. (University of Washington); Ph.D. (Rutgers University).

Cameron C. Lindsey; professor of pharmacy practice and administration and director, co-curriculum; Pharm.D. (University of Missouri-Kansas City).

Yifei Liu; associate professor of pharmacy practice and administration; B.S. (West China University of Medical Sciences, China); M.S., Ph.D. (University of Iowa).

Heather Lyons-Burney; clinical assistant professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Patricia A. Marken; associate dean student affairs, school of pharmacy, and professor of pharmacy practice and administration; B.S. (Dalhousie University, Canada); Pharm.D. (Medical University of South Carolina).

Diane McClaskey; clinical assistant professor of pharmacy practice and administration and assistant director, experiential programs; B.S. (Drake University College of Pharmacy & Allied Health Sciences).

Cydney McQueen; clinical associate professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Tatum Mead; clinical associate professor of pharmacy practice and administration; Pharm.D. (University of Iowa); B.A. (University of Northern Iowa).

Russell B. Melchert; dean, school of pharmacy, and professor of pharmacology and pharmaceutical sciences; B.S., Ph.D. (The University of Oklahoma Health Sciences Center).

Srikumaran K. Melethil professor emeritus of pharmacology and pharmaceutical sciences; B.Pharm., M.Pharm. (Andhra University, India); Ph.D. (State University of New York at Buffalo).

Mridul Mukherji^{2,3}; associate professor of pharmacology and pharmaceutical sciences; B.S. (University of Allahabad, India); M.S. (University of Calicut, India); Ph.D. (University of Oxford, United Kingdom).

Leigh Anne Nelson; professor of pharmacy practice and administration; B.S., Pharm.D.(University of Missouri-Kansas City).

Sarah M. Oprinovich; clinical assistant professor of pharmacy practice and administration; Pharm.D.(Purdue University).

Erica Ottis; clinical associate professor of pharmacy practice and administration; Pharm.D. (St. Louis College of Pharmacy).

Melissa Palmer; clinical assistant professor of pharmacy practice and administration; Pharm.D.(University of Missouri-Kansas City).

Mark Patterson; associate professor of pharmacy practice and administration; B.A. (Bowdoin College); M.P.H. (Yale University); Ph.D. (University of North Carolina-Chapel Hill School of Pharmacy).

Robert W. Piepho; dean emeritus and professor emeritus of pharmacology and pharmaceutical sciences; B.S. (University of Illinois); Ph.D. (Loyola University).

Jordan M. Rowe; clinical assistant professor of pharmacy practice and administration; Pharm.D. (University of Arkansas For Medical Sciences).

Valerie L. Ruehter; clinical associate professor of pharmacy practice and administration and director, experiential programs; B.S., Pharm.D. (University of Missouri-Kansas City).

Dominick Salvatore; clinical assistant professor of pharmacy practice and administration; Pharm.D. (St. Louis College of Pharmacy).

Jennifer A. Santee; clinical associate professor of pharmacy practice and administration; Pharm.D. (University of Iowa).

Mark T. Sawkin; clinical associate professor of pharmacy practice and administration; B.S., Pharm.D. (Wayne State University).

Stephanie Schauner; clinical associate professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Peter S. Silverstein; associate research professor of pharmacology and pharmaceutical sciences; B.A. (Duke University); MA (Lehman College of City University of New York); Ph.D. (Auburn University).

Andrew Smith; clinical associate professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Roger W. Sommi, Jr.; associate dean, school of pharmacy, professor of pharmacy practice and administration and vice chair, division of pharmacy practice and administration; B.S. (University of Wisconsin-Madison); Pharm.D. (University of Utah).

Morgan Sperry; clinical associate professor of pharmacy practice and administration; Pharm.D. (Creighton University).

Amanda M. Stahnke; clinical associate professor of pharmacy practice and administration; BA (Westminster College); Pharm.D. (Southern Illinois University).

Steven Stoner; clinical professor of pharmacy practice and administration and chair, Division of Pharmacy Practice and Administration; Pharm.D. (University of Nebraska).

Diana Tamer; clinical assistant professor of pharmacy practice and administration; B.S.,(American University of Beirut); Pharm.D. (Lebanese American University).

Heather Taylor; clinical assistant professor of pharmacy practice and administration; Pharm.D. (University of Arkansas for Medical Sciences).

Jianping Wang^{2,3}; associate professor of pharmacology and pharmaceutical sciences; M.D., M.S. (Second Military Medical University); Ph.D. (Louisiana State University of Health Sciences Center).

Eric Wombwell; clinical associate professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Bi-Botti C. Youan^{2,3}; professor of pharmacology and pharmaceutical sciences; Pharm.D. (University of Cote, Abidjan); MBA (United Business Institutes, Belgium); M.Sc., Ph.D. (Catholic University of Louvain, Belgium).

David M. Yourtee professor emeritus of pharmacology and pharmaceutical sciences, School of Pharmacy and School of Medicine; B.S. (University of Missouri-Columbia); Ph.D. (University of Missouri-Kansas City).

¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

⁴ Located at UM-St. Louis campus

Courses

PHARM 5507 Basic Pharmacology Credits: 3

Basic pharmacological concepts and important classes of pharmacologic agents.

Prerequisites: BIOLOGY 218, LS-PHYS 217.

PHARM 5508 Medicinal Chemistry of Drug Classes Credits: 3

This course will focus on major drug classes, both natural and synthetic, with emphasis on their chemical properties, their mode of action, their structure-activity relationships, and their metabolic fate. Structure-activity relationships and the influence of organic functional groups on physicochemical properties of drugs and their pharmacological activities will be emphasized. Drug metabolism will also be covered, with a focus on organic functional group transformations.

PHARM 5509 Toxicology Credits: 3

Principles of general toxicology and toxicology of industrial and household chemicals, agricultural agents, social poisons, and selected therapeutic agents.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 5519 Pharmacology I Credits: 2

Basic pharmacological principles of drug absorption, distribution, metabolism and elimination; concept of drug-receptor interactions; dose-response relationships and mechanism of action; and signaling mechanisms.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 5520 Pharmacology II Credits: 4

Principles of and advances in chemotherapy, biology, mechanism of action; clinical applications and adverse effects of various drug groups.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 5521 Advanced Organic Medicinal Chemistry Credits: 3

The focus of this course is an examination of the physical-chemical basis of drug action, particularly focusing on the formation of drug-target complexes. This includes the mathematical description of this binding, as well as an advanced description of the physical forces responsible for binding. In addition we will examine the energetic and entropic factors that contribute to complex stability, examining real world examples when possible.

PHARM 5527 Analytical Methods Credits: 3

A detailed study of the methods used to detect, identify, and quantitate drugs, small molecules, enzymes, proteins, and biological molecules. The statistical foundation, core concepts, and practical implementation of analytical methods are areas of emphasis. State-of-the-art instrumentation and recent technological developments are also presented, including biotechnology based methods such as proteomics methods and quantitative PCR.

PHARM 5530 Pharmacology III Credits: 4

Mechanism of action; therapeutic uses; and adverse effects of drugs affecting different organ systems.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 5531 Physical Pharmacy Equilibria Credits: 3

Advanced principles of aqueous solutions, acid-base equilibria, solubility and complexation. Mathematical solutions and state-of-the-art research applications.

Prerequisites: B.S. in pharmacy.

PHARM 5533 Advanced Pharmacokinetics and Biopharmaceutics Credits: 3

This course involves the study of the rates at which drug absorption, distribution, metabolism, and excretion occur in the body following medication administration. The student will be expected to kinetically model a given physiological process associated with the disposition of a drug in any tissue, write a series of equations, and then solve those equations to produce a final set of equations that can be used to predict the concentrations of drug in the biological matrix of interest. Knowledge of derivation of equations is expected, along with real-world application of resulting equations.

Prerequisites: PHARM 7303 and MATH 345 (both with a grade of B or better).

PHARM 5550 Stability of Pharmaceuticals Credits: 3

The course provides instruction in the processes responsible for instability of pharmaceuticals. Course content includes, but is not limited to, instability due to light, oxygen, and metal ions; the effect of temperature on the rate of drug decomposition; the effect of dielectric constant and ionic strength on degradation; and physical and chemical instability of newer polypeptide drugs. In addition, practical strategies to prevent instability of the active compound and excipients used in pharmaceutical formulations is provided.

Prerequisites: MATH 210, PHARM 7202, PHARM 7203.

PHARM 5555 Religion, Culture and Health Credits: 3

This course addresses the impact of religious beliefs on the culture practices of contemporary society, and aims at examining the relationship between these beliefs, modern sciences and health.

PHARM 5560 Discussions in Pharmacology Credit: 1

Discussions in Pharmacology (also called Pharmacology Journal Club), is a graduate course. It is designed to provide graduate student the opportunity to read, interpret and present literature to fellow peers, post-docs and faculty. The Journal Club presentations promote active and lively discussion and exchange of ideas. The class is a mandatory requirement for all graduate students in the Division of Pharmacology Toxicology.

Prerequisites: B.S. (or equivalent) in biology, chemistry, pharmacy or related biomedical sciences.

PHARM 5580A Seminar in Pharmaceutical Sciences Credit: 1

Enrollment and participation required of all graduate students in the School of Pharmacy during each semester of graduate study.

PHARM 5580C Seminar in Pharmacology/Toxicology Credit: 1

Enrollment and participation required of all graduate students in the School of Pharmacy during each semester of graduate study.

PHARM 5588 Biotechnology Credits: 3

In this graduate course, the principle theories, techniques and strategies to conduct experiments using common biotechnology/molecular biology techniques will be discussed. The course material has been designed to provide up to date information on techniques in biotechnology. Knowledge on these basic biotechnology/molecular biology techniques will be useful in diverse fields like biochemistry and pharmaceutical sciences to work with nucleic acid and proteins (or equivalent) in biology, chemistry, pharmacy or related discipline.

PHARM 5590A Special Topics Pharmacy Credits: 1-3**PHARM 5599A Research And Thesis Pharmacy Credits: 1-9****PHARM 5599C Research And Thesis Pharmacology Credits: 1-9****PHARM 5605 Fundamentals of Pharmaceutical Sciences Credits: 3**

This is an entry-level graduate course for all incoming graduate students who select Pharmaceutical Sciences either as the primary discipline or co-discipline. The course will teach the fundamentals of the Pharmaceutical Science discipline. The fundamentals include drug discovery, drug absorption and metabolism, formulation development, physical pharmacy, pharmaceuticals, drug delivery, molecular biology, cell biology, medicinal chemistry, and pharmacokinetics.

PHARM 5615 Methods In Pharmacology And Toxicology Credits: 3

Exposure to some of the techniques employed in research in pharmacology and toxicology. There are eight one-hour introductory lectures for the course, followed by six hours of laboratory per week.

PHARM 5630 Cytochrome P450: Drug Metabolism, Bioavailability, Interactions and Toxicity Credits: 3

This course is designed to provide students up-to-date scientific facts on drug metabolism, bioavailability interactions, and toxicity (DMBIT) in perspective of cytochrome P450 (CYP) and the factors that affect DMBIT. The course will also include prospects of CYP applications for various purposes in reference to drug metabolism. The course will include lectures, lab experience, and student seminar/report.

Prerequisites: B.S. (or equivalent) in chemistry, biology, pharmacy, or related subject.

PHARM 5631 Pharmaceutical Formulations I Credits: 3

Advanced theory and practice of Pharmaceutical formulations, including classical and current research. This course will introduce the principles of biomaterial based drug delivery systems and unify knowledge from the fields of biology, materials science, and pharmaceuticals.

Prerequisites: B.S. in Pharmacy.

PHARM 5632 Novel Drug Delivery Systems Credits: 3

The course offers up-to-date information about drug transport mechanisms and drug absorption processes across various absorptive membranes ie., buccal, nasal, dermal, corneal, pulmonary, and oral mucosae. The course material has been designed to provide current ideas and thinking about gene delivery, drug targeting to tumor cells and lipid and carrier mediated drug delivery. It provides unique information about cell culture models as a predictor of drug delivery as well as physical chemistry of surfaces in various microparticulates and lipid emulsion systems.

PHARM 5633 Receptor Pharmacology and Signal Transduction Credits: 3

Molecular characterization of drug receptors involving quantitative description of functional studies with agonists and antagonists and binding of ligands to receptors; the molecular structure of receptors and the signaling systems that couple receptors to their pharmacologic functions.

Prerequisites: LS-BIOC 370, PHARM 5519, PHARM 5520, PHARM 5530.

PHARM 5634 Protein and Nucleic Acid Drug Delivery Credits: 3

In the graduate course, the principle theories, techniques and strategies in developing protein and nucleic acid drugs will be discussed. The course material has been designed to provide up to date information in protein and nuclear acid drug delivery. It offers unique information on how to combine knowledge of chemistry, molecular biology and pharmaceutical sciences to achieve successful therapeutic application of protein and nucleic acid.

Prerequisites: B.S. in bioengineering, biology, chemistry, pharmacology, or pharmacy.

PHARM 5640 Biochemical and Molecular Toxicology Credits: 3

This course will provide students with a comprehensive mechanistic understanding of various molecular events that lead to and/or are associated with chemically/environmentally induced degenerative or proliferative diseases. The course will include lectures student presentations of recent advances in biochemical and molecular toxicology and student report on a topic of interest as it pertains to the subject being taught. The title of the report has to be approved by the course coordinator.

Prerequisites: B.S. (or equivalent) in biochemistry, biology, chemistry, or molecular biology.

PHARM 5645 Cancer Biotechnology I Credits: 3

This course is designed to provide a basic understanding of tumor progression, molecular events and signaling mechanisms underlying tumor formation. Epidemiological approaches, etiology, and current methods of detection and diagnosis of cancer will be discussed. Current pharmacological management strategies of cancer and future therapeutic interventions will also be reviewed.

Prerequisites: BIOLOGY 202 (or equivalent).

PHARM 5690BB Special Topics Toxicology Credits: 1-3**PHARM 5690C Special Topics Pharmacology Credits: 1-3****PHARM 5690PCII Special Topics Pharmacy Credits: 1-3**
Special Topics Pharmacy**PHARM 5699 Research and Dissertation Credits: 1-16**

Available for Doctorate program with the following emphasis areas: (A) Pharmacy, (B) Pharmaceutical Chemistry, (C) Pharmacology, (AA) Pharmacy Administration, and (BB) Toxicology.

PHARM 5699A Research And Dissertation - Pharmacy Credits: 1-16**PHARM 5699B Research And Dissertation Pharmaceutical Chemistry Credits: 1-16****PHARM 5699BB Research And Dissertation Toxicology Credits: 1-16****PHARM 5699C Research And Dissertation Pharmacology Credits: 1-16****PHARM 5899 Required Graduate Enrollment Credit: 1****PHARM 7100A Introductory Topics in Pharmacy I Credit: 1**

These courses include presentations and discussions on the profession of pharmacy including: the roles and responsibilities of the pharmacist, educational requirements to obtain the degree, career opportunities, student life, legal and ethical issues, and study skills development.

PHARM 7101 Introduction to the Professional Degree Program and Pharmacy Practice Credits: 2

This course introduces students to the profession of pharmacy by communicating drug names, defining drug-related problems and discussing professional responsibilities and roles of a pharmacist. Students will examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth following completion of various self-assessments. This course also assists students to assume responsibility for their own learning. One 2-hour class session is held per week.

Prerequisites: Admission to the Pharm.D. Program.

PHARM 7110 Professional Skills II: Pharmacy Calculations Credits: 2

This course provides instruction in performing and applying the necessary calculations involved in pharmacy practice and the dispensing, manufacturing and preparation of dosage forms. Topics covered include but are not limited to: fundamentals of pharmaceutical calculations, exponents, ratios, percentages, proportions and fractions); International System of Units; pharmaceutical measurements; interpretations of medication orders and prescriptions; density, specific gravity and specific volume; patient specific parameters involved in dosing (surface area, weight and age); isotonicity and buffer solutions; milliequivalents, millimoles and milliosmoles; dilution, concentration and allegation; and reduction/enlargement of formulas. Students must have an understanding of mathematical principles to include algebra and calculus.

Prerequisites: MATH 210.

PHARM 7151 Introduction to Pharmacy Law Credit: 1

This course will examine the federal laws that pertain to the practice of pharmacy.

PHARM 7199 Pharmacy Grand Rounds Credits: 0.25

The School of Pharmacy offers Grand Rounds seminars for the student body regarding timely and important topics and issues facing the profession of the School.

PHARM 7202 Pharmaceutics I Credits: 3

Overall, in this course, the principles of chemistry, physics and mathematics are applied to the pharmaceutical sciences. Elements of mathematics, states of matter, acid-base chemistry, solubility, partitioning, isotonicity, interfacial phenomena, rheology, reaction kinetics, incompatibilities, and stabilization of pharmaceutical formulations and dispersed systems will be considered.

Prerequisites: MATH 210, PHYSICS 210, CHEM 322R, PHARM 7110.

PHARM 7203 Pharmaceutics II Credits: 3

Discussion of pharmaceutical processes, equipment and material used in drug delivery systems and the preparation and evaluation of various drug delivery systems and formulations.

Prerequisites: PHARM 7202.

PHARM 7203L Pharmaceutics II Lab Credit: 1

In this lab course, students will perform hands-on pharmaceutical processes, use manufacturing equipment, and prepare formulations in which selected dosage forms are manufactured and evaluated. This is a professional elective option for Pharm.D. students.

Prerequisites: PHARM 7202.

Co-requisites: PHARM 7203.

PHARM 7223 Rural Health and Agricultural Medicine Credits: 2

Intended to introduce inter-professional health professions students to agricultural health and rural medicine in order to prepare them to serve rural populations. Provided in collaboration with the Great Plains Center for Agricultural Health Safety, this course will provide a solid foundation in prevention strategies for safety and health in production agriculture. Students will recognize relevant demographic, socioeconomic and social determinants of health. Participants will be equipped with resources and tools that can support them in their future service to rural communities and emphasize the importance of interdisciplinary collaboration among health professions in order to reduce risks and optimize health.

Prerequisites: Students must be enrolled in health professions coursework.

PHARM 7224 Introduction to Cannabis Medicine Credit: 1

The course will serve as an introduction to the endogenous cannabinoid system and explore the clinical potential and the clinical, social, and legal problems associated with medicinal use of cannabis and cannabinoid medicines.

PHARM 7231 Drug Development and Pharmaceutical Career Opportunities Credits: 2

An introduction to the drug development industry and the process by which a new drug is brought to market. Students will use knowledge gained in previous coursework to deepen their understanding of how the biopharma and pharmaceutical industry functions. There will be an overview of discovery, preclinical, clinical, regulatory, drug safety, marketing, and medical affairs functions within the pharmaceutical industry. Opportunities that exist for Doctor of Pharmacy graduates to develop careers in these areas will also be discussed.

Prerequisites: PHARM 7101 or PHARM 7489.

PHARM 7233 U.S. Health Care System and Marketing Credits: 3

U.S. Health Care System and Marketing is a required course for the Doctor of Pharmacy degree program at The University of Missouri -Kansas City School of Pharmacy. It consists of two modules: U.S. Health Care System and Medication Safety (Module I) , and Health Care Marketing (Module 2). The learning objectives of the course are to (1) characterize components of the U.S. health care system at the macro level, including public health programs; (2) discuss medication errors and management within the U.S. health care system; (3) manage patients' health care needs using technological resources to optimize safety and efficacy of medication use systems; and (4) analyze the marketing process for health care projects and services, including business ethics in marketing activities. This course provides the context and builds the knowledge base for future required courses in economic, social, and administrative sciences.

PHARM 7244 Introduction to Drugs of Abuse Credits: 2

As a health professional in training, it is important to know the mental and behavioral effects of abusing both prescription and illicit substances. This knowledge will help the health professional to be more understanding of their patients who may be suffering with a substance abuse problem. Introduction to Drugs of Abuse will focus on both the physical and psychological effects of substances such as hallucinogens, amphetamines, alcohol, and nicotine among others. The course will also be discussing important topics such as behavioral modification, the controversies of treatment, and the role of the pharmacist in the treatment of substance abuse. A substantial focus will also be placed on patient experiences and the psycho-social aspects of substance abuse.

Prerequisites: BIOLOGY 218, BIOLOGY 218L.

Co-requisites: LS-PHYS 399, LS-PHYS 400.

PHARM 7245 Top Drugs I Credit: 1

This 1.0 hour course is designed as an introduction to up to 300 of the most commonly prescribed medications. This course will provide students with the opportunity to learn basic drug knowledge including brand (trade) and generic names, narcotic class, therapeutic class, common dosage forms, and FDA approved indications, dosing, pharmacology/pharmacokinetics, drug interactions, contraindications/precautions, and adverse effects.

Prerequisites: Successful completion of the P1 year in the Pharm.D. Program

PHARM 7266 Medical & Medication Error Evaluation & Management Credit: 1

A course designed to discuss the current body of evidence with respect to medical quality, medication errors, and strategies used to improve quality minimize error rates. At the completion of the course, the student should be able to (1) review and synthesize evidence within the literature; (2) describe the policy framework designed to improve health care quality; (3) describe characteristics and factors that enable encourage providers to improve the quality of care; (4) describe common causes of medication errors; (5) differentiate strategies to prevent errors; (6) correlate medication errors and specific disease states.

PHARM 7275 The Pharmacists' Role in Global Health Credits: 2

This course is designed to introduce students to the global context of public health. "Global Health" is defined as the application of principles of public health to health issues and challenges that transcend geopolitical boundaries, and to the complex array of global and local forces that affect these health issues.

PHARM 7277 Zoonotic Illnesses Credit: 1

A zoonotic illness is a disease that can be transmitted from animals to humans – over 60% of all human infections are zoonotic. The purpose of this course is to increase student knowledge relative to infectious diseases caused by zoonotic transmission/pathogens. Topic discussion will include background evolution of the disease, diagnostic considerations, management, monitoring and reporting of the infectious diseases to the local health department. This course will serve to reinforce the principles of infectious diseases pharmacotherapy and further expose students to diseases encountered in rural Missouri (i.e. tick bites, farm animals). Classes are didactic in nature.

Prerequisites: Microbiology course from any accredited college or university.

PHARM 7289 Introduction to Complementary and Alternative Medicine Credit: 1

An elective course designed to introduce a variety of the most common complementary and alternative medicine (CAM) modalities. Each modality will be defined and explained and any clinical evidence for or against will be discussed. An important emphasis will be on how patient use of these therapies may affect their needs for medication therapy management and counseling. For example, patients who see a naturopathic physician may be more likely to use herbal therapies that may interact with their prescription medications.

Prerequisites: Good standing in the P2 Doctor of Pharmacy year; P1 students may enroll with instructor approval.

PHARM 7303 Pharmacokinetics and Biopharmaceutics Credits: 3

This course involves the study of the rates at which drug absorption, distribution, metabolism, and excretion occur in the body following medication administration. The student will be taught to calculate pharmacokinetic parameters, and then utilize those values to optimize pharmacotherapy in his/her patient. So as to promote inter-professional healthcare dialogue, this course will demonstrate how to make informed recommendations associated with both drug administration and monitoring to medical and nursing healthcare providers. Recommendations include, but are not limited to, suggesting changes in the dose, dosing frequency, infusion rate, steady-state plasma drug concentrations, 'peak' and 'trough' plasma drug concentrations, drug/drug interactions, drug/food interactions, and dosing adjustment in the context of diminished kidney or liver function.

PHARM 7307 Advanced Pathophysiology Credits: 4

Advanced pathophysiology I is the study of the alterations of normal physiological functioning in cellular, tissue, organ, and organ systems. These alterations form the basis for understanding a variety of pathophysiological conditions and the manifestations and impact of abnormal physiological functioning on patients across the life span. Advanced pathophysiology I deals with both generalized disease processes and major organ system dysfunction. Students will have the opportunity to identify clinical signs and symptoms for various disease states and associate those symptoms with pathophysiological changes. The focus of this course is not on the pharmacologic management of disease, though medication management categories may be briefly introduced as it relates to mechanism of action and the physiologic abnormality contributing to the disease state.

Prerequisites: LS-BIOC 370, LS-PHYS 400.

Co-requisites: PHARM 7362, PHARM 7245.

PHARM 7308 Advanced Pathophysiology II Credits: 3

Advanced pathophysiology II is the study of the alterations of normal physiological functioning in cellular, tissue, organ, and organ systems. These alterations form the basis for understanding a variety of pathophysiological conditions and the manifestations and impact of abnormal physiological functioning on patients across the life span. Advanced pathophysiology II deals with both generalized disease processes and major organ system dysfunction. Students will have the opportunity to identify clinical signs and symptoms for various disease states and associate those symptoms with pathophysiological changes.

Prerequisites: LS-BIOC 370, LS-PHYS 400, PHARM 7307.

Co-requisites: PHARM 7363, PHARM 7345.

PHARM 7310 Academic Service Learning I Credit: 1

Academic Service Learning is a professional elective course where students are assigned to either an area clinic in Kansas City or the MedZou program in Columbia. A minimum of 30 contact hours must be completed during the assigned semester. Health education will be the primary focus.

PHARM 7311 Pharmacy in the 21st Century Technology Credits: 2

This course allows students to develop the skills to evaluate and use Health Care Information Technology (HCIT) in contemporary pharmacy practice. The elective course is offered in the winter semester only.

Prerequisites: Third year status or higher in the Pharm. D. program.

PHARM 7313 Career Planning Credit: 1

This course enables students to engage in the study of career opportunities in the areas of industry, hospital/clinic practice, retail and managed care settings. Pharmacy opportunities are explored through lecture and discussion, guest speakers in the various areas and student exploration with business contacts and research. Topics include understanding career opportunities, achieving one's professional goals, compensation packages and negotiations, and designing a path to accomplish career objectives.

PHARM 7316 Introduction to Pharmaceutical Policy Analysis Credits: 2

This course addresses multiple key influential pharmaceutical policy areas shaping pharmacy practice, and will teach critical thinking skills required to measure both federal and state level policy impact in patient safety and access to medications.

Prerequisites: PHARM 7151, PHARM 7325.

PHARM 7317 Drug Induced Diseases Credits: 2

Drug-induced disease is an unintended effect if a drug that results in mortality or morbidity with symptoms sufficient to prompt a patient to seek medical attention and/or require hospitalization. This course will aid students in the identification, management, and prevention of drug-induced diseases.

Prerequisites: PHARM 5519, PHARM 7307.

PHARM 7318 Introduction to Critical Care Medicine Credits: 2

Critical Care is a multidisciplinary healthcare specialty that cares for patients with acute, life-threatening illness or injury. The management of these patients requires advanced knowledge in various disease states, pathophysiological changes as a result of the illness or injury, as well as the pharmacologic agents used in their treatment. The course will serve as an introduction to Critical Care medicine and will allow students to gain exposure to all that encompasses caring for the critically ill. It will not only focus on specific disease states, but also delve into the negative outcomes associated with such illnesses and provide an introduction to both medical and pharmacologic management of them. The course is not meant to provide students with a comprehensive review but rather provide a glimpse into the specialty of Critical Care Medicine.

Prerequisites: Successful completion of all pharmacy didactic and experiential courses through semester four.

PHARM 7324 Medication Management in Transitions of Care Credit: 1

Transitions of care is an important aspect of patient care in all pharmacy practice settings. The pharmacist plays a crucial role in medication management during the transitions of care process. The purpose of this course is to increase student knowledge and skills relative to the pharmacist's role in transitions of care. Students will learn strategies to effectively develop and implement pharmacy-led transitions of care services in various healthcare settings.

Prerequisites: PHARM 7414. PHARM 7414L.

PHARM 7325 Patient Assessment and Professional Communication Credits: 2

In this course, students will continue developing necessary skills to provide patient-centered care. Students will be introduced to health informatics and an electronic medical record. Students will be taught the four components of a SOAP note, a method of documentation used by healthcare providers. Students will learn how to physically assess patients and document findings in SOAP format in a patient's record. Students will also learn how to effectively communicate with other healthcare professionals and document the interactions.

Prerequisites: PHARM 7101, PHARM 7414.

Co-requisites: PHARM 7325L.

PHARM 7325L Applied Skills Lab: Patient Assessment and Professional Communication Credits: 0.5

This applied skills lab is associated with the Patient Assessment and Professional Communication course. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge in a simulated environment. Students are expected to perform physical assessments on each other while under supervision and document patient information accurately and periodically within the electronic medical record system. Student achievement of core abilities will be assessed through an Objective Structured Clinical Examination. One 2-hour lab session is held every other week or weekly but no more than 10 sessions per semester.

Prerequisites: PHARM 7101, PHARM 7414.

Co-requisites: PHARM 7325.

PHARM 7326 Evidence Based Medicine Credits: 4

Pharmacists, if they are to assume the role of "medication expert," must learn how to evaluate the reliability of information relevant to healthcare options and choices. A pharmacist then can develop a clinical recommendation with justifications based on this evidence. Students will be taught a rigorous 5-Step systematic methodology assisting them with integrating this process into multidisciplinary healthcare decision-making for improved patient care.

Prerequisites: PHARM 7325, PHARM 7405.

Co-requisites: PHARM 7420.

PHARM 7331 Aseptic Technique & Compounded Sterile Preparations Credit: 1

In 7331, students will gain knowledge necessary to prepare sterile compounds including review of environmental requirements, proper aseptic technique, and dose calculations as well as legal and regulatory issues.

Prerequisites: Successful completion of all prior professional Pharm.D. program coursework through semester three and OSHA Bloodborne Pathogen Safety Training.

Co-requisites: PHARM 7331L.

PHARM 7331L Applied Skills Lab: Aseptic Technique & Compounded Sterile Preparations Credits: 0.5

The learning activities in 7331L are designed to complement didactic instruction and allow students to apply knowledge in a simulated environment. In 7331L, students will also demonstrate proper aseptic technique skills to compound and label, sterile preparations for safe and effective use.

Prerequisites: Successful completion of prior professional program coursework and OSHA Bloodborne Pathogen Safety Training.

Co-requisites: PHARM 7331.

PHARM 7334 Pharmacy Based Immunization Delivery Credit: 1

Pharmacy-based Immunization Delivery is an interactive training program that teaches student pharmacists the skills necessary to become a primary source for vaccine information and administration. The program teaches the basics of immunology and focuses on practice implementation, administration technique and legal/regulatory issues.

Prerequisites: PHARM 7307, PHARM 7361.

PHARM 7339 Business Plan and Entrepreneurship in Community Pharmacy Credits: 2

Business Plan and Entrepreneurship in Community Pharmacy course is designed to provide an opportunity for students enrolled in the School of Pharmacy to further explore business plan development and entrepreneurship in the community pharmacy setting. Upon course completion, the student will be able to understand and complete the necessary components of a full business plan and proposal that involves innovation and creativity in pharmacy practice. Students are expected to participate in a team approach to delegate all aspects of the business plan, as well as participate in classroom activities and discussions of innovative practice.

Prerequisites: PHARM 7101, PHARM 7151, PHARM 7233, PHARM 7414, PHARM 7414L, PHARM 7465.

PHARM 7341 Medicinal Chemistry I Credits: 3

This course is the study of medicinally active substances, both natural and synthetic, which describes their chemical properties, their mode of action, their structure-activity relationships and their metabolic rate. Starting with their origin, it is shown how drugs in a series are developed by chemical modification, quantitative structure activity relationships and receptor theory. The chemical properties of a drug are described and explained. The mode of action of the drug is explained on a biochemical basis whenever possible. Once a drug has had its medicinal effect, it is excreted or metabolized. Reasons for excretion or metabolism are explained.

Prerequisites: CHEM 322R.

PHARM 7344 Medicinal Chemistry II Credits: 3

This course is a continuation of PHARM 7341. This course will focus on major drug classes, both natural and synthetic, including their chemical properties, their mode of action, their structure-activity relationships and their metabolic fate. Structure-activity relationships and the influence of organic functional groups on physicochemical properties of drugs and their pharmacological activities will be emphasized. Drug metabolism will also be covered, with a focus on organic functional group transformations.

Prerequisites: PHARM 7341.

PHARM 7345 Top Drugs II Credit: 1

This 1.0 hour course is designed as an introduction to up to 300 of the most commonly prescribed medications. This course will provide students with the opportunity to learn basic drug knowledge including brand (trade) and generic names, narcotic class, therapeutic class, common dosage forms, and FDA approved indications, dosing, pharmacology/pharmacokinetics, drug interactions, contraindications/precautions, and adverse effects.

PHARM 7353 Investigative Toxicology Credits: 2

The science of investigative toxicology is an emerging science that plays a central role in forensic toxicology and pathology regarding conditions of and for exposure of many different kinds of environmental, biological, chemical, or physical agents. Investigative toxicology may include criminal or civil legal matters. The duties of an investigative toxicologist include the qualitative and quantitative analysis of drugs or poisons in biological systems and other physical evidence collected at the scene of the investigation. This also includes the interpretation of the exposure scene evidence and findings in regard to the physiologic and behavioral effect of those exposed to the detected/suspected chemical(s) at time of exposure. The complete investigation of the cause or causes of sudden or chronic chemical exposure and its potential aftermath is an important civic responsibility. The use of toxicologic information in investigation assessment requires careful field and laboratory analysis, evaluation of data.

PHARM 7361 Pharmacology I Credits: 2

Basic pharmacological principles of drug absorption, distribution, metabolism and elimination; concept of drug-receptor interactions; dose-response relationships and mechanism of action; and signaling mechanisms.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 7362 Pharmacology II Credits: 4

Principles of and advances in chemotherapy, biology, mechanism of action; clinical applications and adverse effects of various drug groups.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 7363 Pharmacology III Credits: 4

Mechanism of action; therapeutic uses; and adverse effects of drugs affecting different organ systems.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 7364 Concepts of Epidemiology and Statistics In-Research Credits: 3

This course introduces students to study design, principles, concepts, and application of epidemiological and statistical methods in research. First part of the course will cover understanding the epidemiological principle, measuring the occurrence of disease, measures of disease association, and types of study designs, interpretation and evaluation of epidemiologic research. Second part will provide hands-on experience for students on developing skills to analyze research data using appropriate statistical methods by means of statistical software to calculate the measures of disease association. This course will help students to evaluate health care studies with respect to study design, statistical analysis, interpretation, and evidences of association. During this course students will develop an epidemiologic study proposal. Students will learn to analyze and interpret the output of these analyses using the Statistical Package for the Social Science (SPSS).

Prerequisites: STAT 436.

PHARM 7366 Oncology and Hematology Pharmacotherapy Credits: 3

This course provides disease-oriented and pharmacy-oriented insight into the pathophysiology, diagnosis, and rational drug treatment of malignancy. The pharmacist's role in selecting drug products, individualizing dosages, supportive care, and monitoring patients is emphasized, with additional emphasis on safety and handling.

Prerequisites: PHARM 7361, PHARM 7420.

PHARM 7369 Advanced Psychiatry Credits: 2

This course aims to expand student pharmacist knowledge in regards to psychiatric pharmacy practice. Students will develop skills in patient assessment, treatment plan development, and professional communication. Course content and projects are aimed at expanding the students' understanding of a wide range of psychiatric disorders and developing their ability to discuss and analyze these disorders and their implications for patients and society as a whole.

Prerequisites: Successful completion of all pharmacy coursework through semester five.

Co-requisites: PHARM 7485P, PHARM 7485L.

PHARM 7377 Principles of Nutrition Support Credits: 2

Clinical nutrition, a multidisciplinary field, has become an important practice area for the hospital pharmacist. Its growth has been the result of an awareness of the high incidence of malnutrition among hospitalized patients and its effects on morbidity and mortality. Nutrition support is an important therapy provided to patients in the acute care, homecare and long term care settings. This course will introduce the student to the fundamentals of nutrition support and prepare him/her for future involvement in this important practice area.

PHARM 7378 Introduction to Community Pharmacy Practice Credits: 3

This course is a required Introductory Pharmacy Practice Experience (IPPE) in which students will spend three weeks during the summer after their first year providing patient-centered care in a community pharmacy practice setting. The experience will emphasize application of knowledge gained in didactic coursework at the student's level in the curriculum. This IPPE provides a blend of activities that focus on both the delivery of care to patients as well as the dispensing of medications. The Introductory Pharmacy Practice Experiences seek to establish a solid practice foundation on which students will continually build as they progress through the Doctor of Pharmacy curriculum.

Prerequisites: Successful completion of all professional program coursework through semester two. Proof of current pharmacy non-credit requirements and immunization documentation.

PHARM 7379 Introduction to Health Systems Pharmacy Practice Credits: 3

This course is a required Introductory Pharmacy Practice Experience (IPPE) in which Pharm.D. students will spend three weeks during the summer after their second year providing patient-centered care in a health systems pharmacy practice setting. The experience will emphasize application of knowledge gained in didactic coursework at the student's level in the curriculum. Activities focus on understanding the medication use system and delivering care to patients in a hospital setting. The Introductory Pharmacy Practice Experiences seek to establish a solid practice foundation on which students will continually build as they progress through the Doctor of Pharmacy curriculum.

Prerequisites: Successful completion of all professional program coursework through semester four. Proof of current pharmacy non-credit requirements and immunization documentation.

PHARM 7389 Advances In Drug Therapy Credits: 2

This course provides the fundamentals of recent advances in drug delivery and therapy. Concepts covered include advanced and novel drug delivery systems, modern drug analysis tools, the role of efflux proteins in drug kinetics, and transporter/receptor mediated drug delivery.

Prerequisites: PHARM 7303.

PHARM 7397 Home Health Care Credits: 2

Anything a patient does in the home concerning their healthcare is considered Home Health Care. All aspects of Home Health Care are covered in this class. Diabetic Ostomy products care, Durable Medical Equipment (Wheelchair, cane, crutches, etc.), home Renal Dialysis, Wound Care, Respiratory Therapy, IV accesses, Home Infusion Therapy, Hospice Care, and Enteral Nutrition are presented and discussed. Reimbursement issues are not discussed due to constantly changing regulations. This is a "hands-on" class with participation in, for example, ostomy fitting, crutches fitting, enteral nutrition taste testing, and a tour of a Home Infusion Pharmacy.

Prerequisites: PHARM 7362, PHARM 7405.

Co-requisites: PHARM 7420.

PHARM 7398 Comprehensive Diabetes Management Credits: 4

The purpose of the course is to provide the student with a multidisciplinary foundation in the principles of diabetes management. The student will develop his-her knowledge and ability to assess, manage, educate and monitor patients with diabetes. The faculty are comprised of a multidisciplinary team of experts for the online lectures. The in-class discussion will be led by a faculty member who specializes in diabetes management.

Prerequisites: PHARM 7303.

PHARM 7399 Required Enrollment Credit: 1

Required enrollment for international students in pharmacy training sites.

PHARM 7405 Pharmacotherapy I: Emphasis on Self-Care and Nonprescription Medications Credits: 4

Pharmacotherapy I integrates the fundamentals of pathophysiology and pharmacology to help develop the student's ability to provide patient-centered care. Upon course completion, students will be able to assess and provide pharmaceutical care for patients with illnesses commonly encountered in community pharmacy practice utilizing the QuEST/SCHOLAR MACS process to assess a patient's condition systematically and completely, as well as following the Pharmacist Patient Care Process (PPCP). Students are expected to identify medical and medication-related problems, recommend nonprescription drug therapy, prescription drug therapy when appropriate, and monitor for safe and effective drug use. Students are also expected to provide accurate medication counseling. In general, three hours per week are devoted for traditional didactic, classroom based instruction, teaching and learning and two hours for case recitation.

Prerequisites: PHARM 7279, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7414.

Co-requisites: PHARM 7405L.

PHARM 7405L Applied Skills Lab Pharmacotherapy I: Emphasis on Self-Care and Nonprescription Medications Credits: 0.5

Students enrolled in this applied pharmacotherapy lab will gain skills necessary to provide care for patients with illnesses commonly encountered in community practice. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge in a simulated environment. Students will be afforded opportunities to provide patient-centered care utilizing the QuEST/SCHOLAR MACS process. Student achievement of core abilities will be assessed through an Objective Structured Clinical Examination.

Prerequisites: PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7414.

Co-requisites: PHARM 7405.

PHARM 7406P IPPE: General Medicine I Credits: 2

This course is a required Introductory Pharmacy Practice Experience (IPPE) which provides a continuum of patient care activities throughout the third professional year. The student will spend one academic year (Fall and Spring Semesters) in a patient care setting with a minimum of 90 contact hours (45 contact hours each semester). The Pharmacist's Patient Care Process will be emphasized in the care of patients with commonly seen illnesses. Students are expected to become involved in the provision of direct patient care collaborating with other healthcare professionals and improving rational drug therapy in a practice environment. Students will take part in rounds, conferences, consultations and other activities as determined by the supervising faculty. General Medicine I practice site time allows maximum time and opportunity to engage IPPE students in patient care activities; interactions with patients, caregivers, and other health care professionals; and to apply their patient care knowledge and skills in authentic practice settings.

Prerequisites: PHARM 7420, PHARM 7485P.

PHARM 7407P APPE Patient Care Selective Credits: 4

The student will spend one month actively participating in the delivery of direct patient care in an interprofessional practice setting where there are ongoing clinical pharmacy services. Students will take part in rounds, conferences, consultations and other activities as directed by the faculty preceptor. Faculty preceptors may add site-specific objectives as indicated.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7409P APPE Health Systems Credits: 4

The student will spend one month assigned to a health system site. Emphasis of study will be on the pharmacy systems of hospital/health systems, medication safety and quality, and professional practice. Clinical applications will be maintained throughout the rotation. Students will take part in department activities to enhance understanding of the integration of all aspects of patient-centered care within the department and other services in the facility/health system. Faculty preceptors may add site-specific objectives as indicated.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7410P APPE Ambulatory Patient Care Credits: 4

The student will spend one month actively participating in the delivery of direct patient care in an interprofessional ambulatory patient care practice setting where there is an ongoing program of clinical pharmacy services. Students will take part in rounds, conferences, consultations and other activities as directed by the faculty preceptor. Faculty preceptors may add site-specific objectives as indicated.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential coursework through semester six.

PHARM 7412P APPE Advanced Community Pharmacy Credits: 4

The student will spend one month in a progressive community pharmacy setting. Emphasis of study will be on the clinical aspects of providing comprehensive patient care services to diverse patient populations in a community practice. Patient-centered care activities will be emphasized throughout the rotation. Students will take part in all aspects of patient care within the practice. Faculty preceptors may add site-specific objectives as indicated.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7414 Patient-Centered Care and Ethical Practice Credits: 2

Students will understand the concept as well as the pharmacist's role in providing patient-centered care. Students will learn how to build relationships through consideration of the patient's personal values, preferences and beliefs. Students will learn how to effectively communicate with patients to obtain health and medication histories and to counsel for medication adherence. Drug knowledge for the most commonly prescribed medications will be learned, assessed and applied throughout this course and the associated applied skills lab (7414L). One 2-hour class session is held per week.

Prerequisites: PHARM 7101.

Co-requisites: PHARM 7414L.

PHARM 7414L Applied Skills Lab: Patient-Centered Care and Ethical Practice Credits: 0.5

This applied skills lab is associated with Patient-Centered Care and Ethical Practice course. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge to patient care in a structured lab environment. Student achievement of core abilities will be assessed through completion of assigned activities and an Objective Structured Clinical Examination (OSCE). One 2-hour lab session is held on designated weeks as outlined in the course schedule.

Prerequisites: PHARM 7101.

Co-requisites: PHARM 7414.

PHARM 7418P APPE Elective I Credits: 4

Elective experiences give students the opportunity to mature professionally, secure the breadth and depth of experiences needed to achieve curricular outcomes, and explore various sectors of practice. Students may repeat required rotations as electives if space is available or may approach a preceptor to tailor an elective experience to develop an area of interest. Faculty preceptors may add site-specific objectives as indicated. Electives may include a maximum of two experiences without a patient care focus.

Prerequisites: Successful completion of all pharmacy required non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7419P APPE Acute Patient Care Credits: 4

The student will spend one month actively participating in the delivery of direct patient care in an interprofessional acute practice setting where there are ongoing clinical pharmacy services. Students will take part in rounds, conferences, consultations and other activities as directed by the faculty preceptor. Faculty preceptors may add site-specific objectives as indicated.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7420 Pharmacotherapy II Credits: 7

Pharmacotherapy II is designed to develop the student's ability to assess patients and provide pharmaceutical care. The course focuses on developing and applying problem-solving strategies for complex illnesses commonly encountered in pharmacy practice. Students are expected to identify medical and medication-related problems, recommend drug therapy and monitor for safe and effective drug use. Students are also expected to provide medication counseling. Throughout the semester, students are expected to retrieve and utilize relevant patient data from an electronic medical record system to make patient care decisions. Six hours of large group and two hours of small group discussions occur weekly.

Prerequisites: PHARM 7279, PHARM 7280, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7362, PHARM 7405, PHARM 7414.

Co-requisites: PHARM 7420L, PHARM 7406P.

PHARM 7420L Applied Skills Lab: Pharmacotherapy II Credits: 0.5

Students enrolled in this applied pharmacotherapy lab will gain skills necessary to provide care for patients with illnesses commonly encountered in pharmacy practice. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge in a simulated environment. Students will be afforded opportunities to utilize home monitoring tests, conduct medication reviews, and therapeutically manage patients at a distance (telepharmacy). Student achievement of core abilities will be assessed through an Objective Structured Clinical Examination (OSCE).

Prerequisites: PHARM 7279, PHARM 7280, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7362, PHARM 7405, PHARM 7414.

Co-requisites: PHARM 7420, PHARM 7406P.

PHARM 7420P APPE Elective II Credits: 4

Elective experiences give students the opportunity to mature professionally, secure the breadth and depth of experiences needed to achieve curricular outcomes, and explore various sectors of practice. Students may repeat required rotations as electives if space is available or may approach a preceptor to tailor an elective experience to develop an area of interest. Faculty preceptors may add site-specific objectives as indicated. Electives may include a maximum of two experiences without a patient care focus.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7421P APPE Elective III Credits: 4

Elective experiences give students the opportunity to mature professionally, secure the breadth and depth of experiences needed to achieve curricular outcomes, and explore various sectors of practice. Students may repeat required rotations as electives if space is available or may approach a preceptor to tailor an elective experience to develop an area of interest. Faculty preceptors may add site-specific objectives as indicated. Electives may include a maximum of two experiences without a patient care focus.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7422P APPE Elective IV Credits: 4

Elective experiences give students the opportunity to mature professionally, secure the breadth and depth of experiences needed to achieve curricular outcomes, and explore various sectors of practice. Students may repeat required rotations as electives if space is available or may approach a preceptor to tailor an elective experience to develop an area of interest. Faculty preceptors may add site-specific objectives as indicated. Electives may include a maximum of two experiences without a patient care focus.

Prerequisites: Successful completion of all pharmacy non-credit requirements and all didactic and experiential pharmacy coursework through semester six.

PHARM 7424 Introduction To Dietary Supplement Therapeutics Credits: 2

This course is intended to provide students with an awareness of important issues about dietary supplements to consider when providing pharmaceutical care to patients. Students will become familiar with regulations for dietary supplements, learn communication skills specific to discussing supplement use with patients, and the skills to retrieve and interpret reliable information to be able to make decisions about new or unfamiliar supplements.

Prerequisites: PHARM 7361.

PHARM 7427 Hospital Pharmacy Credits: 2

This course in Hospital Pharmacy is designed to expose students to the daily operation of a typical hospital pharmacy, integration of informatics and automation, and understanding of historical concepts in hospital pharmacy management. The course consists of one, two-hour lecture per week. The course will be delivered via traditional didactic lecture format and interactive group discussions.

PHARM 7434 Pharmacy Preparations: Compounding Credit: 1

In the Pharmacy Preparations: Compounding Course, students will gain knowledge and skills necessary to compound extemporaneous non-sterile preparations. The course will cover regulations governing pharmaceutical compounding in Missouri, ethical considerations applicable to compounds, various dosage forms including advantages and disadvantages of each, techniques used in preparing compounds, and the counseling information to be included for each type of dosage form covered in the course. Students will utilize their knowledge of pharmaceutical calculations in the preparation of the formulations such as calculating doses and ingredient quantities.

Prerequisites: PHARM 7110.

Co-requisites: PHARM 7434L.

PHARM 7434L Applied Skills Lab: Pharmacy Preparations: Compounding Credit: 1

Students enrolled in this compounding lab will apply knowledge gained in the associated course necessary to compound extemporaneous non-sterile preparations. Students are expected to accurately prepare, dispense, and label a variety of the most commonly prescribed extemporaneous formulations, including liquid, solid, semi-solid, and topical preparations.

Prerequisites: PHARM 7110.

Co-requisites: PHARM 7434.

PHARM 7439 Pediatric Pharmacotherapy Credits: 3

Pediatric Pharmacotherapy provides disease-oriented and pharmacy-oriented insight into the pathophysiology, diagnosis, and rational drug treatment of diseases primarily encountered in the pediatric population. The pharmacist's role in selecting drug products, individualizing dosages, and monitoring patients is emphasized.

Prerequisites: PHARM 7361, PHARM 7362, PHARM 7420.

PHARM 7451 Pharmacy Law Credit: 1

State laws impacting pharmacy practice.

Prerequisites: PHARM 7151.

PHARM 7463 Basic and Clinical Toxicology Credits: 2

Fundamentals of toxicology, including discussion of the general classes of poisonous substances, their physiological effects, and methods of treatment.

Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

PHARM 7465 Health Economics and Medicine Credits: 3

This course introduces major economic dimensions of healthcare system and public health practices. Covers concepts necessary to understand provider and consumer behavior, health care market structure, government involvement in health care, reimbursement strategy, determinants of health, distribution channels for biopharmaceuticals, pharmacovigilance, economic evaluation of healthcare services, and comparative-effectiveness research.

Prerequisites: PHARM 7233.

PHARM 7466 Pharmacy Practice Leadership, Management, and Innovation Credits: 3

Pharmacy Practice Leadership, Management, and Innovation is a required course for the Doctor of Pharmacy degree program. The goals of the course are to teach basic leadership and management principles and apply them to pharmacy practice in a variety of situations and settings. Leadership principles are related to broad personal and organizational missions and visions. Management principles are related to operational details of managing human resources, inventory, and finances. In order to achieve these goals, this course will review specific topics, including but not limited to, leadership and professional development, entrepreneurship, operations management, application of reimbursement mechanisms, pay-for-performance, and innovative pharmacist services. Pharmacists need to understand these principles and applications as a means of providing optimum care for patients, especially when pharmacists emerge as important contributors to the future of the U.S. health care system.

Prerequisites: PHARM 7465.

PHARM 7467 Religion, Culture and Health Credits: 3

This course addresses the impact of religious beliefs, education, and cultural practices on health and healthcare issues pertinent to various segments of our society.

PHARM 7484P Pharmacy Seminar Credit: 1

Pharm. D. Student Seminar course is designed to provide students with examples and reasoning behind the fundamentals of seminar preparation and delivery and opportunity to utilize their knowledge by presenting a seminar. This experience will be achieved through identification of a topic, development and presentation of a seminar. The student is expected to complete two 40-minute seminars over two semesters.

Prerequisites: PHARM 7485P.

PHARM 7485L Applied Skills Lab: Pharmacotherapy III Credits: 0.5

Students enrolled in this applied pharmacotherapy lab will gain skills necessary to provide care for patients with illnesses commonly encountered in pharmacy practice. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge in a simulated environment. Students will be afforded opportunities to provide pharmacy services, including but not limited to, Medication Therapy Management, therapeutic Drug Utilization Review, Patient Centered Medical Home and telepharmacy. Multiple activities will incorporate concepts of interprofessional team-based care. Student achievement of core abilities will be assessed through an Objective Structured Clinical Examination.

Prerequisites: PHARM 7279, PHARM 7280, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7362, PHARM 7405, PHARM 7414, PHARM 7420.

Co-requisites: PHARM 7485P, PHARM 7406P.

PHARM 7485P Pharmacotherapy III Credits: 7

Pharmacotherapy III is designed to develop the student's ability to assess patients and provide pharmaceutical care. The course focuses on developing and applying problem-solving strategies for complex illnesses commonly encountered in pharmacy practice. Students are expected to identify medical and medication-related problems, recommend drug therapy and monitor for safe and effective drug use. **Prerequisites:** PHARM 7279, PHARM 7280, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7362, PHARM 7405, PHARM 7414, PHARM 7420, 7420L.

Co-requisites: PHARM 7485L, PHARM 7406P.

PHARM 7489AB Introduction to Nuclear Pharmacy & Nuclear Medicine Credits: 2

Nuclear pharmacy employs the safe and effective use of radiopharmaceuticals and other drugs with the purpose of improving patient health. The purpose of this course is to educate students regarding the diagnostic and therapeutic roles of radiopharmaceuticals in healthcare and teach the proper procedures and techniques that go into safely compounding and handling these products. Students will visit Cardinal Health Nuclear Pharmacy where they will be able to demonstrate the techniques they have learned. Students will attend four two-hour lectures and have the opportunity to witness the utilization of a radiopharmaceutical during a diagnostic scan at Truman Medical Center.

PHARM 7489CC Special Topics-Pharmacy Credits: 1-5

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489CE Special Topics in Pharmacy Credits: 1-5

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489RB Special Topics Pharmacy Credits: 1-5

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective

PHARM 7489SI Special Topics in Pharmacy Credits: 1-5

A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7497E Directed Individual Study-Clinical Pharmacy Credits: 1-4

Study in areas of special interest under individual faculty direction. Elective. Not to exceed five semester credits.

Academic Regulations and Requirements

Class Attendance

Students should refer to the UMKC Attendance Policy (p. 477) under the Academic Regulations section of this catalog.

Absences from Scheduled Examinations

Students must refer to the individual course policies within the syllabus.

Policy for Examination Process

Students must refer to the individual course policies within the syllabus.

Inclement Weather Policy

Please refer to the School of Pharmacy inclement weather policy related to campus closures because of weather related issues - I (https://pharmacy.umkc.edu/wp-content/uploads/2016/08/Inclement_Weather_and_Campus_Closure_Policy.pdf)nclement Weather Policy (https://pharmacy.umkc.edu/wp-content/uploads/2016/08/Inclement_Weather_and_Campus_Closure_Policy.pdf)

Academic Loads

All coursework in the pharmacy curriculum is sequential and success depends upon the instruction and content from the previous semester and builds upon knowledge needed for subsequent semesters. Pharmacy students must enroll for the total program as outlined for each semester in the most current version of the curriculum. Therefore, all coursework and related requirements must be successfully completed in sequence, as outlined, before matriculating to the next professional year.

Grading System

Refer to the grade-point system listed in the General Undergraduate Academic Regulations and Information section of this catalog and to the individual course syllabi. Note: Letter grade changes must be made no later than four weeks from the beginning of the next semester, to include summers, unless a shorter time frame be affixed by a course coordinator. This policy applies to School of Pharmacy departmental courses only and does not apply to incomplete grades.

Doctor of Pharmacy students are not eligible for GPA Adjustment through the UMKC repeated courses policy.

Academic Standing for Doctor of Pharmacy Students

A student's academic standing is determined by their academic performance while progressing through the University of Missouri-Kansas City School of Pharmacy (UMKC SOP) Doctor of Pharmacy curriculum.

Reasons for the Policy

The UMKC SOP recognizes that students admitted to professional studies may encounter academic difficulty or need a leave to attend to personal issues. The SOP has established policies designed to give students an opportunity to be reinstated following a leave of absence, withdrawal or poor academic performance.

Academic Standing Defined

Good Academic Standing: The student is currently enrolled in the UMKC SOP.

Academic Concern: Less than a C grade on a test or major assignment. Students meeting criteria for Academic Concern will be monitored through the Student Success Program.

Academic Probation: Less than a 2.00 term grade point average (GPA), with no grades of D, F, WF or NC, or less than a 2.00 cumulative GPA in any **one** semester.

Academic Dismissal:

- Receipt of a D, F, WF or a NC grade in any coursework in a single semester
 - Receipt of less than a 2.00 term GPA while on academic probation
- Placement on Academic Probation **two** consecutive semesters
- Placement on Academic Probation **more than two** non-consecutive semesters

NOTES:

- Any student who is placed on academic probation is notified in writing by the Associate Dean for Student Affairs (ADSA).
- A student will be notified in writing by the ADSA following their first and second academic dismissal from the Doctor of Pharmacy program.
- A student may request reentry into the program following their first and second academic dismissal from the Doctor of Pharmacy program.

A student **is not eligible for readmission** if he/she is academically dismissed for a third time. The third dismissal causes the student to be irrevocably dismissed from the UMKC SOP. A student who is academically dismissed for a third time will be notified by the Dean of the School of Pharmacy.

A student who is irrevocably dismissed from the UMKC SOP may consult with the ADSA or the Director of Student Affairs regarding options for their academic career beyond pharmacy and logistics of transferring to another major. A Faculty Advisor (FA) cannot advise students who are irrevocably dismissed from the UMKC SOP and should refer them to the ADSA or the Director of Student Affairs.

Leave of Absence:

Pharmacy students can petition the Academic Progression Committee for a leave of absence under the following stipulations:

- Student is eligible for reentry into the UMKC SOP.
- *P1-P3 year*: Petition must be initiated during the current term no later than the 12th week of class.
- *P4 year*: Petition must be initiated no later than one week before the start of the next rotation.
- Petition includes a personal statement detailing reason for leave.
- Documentation from a health care professional is provided to support reasons for a medical leave.
- Documentation from Department of Defense is provided to support reasons for a military leave.
- NOTE: Petitions for leaves resulting from catastrophic events will be given an exception to the timelines stated above.

Requesting a Leave of Absence

Students requesting a Leave of Absence must submit a completed SOP petition form (<http://pharmacy.umkc.edu/pharm-d/policies/>) then see Program Policies and Procedures then Petition Form, the UMKC Request for Leave of Absence form (<https://www.umkc.edu/registrar/forms-resources/student-resources/>) and required supporting documentation. The forms are submitted to the Office of Student Affairs (OSA) for the School of Pharmacy who forwards them to the Academic Progression Committee Chair. The Chair calls a meeting of the Academic Progression Committee who hears the petition.

Pharmacy students approved for Leave of Absence:

- Will be withdrawn from all courses as per University policy.
- Are approved for up to one year leave only. An extension may be requested if needed and well documented. The extension cannot extend more than two years beyond the original date that the leave started. Students who do not return by the date noted on their approved leave and who are not granted an approved extension will be required to reapply for admission.
- Will not be enrolled for pharmacy coursework in the subsequent semester(s).

A student on a leave of absence will not:

- Be eligible for any financial aid disbursements during the semester(s) while on a leave of absence. A student on a leave of absence will be reported to lenders and loan service agencies as “non-attending” and will need to contact his/her lenders for information on possible repayment requirements, deferments and forbearances.
- Have access to campus computing labs, Student Health and Wellness Services, or any campus or university services available only to currently enrolled students. Students on a leave will be able to maintain their UMKC exchange email account.

NOTE – Any student dismissed from the Doctor of Pharmacy program or approved for a leave of absence must notify the Missouri Board of Pharmacy and their current pharmacy employer of their change in status immediately as they are ineligible to maintain any current pharmacy intern license.

Procedures After a Change in Academic Standing**Academic Probation:**

All cases of probation are reviewed by the Academic Progression Committee to discuss reasons for the unsatisfactory progress. Following review, the ADSA will notify the student of their academic probation status by letter. In order to be removed from Academic Probation status, the student must:

- Receive no less than a 2.00 term GPA in the next academic semester;
- Raise their cumulative GPA above 2.00 in the next academic semester.

Readmission After a Leave of Absence:

Petitions for readmission after a leave of absence will be reviewed by the Academic Progression Committee. Re-entry is contingent on their eligibility to continue, results of a new Criminal Background Check, and space available in the class the student seeks to re-enter. Pharmacy students returning from a leave of absence must:

- *P1-P3 year:* Submit the petition form at least two months prior to the beginning of the **term** applying for re-entry. Upon re-entry will continue under the student's same academic standing status that was in place at the time the leave of absence began.
- *P4 year:* Submit the petition form at least one month prior to the desired re-entry date. Note that students are rescheduled to rotations on a space available basis. Attempts will be made to restart the student on their desired date, but there are no guarantees of availability.
- Be held under the policies and procedures in place at the time of their re-entry.
- Complete a new Criminal Background Check.
- If applicable, supply a letter from a health professional and/or other entity verifying that the student can return to full-time, collegiate work.
- Provide any additional documentation from other entities as required by the SOP to support readiness for readmission.
- Incorporate any curricular or policy changes into modified plan of study.

NOTE: Program and graduation requirements may change during a student's leave of absence. It is at the discretion of the SOP to define the program and graduation requirements once the student has been approved to return from a leave of absence.

Readmission of Eligible Students After Academic Dismissal:

- A student is eligible for readmission to the Doctor of Pharmacy program after their first and second academic dismissal. The student must request reentry within one year from notice of their academic dismissal. Readmission is determined on a case by case basis.
- If readmitted, the student is placed on an academic contract and must meet the conditions of their contract throughout their remaining time as a UMKC SOP student. A student cannot continue in the program until the Dean or designee has approved the students' academic contract.
- An academic contract includes an individualized modified plan of study to complete the curriculum and other programmatic requirements and additional expectations needed to maintain enrollment in the program.
- A student is **not eligible for readmission** if they are dismissed after failing to meet the terms of their academic contract for a third time. A third academic dismissal causes the student to be irrevocably dismissed from the UMKC SOP.

The following steps must be completed for an eligible student to request reentry:

- Meet with their FA and the ADSA to discuss factors contributing to their dismissal and their proposed readmission plans (timing, coursework, additional improvement strategies)
- A written contract is developed by the FA, ADSA, ADAA (Associate Dean of Academic Affairs) and other individuals as deemed necessary by the ADSA. Readmission contracts consider, but are not limited to the following factors:
 - Performance in previous course work completed by the student and other circumstances surrounding their dismissal.
 - Corrective measures taken by the student to address academic readiness, financial problems, personal matters, course work deficiencies, and/or ongoing support needed to address any relevant issues.
 - Availability of space in the professional class the student seeks to enter. The student may be assigned to their original campus location or to an alternative campus location based upon space availability.
- Conditions of readmission include, but are not limited to:
 - The student remains on contract and meets all terms in their contract for the duration of their tenure in the Doctor of Pharmacy program.
 - The student meets with their FA and other individuals as set forth in the contract.
 - The student does not receive any grades of NC, D, F in any course during the remainder of their tenure in the Doctor of Pharmacy program.
 - The student does not receive less than a 2.00 term GPA.
 - The student cannot withdraw from any required course unless they have a Leave of Absence approval from the Academic Progression Committee.
 - Completion of a new Criminal Background Check, when necessary.
- The student, FA, ADSA and ADAA discuss the contract. If the student agrees to the stipulations in the contract, he/she signs it and provides a signed copy to ADSA. If the student disagrees, he/she submits a written appeal using the petition form within 10 working days of receipt of the contract. The appeal is submitted to the ADSA who forwards it to the Academic Progression Committee. The Chair calls a meeting of the Academic Progression Committee who hears the appeal. The student is required to present their appeal in person to the Academic Progression

Committee. The ADSA, ADAA and FA will answer any questions about the original contract at that meeting. The Academic Progression Committee determines the student's final contract.

Request for Modified Plan of Study for Students Not on Academic Contract

In exceptional circumstances, a student can request a modification to their original curricular plan of study if they are not on an academic contract. Circumstances can include but are not limited to:

- Health or personal reasons not resolved by a Leave of Absence.
- Receipt of course withdrawal without assessment or course withdrawal passing.
- NOTE:
 - The SOP follows the UMKC Undergraduate Course Withdrawals policy
 - **Students should not withdraw from any coursework without first communicating in writing with their FA or the ADSA.**
 - Students who withdraw from required coursework are ineligible to continue in the regular curriculum, must be approved for a modified plan of study to continue in the program. They may have a **delayed graduation completion date.**

Students who seek a Modified Plan of Study must meet with their FA, ADSA, ADAA and other individuals as deemed appropriate to develop the plan and submit that plan for approval by the Academic Progression Committee prior to continuing in the program. All modified plans of study are approved on a case-by-case basis, must meet all UMKC and UMKC SOP prerequisites and policies and procedures and be approved by the Academic Progression Committee.

Remediation Policy for UMKC Pharm.D. Program

This remediation policy addresses didactic course-specific remediation.

Remediation Policy:

- A. Remediation is a privilege. Considerations for eligibility include (but are not limited to) the following: The student must have demonstrated regular attendance, completed assigned coursework, communicated with the instructor and/or course coordinator, and utilized other available academic resources throughout the semester in an attempt to meet the course learning outcomes and avoid a failing grade. The course coordinator has the right to deny the student the option of remediation.
- B. If a student earns a non-progressing grade and has been granted permission to remediate, a course grade of "Incomplete" ("I") will be given.
- C. Course remediation will be determined by the course coordinator and completed within 4 weeks following the end of the semester.
- D. No grade higher than a "C" can be earned in the course with remediation. If the student fails remediation, the original course grade will take the place of the "I" grade.
- E. Students will be allowed to remediate no more than three (3) times during years 1 through 3 of the professional degree program with no more than 2 courses remediated in the same semester.

Appeal of Disputed Grades

Policy Statement

The School of Pharmacy affirms the principle that students are responsible for meeting the standards of academic performance established for each course. Further, the course coordinator is responsible for setting the criteria for grades, evaluation of student performance, and assignment of grades.

Students have the right to appeal for change of the grade they received in a course. Grade appeal is only available for reviewing allegedly capricious grading, and not to review the instructor's evaluation of the student's academic performance.

Capricious grading, as that term is used here, consists only of any of the following:

1. the assignment of a grade to a particular student on some basis other than the performance in the course;
2. the assignment of a grade to a particular student by resorting to more exacting or demanding standards than were applied to other students in the course; (Note: Additional and/or different grading criteria may be applied to graduate students enrolled for graduate credit in 300 and 400 level courses.)
3. the assignment of a grade by a substantial departure from the instructor's previously announced standards.

Procedures for Appeal of a Disputed Grade

Informal Disposition

Students are encouraged to meet with the course coordinator to discuss the disputed grade prior to formally initiating a grade appeal. If the student is still not satisfied with the grade, they can then initiate the formal grade appeal process as outlined below. The student can also discuss their case with their faculty advisor* as they seek informal resolution.

Pre Appeal Meetings

The student and their faculty advisor may meet with Associate Dean for Student Affairs before entering Step 1a or 1b or at any other time throughout the process to ensure all parties understand the processes involved in a grade appeal. The Associate Dean for Student Affairs is also available to meet with the course coordinator and the relevant division chair to discuss procedural issues.

Appeal Step 1 – Appeal to Course Coordinator

Step 1a

- Appeals involving didactic courses

The student will first discuss any disputed grade with the course coordinator.

The student must clearly state in writing that they are enacting Step 1 of the grade appeal process and provide a written petition stating how the disputed grade meets one or more definition(s) of capricious grading. This must be done within six weeks after the beginning of the succeeding regular academic semester.

Step 1b – Appeals involving Experiential Education

The student will first discuss any disputed grade with the instructor responsible of the assignment of an experiential rotation grade. In the case of a grade being assigned by an *adjunct* faculty preceptor, the Director of Experiential Rotations will serve as arbitrator on behalf of the adjunct member. **The student must clearly state in writing that they are enacting Step 1 of the grade appeal process and provide a written petition stating how the disputed grade meets one or more definition(s) of capricious grading.** This must be done within six weeks after the beginning of the succeeding regular academic semester.

Appeal Step 2 – Appeal to Division Chair **

If the matter cannot be resolved during Step 1, the student will describe their case in a written petition. The petition must be given to the Division Chair within 10 consecutive calendar days following the meeting with the course coordinator. An airing of the petition with the appropriate Division Chair and the student's faculty advisor* provides the student an opportunity to present the matter in dispute and to assist all parties to comprehend the issue germane to the situation. The Division Chair will report the outcome in writing to the student within 10 consecutive calendar days.

Appeal Step 3 – Appeal to School of Pharmacy Executive Committee

If the grade appeal is not resolved to the satisfaction of the student in Step 2, the student requests in writing that that the Division Chair refer the matter, with all pertinent records, to the Dean** of the School of Pharmacy. The request must be made within 10 consecutive calendar days of the Chair's notification to the student. The Dean will refer the entire case to the School of Pharmacy Executive Committee (members holding academic appointments) as soon as possible, but no later than 21 consecutive calendar days.

The Executive Committee will:

- Review the Chair's decision and all documents reviewed during Step 2.
- Hear from the student.
- Hear from the course coordinator.
- Find and consider other pertinent data as indicated. The student has the right to submit additional evidence during Step 3.

By formal motion and vote, the Executive Committee will arrive at a recommendation to the Dean to either sustain the grade as assigned or to alter the grade in favor of the student. (NOTE - In this deliberation, the Dean, as Chair, may enter into the deliberation but will not vote on the recommendation, except as necessary to break a tie.) The outcome of this hearing will be reported in writing to the student within 10 consecutive calendar days.

Appeal Step 4 – Appeal to Provost

In the event that the student is not satisfied with the outcome of Step 3, the student can appeal to the Provost 10 consecutive calendar days after notification of the Dean's decision.

Additional Procedural Considerations:

- Students can request permission to take next semester courses while appealing their grade from the previous semester. The student makes their request in writing to each course coordinator who teaches in the upcoming semester. The coordinator grants or denies permission to the student, in writing, on a case by case basis. The student must have permission from all course coordinators to attend their class while a grade is under appeal

in order to progress. The student provides all written permissions to the Associate Dean for Student Affairs who will facilitate registration for that semester.

o No student will be allowed to continue into APPE's until all coursework through the P3 year is complete and all grade appeals are completed.

o If a student exhausts all steps in the appeal process and the grade is upheld, permission to attend the classes is immediately rescinded. Depending upon the timing the grade appeal decision – fees for that semester may or may not be able to be recouped.

• *The student has the right to use someone other than their assigned faculty advisor to assist him/her through the appeal process.

• **The Dean, Associate Dean or Department Chair can name a designee if they are unable to fulfill their role in the appeal process.

• Witnesses or statements of support are not allowed as part of any School of Pharmacy grade appeal hearing. Students can bring their faculty advisor or another individual of their choosing to the hearing. That individual cannot directly address the school representative hearing the case at that step. The student and the individual can speak to each other during the hearing step(s).

• Step 4 procedures are determined by the Provosts office. Appeals are submitted to gradeappeals@umkc.edu.

Noncredit Requirements

All doctor of pharmacy students are expected to actively obtain certain certifications, meet specified standards, as well as participate in professional activities offered or required by the School of Pharmacy. These activities, standards, and certifications mirror those expected in professional practice and are intended to better prepare the student for professional life. The following are requirements for all Pharm.D. students that must be adhered to throughout the program. Students will be notified if additional certifications or requirements apply. Additional information regarding these requirements and other School of Pharmacy Policies and Procedures that must be followed are found on the School's web page at <http://pharmacy.umkc.edu/pharm-d/policies/>.

The following requirements apply to Doctor of Pharmacy students (as defined for each item), unless a waiver is obtained from the appropriate school official.

Career Fair

All students must attend and participate at the Pharmacy Career Enhancement and Professional Preparation Day during their final year of the program unless previously excused, in writing, in advance of the event by the Dean or designee.

Certifications in Basic Cardiac Life Support/Cardio Pulmonary Resuscitation (BCLS/CPR) for Health Professionals

All students must complete BCLS/CPR through the American Heart Association or the American Red Cross. Certification must be obtained and submitted to the School by December 31 of the P1 year and renewed during the P3 year. The certification must remain current and be valid through the last Advanced Pharmacy Practice Experiential [APPE] rotation.

Health Insurance Coverage

All Pharm.D. students must obtain and provide proof of health insurance coverage no later than the end of the first week of every fall semester and the coverage must remain current throughout enrollment in the program.

Criminal Background Checks (CBCs)

The University, on behalf of the School of Pharmacy, agrees to inform students that as a condition of full admission to the Doctor of Pharmacy program and for participating in any affiliated institution or site [academic service learning and/or introductory and advanced pharmacy practice experiential rotations], students must obtain and provide verification of a current, criminal background check prior to final acceptance/matriculation into the program and again prior to starting any Introductory Pharmacy Practice Experience (IPPE) and any Advanced Pharmacy Practice Experience (APPE). The affiliated hospital/institution/practice site hereby understands and agrees that the decision to permit a student to participate at that affiliated hospital/institution/practice site on the basis of the result of any criminal background check remains solely with the affiliated hospital/institution and not the University. Failure on the student's part to submit to criminal background checks will delay progression or render a student unable to complete the professional degree program. The School of Pharmacy is not responsible if a student is unable to be placed in an educational experience at any affiliation site because of findings on his/her CBC.

Drug Screens

Pharmacy students will be required to complete a urine drug screen annually prior to starting their summer Introductory Pharmacy Practice Experiences and again prior to starting Advanced Pharmacy Practice Experiences. Students may be subject to additional requirements as a condition of participation in experiential education and patient care activities at affiliated sites. The drug screen will be collected as per the Pharm.D. Student Urine Drug Screen Policy (https://pharmacy.umkc.edu/wp-content/uploads/2016/01/UDS_Policy.pdf). If the school is made aware of the results of any positive findings, they will be shared with the Associate Dean for Student Affairs for further evaluation.

Students may be required to complete random drug screens as part of compliance with the UMKC School of Pharmacy Alcohol and Drug Use Policy.

Procedures for Alcohol and Drug Use Related Issue

A. Procedure for Reporting Any History of Alcohol or Drug Related Conviction - Prior to Admission

All applicants admitted to the SOP are provisionally admitted until their Criminal Background Check (CBC) is reviewed and cleared. Failure to report prior drug or alcohol convictions that are discovered following entry into the Pharm.D. program can result in the case being submitted to the Honor Council for review. Any drug or alcohol related conviction on an applicant's preadmission CBC will be investigated by the UMKC School of Pharmacy Associate Dean for Student Affairs (ADSA). These findings can lead to a review by the Admissions Committee and result in the withdrawal of the offer of admission.

B. Procedure for Reporting Alcohol and Drug Related Offenses – Current Students

Any student arrested or charged with a drug or alcohol related offense **at any time during their enrollment in the UMKC School of Pharmacy** (e.g. minor in possession, driving under the influence, driving while intoxicated, public intoxication, open container, etc...) must notify, **in writing**, the ADSA within 7 days of the arrest or issue of a citation. The ADSA will investigate the incident and can refer the findings to the Honor Council for review and disposition.

Any student convicted upon a plea or a verdict of guilty or following a plea of nolo contendere to a drug or alcohol related charge, or who receives a suspended imposition of sentence will have their case will be reviewed by the ADSA and they may be remanded to the SOP Honor Council (http://info.umkc.edu/pharmacy/wp-content/uploads/2014/04/Honor_Council_Procedures.pdf) for review and disposition.

C. UMKC School of Pharmacy Procedure for Working with Chemically Impaired Students

UMKC is committed to providing an environment that is safe, healthy and conducive to the academic achievement of all. Abuse of drugs and alcohol is a disruption to this environment and poses significant health and emotional problems that can jeopardize campus safety, patient safety and the personal and professional development of students.

The School of Pharmacy recognizes its obligations to be supportive of students who are chemically impaired. Students are strongly encouraged to self-report to the SOP ADSA any problems with substance abuse and to seek help voluntarily for their issues. The ADSA can offer information about resources for the student as they seek assistance. If a student is determined to be impaired while in class or during professional practice experiences, their case will be reviewed by the ADSA and they may be remanded to the SOP Honor Council (http://info.umkc.edu/pharmacy/wp-content/uploads/2014/04/Honor_Council_Procedures.pdf) for review and disposition. In these cases, the school may require monitoring in order for the student to continue as a student in the School of Pharmacy.

D. Available Resources: Alcohol and Substance Abuse Prevention

Kansas City Location - Counseling Center

- Alcohol and other substance use services are offered to assist students, faculty and staff with concerns regarding alcohol and other substances. Specially trained staff are available to provide evaluations, support, educational and early intervention, and recovery related services. The staff can also assist students, faculty and staff in locating resources in the surrounding community for particular needs

Columbia Location

- Student Health Center** - The Student Health Center provides medical services, psychiatric and counseling services, alcohol/drug problems, and health education.
- B.A.S.I.C.S. (Brief Alcohol Screening and Intervention for College Students)** - This program, which has been demonstrated by research to reduce harmful drinking behavior in college students, is administered by the Wellness Resource Center. Students referred to the BASICS attend an interactive workshop with a group of their peers, receive personalized feedback, and meet for an hour with a counselor to discuss their alcohol use and related issues.

Springfield –The Counseling and Testing Center at MSU (<http://counselingcenter.missouristate.edu/>)

The Counseling and Testing Center provides a wide array of alcohol and other drug services to currently enrolled students at Missouri State University. Confidential alcohol and drug related assessments and services are provided at the Counseling and Testing Center. Services range from information and referral services to assessments, counseling, and educational programs. Assessments require one session and may require a second follow-up session with a clinician specializing in substance abuse counseling. The assessment will involve an interview and standardized assessment tools. Students may also be seen for brief substance abuse counseling or referred elsewhere, as appropriate.

HIPAA Training

Students must successfully complete HIPAA training **annually**.

- Note: completing the online HIPAA course does not relieve students from having to complete additional training as required by any individual practice site.

Intern Pharmacist Licensure and Liability Insurance

Students enrolled in the Doctor of Pharmacy curriculum at UMKC are required to obtain a valid Intern Pharmacist License issued by the Missouri Board of Pharmacy during the first semester of enrollment in order to fully participate in the curriculum. In addition students must provide proof of current professional intern pharmacist liability insurance during the first semester of enrollment. The Intern Pharmacist License and Liability Insurance must remain valid through the last Advanced Pharmacy Practice Experience (APPE).

In order to apply for and maintain a valid Missouri Intern Pharmacist License and proper liability insurance, the following rules apply - Student Intern Pharmacist License and Intern Liability Policy (<http://pharmacy.umkc.edu/pharm-d/internship-and-licensure-information/>)

Laptop/Tablet Requirements

Pharm.D students are required to have a wireless capable mobile device for course completion. There is no required brand or model (please note that the Google Chromebook or other laptops/tablets running the Android operating system **do not** meet specification. In addition Windows must not be the "RT" version.). Laptops and tablets must support Windows, OSX, or iOS. If you are unsure regarding compatibility, contact Information Services prior to purchasing a device (<http://www.umkc.edu/IS/support/>). See the following for specific information regarding minimum and preferred configurations and software for Windows and Macintosh computers - https://pharmacy.umkc.edu/wp-content/uploads/2017/07/Pharmacy_Student_Laptop_Requirements.pdf

Missouri Family Care Registry List

All students must register during their Fall P2 semester. Instructions on how to complete this requirement will be provided from the Office of Experiential Education.

Immunization Requirements

Health care providers (HCP) are at risk for contracting and transmitting infectious diseases as a result of contact with their patients. All doctor of pharmacy students must provide proof of vaccination or evidence of immunity for their own protection and the protection of their patients for these diseases and conditions - Measles, Mumps, and Rubella (MMR), Varicella (Chickenpox), Hepatitis B, Tdap (Tetanus-Diphtheria-Pertussis), Tuberculosis (TB) and influenza. Students living in university sponsored residence halls must abide by the immunization requirements of their respective facilities as well as those listed below. For more information regarding the procedures for submitting documentation proofs, students must refer to the School of Pharmacy Immunization Requirements policy as follows:

- School of Pharmacy Immunization Requirements (https://pharmacy.umkc.edu/wp-content/uploads/2020/03/UMKC_SOP_Immunization_Policy_2020-2021.pdf)

Pharm.D. Orientation

All entering students must attend and participate in all sessions of the Doctor of Pharmacy orientation prior to full matriculation into the First Professional Year unless they are excused, in writing, in advance of the event by the Dean or designee.

Professionalism Policies and Standards

Students must adhere to all Professionalism Standards.

Standards of Professional and Ethical Conduct and Honor Council Procedures

All students entering the Doctor of Pharmacy program receive are informed about the Honor Council Procedures and Standards of Professional and Ethical Behavior. These policies and procedures provide peer and faculty review to ensure these standards are upheld by each pharmacy student. In all cases of academic dishonesty, the instructor shall make an academic assessment about the student's grade on that work and in that course.

- http://info.umkc.edu/pharmacy/wp-content/uploads/2014/04/Honor_Council_-Procedures.pdf
- https://pharmacy.umkc.edu/wp-content/uploads/2014/04/Course_Policy-Professional_Ethical_Behavior.pdf

Standards of Professional Attire and Classroom Behavior

Upon acceptance and entry into the School of Pharmacy, students begin a process of developing the knowledge, skills and attitudes that creates the fundamental core of the profession of pharmacy. The development of these competencies to a practitioner's level takes several years, but early initiation of these professional behaviors promotes the development of professionalism. In order to provide students direction to this end, upon entering the Doctor of Pharmacy program all students learn about the school's Standards of Professional Attire and Classroom Etiquette and must abide by these standards.

- Course Policy-Professional Attire-Classroom Etiquette (https://pharmacy.umkc.edu/wp-content/uploads/2018/08/Behavior_and_Attire_Policy.pdf)

Minimal Technical Standards for Pharm.D. Admission, Matriculation and Graduation

As a condition for admission, students must read the Minimal Technical Standards for Pharm.D. Admission, Matriculation and Graduation and certify that they are able to meet these standards.

- http://info.umkc.edu/pharmacy/wp-content/uploads/2014/04/Technical_Standards_APPROVED-4_11.pdf (https://pharmacy.umkc.edu/wp-content/uploads/2014/04/Technical_Standards.pdf)

Safety Training

All pharmacy students are required to attend and complete required safety training and receive certification beginning with the First Professional Year and maintain certifications on an annual basis to include, but not limited to, Blood Borne Pathogens, Fire Hazard, Chemical Management, and Hazard Communication.

White Coat Ceremony

All students are expected to attend and participate in the School of Pharmacy Professional Dedication Ceremony during the fall semester of the P2 year, unless previously excused, in writing, in advance of the event by the Dean or designee.

Pre-NAPLEX

All students are required to complete the Pre-NAPLEX during a predetermined date as a requirement for continued enrollment. Information about dates and the exam will be provided by the Office of Experiential Education.

Course Evaluations and Graduating Student Exit Surveys

All students are required to complete and submit course and instructor evaluations at the end of each semester of enrollment in order to progress. During the P4 year, all seniors are required to complete and submit the required Graduating Student Exit Surveys in order to finalize graduation completion requirements.

Co-Curricular Requirements

All students are required to complete co-curricular requirements for graduation from the Doctor of Pharmacy program. Co-curricular activities complement and advance the learning that occurs within the formal didactic and experiential curriculum. These experiences are conducted outside the classroom and encompass learning outcomes that take time to gain multiple exposures in order to hone and attain mastery. Students are made aware of these requirements and deadlines for completion each semester of enrollment.

Note: The School of Pharmacy reserves the right to add other noncredit requirements as deemed necessary to protect the health and safety of the students or to further their education.

Directed Individual Study

The opportunity to undertake independent study is offered through Pharmacy 7497 courses. These courses may satisfy part of the pharmacy elective requirements. Generally, the student receives the individual attention of a professor in the chosen field of study, and the project may involve any topic considered appropriate to the academic needs of the student. Once the student and instructor have agreed on a project, a permission-to-enroll form that includes an outline of the proposed course of study signed by the instructor must be reviewed and approved for credit by the school's curriculum committee chair. This must be done at least one month prior to the start of the term in which the coursework is to commence. Pharmacy 7497 requests that are part of a national, regional, or local competitive proposal or any part of a student organizational initiative may not be used for Directed Individual Study proposals.

No more than five credit hours of Pharmacy 7497 courses may be counted toward the degree requirements. Pharmacy 7497 courses are offered on a credit/no credit grading basis.

Off-campus Learning Experiences

All Pharm.D. students are required to participate in experiential learning rotations. All of the experiential learning courses—Introductory Pharmacy Practice Experiences and Advanced Pharmacy Practice Experiences—are conducted in actual practice settings (e.g., community, hospitals, nursing homes, etc.) under the supervision of licensed pharmacy practitioners—instructors who serve as exemplary role models in their particular types of pharmacy practice. Students are expected to provide their own transportation to sites assigned for the experiential learning.

Students may be assigned to an experiential learning experience at a different location than where they completed their didactic coursework. During the Introductory and Advanced Pharmacy Practice Experiential rotations, living, travel, and health expenses are the responsibility of the student. Other expenses may apply.

Outside Employment

Because of the intensity of the professional curriculum, students are strongly urged to limit outside employment to no more than 10 hours per week while enrolled in the school. Students experiencing academic difficulties as a result of commitments to outside employment or over commitments to professional or other extracurricular activities may be asked by the school's academic progression committee to stop outside work or limit extracurricular involvement until their academic difficulties are resolved.

Campus/Site Transfer

In the event that a Pharm.D. student wishes to transfer from one program site to another, the following policies and procedures are in effect:

1. A student will be allowed only one transfer between program locations during their enrollment in the School of Pharmacy.
2. Students will be allowed to transfer only at the end of an academic year; there will be no mid-year transfers.
3. Students requesting to transfer between program sites must submit a petition to the Associate Dean for Student Affairs by July 1. The Associate Dean will discuss the petition with relevant parties in order to render a final decision. Petitions will be granted on a first-come, first-served basis.
4. Petitions will be granted only if space in the class is available at the program site to which the student wishes to transfer. Transfers resulting in a class size that differs from the initial intended class size require special permission from the Dean.

Additional Policies and Stipulations

Students should refer to the UMKC School of Pharmacy website and individual course syllabi for additional policies and required forms.

Note: Program requirements and course descriptions are subject to change without notice after publication of this catalog. Pharmacy students are encouraged to remain in contact with their advisor and professional staff in the Pharmacy Office of Student Affairs to stay apprised of current program requirements in effect.

Doctor of Pharmacy

Doctor of Pharmacy Competencies

A pharmacist is a medication expert whose obligation is to deliver pharmaceutical care. Pharmaceutical care is "the responsible provision of drug therapy for the purpose of achieving a definite outcome that improves a patient's quality of life" (Hepler and Strand). A pharmacist's functions include, but are not limited to:

- Identifying, preventing and/or resolving drug-related problems.
- Preventing disease and promoting good health practices through rational drug therapy.
- Providing drug information to the public.
- Educating other health care professionals about appropriate drug therapies.
- Collaborating with other health care professionals to improve health outcomes, especially as they relate to the appropriate use of medications.
- Ensuring that medications are delivered to the patient in a safe manner.

Many practice areas are covered by these responsibilities. The curriculum is designed to develop the competencies of graduates, allowing them to assume these responsibilities as well as the all of the current curricular outcomes expected of Doctor of Pharmacy graduates detailed on the School of Pharmacy website under the *Curriculum Policies and Procedures* section at: <http://pharmacy.umkc.edu/pharm-d/curriculum-and-registration/>.

Admission Requirements

The doctor of pharmacy (Pharm.D.) degree provides minimum and advanced level competencies necessary for the graduate to assume a pharmacist's professional responsibilities and qualify for national and state pharmacist licensure examinations. The program of study emphasizes clinical sciences and training experiences. The training of doctor of pharmacy students concentrates on rational drug therapy decision-making within the inter-professional health care team.

Doctor of Pharmacy Minimum Pre-Pharmacy Course Requirements

A minimum of 54 credit hours of pre-professional, college level coursework, including the specified requirements listed below, must be successfully completed, with a grade of C or higher, prior to the fall of the entering class year of the professional pharmacy program of study. In addition, an overall cumulative college grade-point average of no less than 2.75, on a 4.0 scale and a science/math grade-point average of no less than 2.5 on a 4.0 scale must be achieved on all college-level work completed through the end of the fall term preceding the year of entry to meet minimum eligibility requirements. Repeated course grades are averaged together in applicants overall cumulative and science/math grade point average calculations. Applicants should note that admission is competitive and that meeting the minimum requirements is not a guarantee of admission. **NOTE:** Students in the Early Assurance Program must have earned, at time of application, a cumulative college GPA of 3.25 or higher; a collegiate science/math GPA of 3.25 or higher; and a minimum PCAT composite of 40.

Equivalent, pre-pharmacy courses must be completed at UMKC or any regionally accredited college or university. Applicants should contact the UMKC Pharmacy Office of Student Affairs to insure proper course equivalents have been met. Second year college pre-pharmacy courses, listed below, must be successfully completed within five years prior to admission entry date. Applicants with elective space during their pre-pharmacy preparation should consider courses that shape their understanding of the human condition. Courses in psychology, sociology, ethics, and anthropology, will assist a student in assuming their role in caring for people. Completion of additional communication studies courses is also encouraged.

In addition to the courses below, a three credit hour (3.0) Statistics course will be required for students entering Fall 2022 forward.

Pre-Pharmacy Courses / Minimum Semester Hours

Year I	Credits
General Chemistry I & II with Labs	8
Calculus with Analytical Geometry ¹	4
General Biology I & II ²	6
Physics with Lab ³	4
English Composition I & II	6
Public Speaking or Communication Studies Course	3
American History I or II or Introduction to Political Science course covering U.S. Constitution	3
	34
Year II	Credits
Organic Chemistry I & II with Labs ⁴	8
Cell Biology ⁴	3
Human Anatomy with Lab ^{4,5}	4
Microbiology with Lab ⁴	4
Medical Terminology ⁴	1
Statistics*	3
Electives completed at student discretion	8
	31

Total Credits: 65

¹ Calculus courses that are less than 4.0 credit hours or that do not include analytical geometry will not meet the minimum requirement.

² Preparatory or introductory biology courses will not meet the minimum requirement.

³ Physics courses must be at least algebra and trigonometry based.

⁴ NOTE: Second year college pre-pharmacy courses must be successfully completed within five years prior to Fall admission entry date.

⁵ Successful completion of two semesters of Human Anatomy and Physiology with labs will meet the Human Anatomy requirement. Comparative or Vertebrate Anatomy courses will not meet the Human Anatomy requirement.

* *In addition to the courses above, a three credit hour (3.0) Statistics course will be required for students entering Fall 2022 forward so the total pre-pharmacy credits will be 57.

General CLEP credits will not be accepted to fulfill the mathematics, biology, physics, or chemistry requirements. Advanced Placement Program scores through the College Board are accepted for some pre-pharmacy courses. Check acceptable scores and courses at <http://www.umkc.edu/registrar/transfer-credit/default.asp>. Contact an academic advisor in the School of Pharmacy regarding minimum score requirements and course transferability. Official scores from the College Board must be sent to the UMKC Records Office for evaluation.

Early Assurance (EA) Program

UMKC School of Pharmacy offers an Early Assurance Program for high school students with a strong interest in and aptitude for science and math and excellent communication skills. Students who meet the EA criteria for admission from high school have an assured seat in the Pharm.D. program if the minimum specified requirements from EA to the Pharm.D. program are achieved during their collegiate freshmen and sophomore years at UMKC. The minimum eligibility criteria to apply for the EA program include 1) a non-weighted high school GPA at the end of the junior year of 3.5 or higher; or 2) a non-weighted high school GPA at the end of the junior year of 3.0 or higher and a minimum ACT composite of 25 or higher or SAT equivalent; and meet the UMKC core requirements through high school curricular units. Students wanting to apply for the EA Program must complete and submit the following: the on-line UMKC Application For Admission and fee; the on-line Early Assurance Application; official high school transcripts through semester six; official college transcripts as applicable; official ACT/SAT scores, as applicable; and one reference letter. The priority deadline for the EA program is March 1st.

Additional information regarding degree program and admission requirements is located on the UMKC School of Pharmacy Pharm.D. Admissions webpage located at <https://pharmacy.umkc.edu/pharm-d/>. (<https://pharmacy.umkc.edu/pharm-d/>) Applicants with questions regarding admission should contact

UMKC School of Pharmacy
Office of Student Affairs
2464 Charlotte Street, Suite 1219 / Kansas City, MO / 64108
(816) 235-1613/ Fax (816) 235-5562
pharmacy@umkc.edu

Application Procedures

Applications for the doctor of pharmacy program are accepted between July 15 through April 1 for consideration for admission to the class entering the following fall. Admission to the Doctor of Pharmacy program is competitive and meeting minimum requirements for admission does not guarantee admission. New students are admitted to the doctor of pharmacy program only in the fall of each year.

As part of the process for application to the Doctor of Pharmacy program, all of the application steps and instructions located within the applications must be adhered to carefully and all required documents must be submitted no later than the April 1st deadline, unless otherwise stated. Applicants must:

1. Complete and submit the PharmCAS application with all supporting and required documentation and fee. The PharmCAS application is located at <http://www.pharmcas.org/>. Official transcripts(s) from each college and/or university attended showing all coursework attempted and completed through the Fall term prior to admission entry date must be submitted to PharmCAS;
2. Submit recent, official scores from the Pharmacy College Admission Test (PCAT) to PharmCAS;
3. Submit an electronic PharmCAS reference from specified categories only as noted on the UMKC Doctor of Pharmacy application; references from relatives, friends, or co-workers will not be accepted.
4. Complete and submit a UMKC Doctor of Pharmacy Application for Admission, to include supplemental materials and application fee. The UMKC Pharm.D. Application for Admission is located at <https://pharmacy.umkc.edu/pharm-d/>;
5. Meet and adhere to the *UMKC School of Pharmacy Minimal Technical Standards for Admission, Matriculation and Graduation* as part of the Pharm.D. Application. The Standards are listed on the application, as well as at <http://pharmacy.umkc.edu/pharm-d/policies/> on the School of Pharmacy website under the *Policies and Procedures* section. Students admitted to the Pharm.D. program must continue to meet and adhere to these standards throughout their tenure in the Pharm.D. program;
6. International applicants must complete the UMKC International Undergraduate Application for Admission (<http://www.umkc.edu/isao/>) in addition to the PharmCAS Application and the UMKC Doctor of Pharmacy Application. Copies of all materials submitted to the International Student Affairs Office must be sent to the Pharmacy Office of Student Affairs. The minimum TOEFL [Test of English as a Foreign Language] score required for Pharm.D. applicants is 560 [paper-based]; 220 [computer-based]; 83 [internet-based]. International applicants whose native language is not English or who received their education in a country where the first language is not English must
 - a. Meet the UMKC English Proficiency requirements
 - b. Complete the English Evaluation Examination prior to the first semester of enrollment
 - c. Follow recommendations from the UMKC Applied Language Institute.
7. Complete a formal, structured interview, if selected, at the School of Pharmacy as a factor for admission. Applicants are notified by e-mail before their scheduled interview. Applicants should note that meeting minimum eligibility requirements does not automatically qualify an applicant for an interview. Based on the academic and application credentials of the applicant and the applicant pool, the school will select candidates for an interview. Students who do not qualify for the interview will receive written notice.

Notification of Acceptance

Admission to the Pharm.D. program is competitive. Applicants will receive written notification of the school's decision concerning their applications.

Official supplementary college transcripts must be submitted to the Pharmacy Office of Student Affairs upon completion of winter/spring and summer coursework. Final acceptance is contingent on submission and clearance of a criminal background check, good academic and behavioral standing, successful completion (grade of C- or higher) of the specified minimum hours of required pre-pharmacy courses and any other coursework completed during the winter/spring and/or summer terms prior to admission. Those applicants approved for admission will be required to confirm their acceptance and submit an advance deposit to guarantee their place in the entering class. This deposit is applied to the first term's educational fees and is not refundable. Admitted students are required to attend the School of Pharmacy orientation sessions.

Curricular Requirements

The doctor of pharmacy degree program provides broad and general preparation in professional areas of practice with the intent that, on completion, graduates will be able to practice at a level sufficient to perform the established functions of a pharmacist. In addition, the Pharm.D. program prepares the student for advanced levels of professional practice. The major emphasis is on the clinical sciences and drug-related patient care.

This program is designed to provide advanced education and training in clinical pharmacy and drug information with particular emphasis on interprofessional team participation in the delivery of health care. To enable students to concentrate solely on this advanced professional coursework, those entering the doctor of pharmacy program are strongly encouraged to limit their work and/or intern hours during the academic year.

Because pharmacy is a profession undergoing rapid change, the curriculum is subject to continual review and modification. As society's needs for specific types of pharmaceutical service change, the curriculum will change as well. To assure the best pharmacy education for its students, the School of Pharmacy reserves the right of making judicious changes and improvements in course sequence, course content, or other program requirements at any time that must be completed and adhered to in order to meet graduation degree requirements.

Pharm.D. Graduation Requirements

To graduate, Pharm.D. candidates must successfully complete the 4 year curricular course requirements as listed in addition to the prerequisite course requirements.

To graduate, students must successfully complete all credit and non-credit requirements as listed and in effect at the time of completion. Within these hours, the following credit hour minimums must be met:

Pharm.D. Admission Prerequisites

Code	Title	Credits
Semester 1 Prerequisites		
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
MATH 210	Calculus I	4
BIOLOGY 108	General Biology I	3
ENGLISH 110	English I: Introduction To Academic Prose	3
GEFSE 101	First Semester Experience	3
Total Credits		18

Code	Title	Credits
Semester 2 Prerequisites		
CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II	5
PHYSICS 210	General Physics I	4
BIOLOGY 109	General Biology II	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Total Credits		15

Code	Title	Credits
Semester 3 Prerequisites		
BIOLOGY 218 & 218L	Introductory Anatomy and Introductory Anatomy Laboratory ¹	5
CHEM 321 & 321L	Organic Chemistry I and Organic Chemistry Laboratory I ¹	4
BIOLOGY 202	Cell Biology ¹	3
COMM-ST 110 or COMM-ST 140 or COMM-ST 277	Fundamentals Of Effective Speaking And Listening Principles Of Communication Interpersonal Communication	3
Total Credits		15

Code	Title	Credits
Semester 4 Prerequisites		
NURSE 125	Medical Terminology ¹	1
CHEM 322R	Organic Chemistry II ¹	3
CHEM 322L	Organic Chemistry Laboratory II ¹	1
LS-MCRB 121 & 121L	Human Biology III (Microbiology) and Human Biology III (Microbiology) Lab ¹	4
STAT 235	Elementary Statistics	3
Select any one of the following courses:		3
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	

POL-SCI 210	American Government
Total Credits	15

¹ Marked Science courses must be completed within five years of Pharm.D. program start date.

Student Learning Outcomes

Curricular Outcomes Expected of Doctor of Pharmacy Graduates

Doctor of Pharmacy graduates must possess the basic knowledge, skills, attitudes, and values to independently practice pharmacy at the time of graduation. These Curricular Outcomes expectations are outlined in full on the UMKC School of Pharmacy website under the *Curriculum Policies and Procedures* section at: <https://pharmacy.umkc.edu/current-students/curriculum-and-registration/>.

First Year

Fall	Credits	Spring	Credits	Summer	Credits
PHARM 7341	3	PHARM 7344	3	PHARM 7378	3
LS-PHYS 399	3	LS-PHYS 400	3		
LS-BIOC 370	4	PHARM 7414	2		
PHARM 7101	2	PHARM 7414L	0.5		
PHARM 7110	2	PHARM 7202	3		
PHARM 7151	1	PHARM 7233	3		
Professional Electives 1.0 - 8.0 ¹		PHARM 7361	2		
		Professional Electives 1.0 - 8.0 ¹			
	15		16.5		3

Second Year

Fall	Credits	Spring	Credits	Summer	Credits
PHARM 7245	1	PHARM 7303	3	PHARM 7379	3
PHARM 7307	3	PHARM 7405	4		
PHARM 7362	4	PHARM 7308	3		
PHARM 7465	3	PHARM 7363	4		
PHARM 7325	2	PHARM 7405L	0.5		
PHARM 7325L	0.5	PHARM 7334	1		
PHARM 7203	3	PHARM 7331	1		
PHARM 7434	1	PHARM 7331L	0.5		
PHARM 7434L	1	PHARM 7345	1		
Professional Electives 1.0 - 8.0 ¹		PHARM 7451	1		
		Professional Electives 1.0 - 8.0 ¹			
	18.5		19		3

Third Year

Fall	Credits	Spring	Credits	Summer	Credits
PHARM 7420	7	PHARM 7485P	7	Advanced Pharmacy Practice Experiences (APPE hours vary) ³	4
PHARM 7420L	0.5	PHARM 7485L	0.5		
PHARM 7326	4	PHARM 7466	3		
PHARM 7406P ²	2	PHARM 7389	2		
Professional Electives 1.0 - 8.0 ¹		Professional Electives 1.0 - 8.0 ¹			
PHARM 7463	2				
	15.5		12.5		4

Fourth Year

Fall	Credits	Spring	Credits
Advanced Pharmacy Practice Experiences (hours vary) ³	16	Advanced Pharmacy Practice Experiences (hours vary) ³	16
	16		16

Total Credits: 139

- ¹ A minimum of eight credit hours of professional elective course work must be successfully completed prior to enrollment in Advanced Pharmacy Practice Experiences (APPE). Visit <http://pharmacy.umkc.edu/pharm-d/curriculum-and-registration/#main-content> under the *Curriculum and Registration* section and review the Guidelines for Electives and the list of potential professional elective offerings. Students should choose electives and semester placement after consultation with a pharmacy academic advisor in the Office of Student Affairs and/or their faculty advisor.
- ² PHARM 7406P IPPE: General Medicine I is a continuous introductory pharmacy practice experience completed over both fall and spring semesters.
- ³ Students must complete 36 credit hours of Advanced Pharmacy Practice Experiences [APPE] over Semesters 6a-8. APPE prerequisites include satisfactory completion of all credit and non-credit degree and course requirements prior to Semester 6a of the professional curriculum.

Because pharmacy is a profession undergoing rapid change, the curriculum is subject to continual review and modification. As society's needs for specific types of pharmaceutical service change, the curriculum will change as well. To assure the best pharmacy education for its students, the School of Pharmacy reserve the right of making judicious changes and improvement in course sequence, course content, or other program requirements at any time that must be completed and adhered to in order to meet graduation requirements.

Prospective Applicants are encouraged to:

- Visit <http://pharmacy.umkc.edu> (<http://pharmacy.umkc.edu/>) to see equivalencies for schools in Missouri and Kansas to see how prerequisites will transfer to UMKC.
- Visit <http://www.umkc.edu/registrar/transfer-credit/default.asp> to review UMKC AP & IB course work minimums.

Doctor of Pharmacy Professional Program

A pharmacist is a medication expert whose obligation is to deliver pharmaceutical care. Pharmaceutical care is "the responsible provision of drug therapy for the purpose of achieving a definite outcome that improves a patient's quality of life" (Hepler and Strand). A pharmacist's functions include but are not limited to:

- Identifying, preventing and/or resolving drug-related problems.
- Preventing disease and promoting good health practices through rational drug therapy.
- Providing drug information to the public.
- Educating other health care professionals about appropriate drug therapies.
- Collaborating with other health care professionals to improve health outcomes, especially as they relate to the appropriate use of medications.
- Ensuring that medications are delivered to the patient in a safe manner.

Many practice areas are covered by these responsibilities. The curriculum is designed to develop the competencies of graduates, allowing them to assume these responsibilities as well as the all of the current curricular outcomes expected of Doctor of Pharmacy graduates detailed on the School of Pharmacy website <http://pharmacy.umkc.edu/pharm-d/curriculum-and-registration/#main-content> under the *Curriculum and Registration* section.

Interdisciplinary Ph.D. Degree Requirements in Pharmaceutical Sciences and Pharmacology

Interdisciplinary Ph.D. Program Requirements

See discipline-specific requirements for the Interdisciplinary Ph.D. program in Pharmaceutical Sciences and Pharmacology and Toxicology in the School of Graduate Studies section of this catalog.

Scholarships, Special Awards and Financial Assistance

The Dean's List

At the end of each semester, the names of full-time doctor of pharmacy students whose term GPA is 3.5 or higher are placed on the dean's list. These students receive a letter of congratulations and a notation is placed on their permanent records. Students must complete a minimum full-time semester of 12 graded hours to qualify for the dean's list. The credit/no credit option may not be used as part of the 12 hours.

Degrees With Honors

Students who meet the academic standards prescribed by the faculty will be graduated "with honors." The criteria for Latin honors eligibility is as follows:

Doctor of Pharmacy (Pharm.D.) Students

Honors

Summa Cum Laude

- Pharmacy GPA¹ greater than or equal to 3.750.
- No periods of probation.
- No incidents of unprofessional behavior.

No more than 5% of the graduating class will be awarded Summa Cum Laude honors. If more than 5% of the class qualifies under the criteria above, the GPA criteria will be raised and students below the revised GPA will be awarded their degrees with Magna Cum Laude honors.

Magna Cum Laude

- Pharmacy GPA¹ greater than or equal to 3.600.
- No periods of probation.
- No incidents of unprofessional behavior.

No more than 5% of the graduating class will be awarded Magna Cum Laude honors. If more than 5% of the class qualifies under the criteria above, the GPA criteria will be raised and students below the revised GPA will be awarded their degrees with Cum Laude honors.

Cum Laude

- Pharmacy GPA¹ greater than or equal to 3.500.
- No periods of probation.
- No incidents of unprofessional behavior.

No more than 10% of the graduating class will be awarded Cum Laude honors. If more than 10% of the class qualifies under the criteria above, the GPA criteria will be raised and students below the revised GPA will be awarded their degrees without Latin honors.

¹ GPA for Latin honors is the Doctor of Pharmacy GPA on all courses completed at UMKC through the end of the fall semester of the last year of the program.

Graduation Awards

At the annual spring pharmacy commencement ceremony, seniors receiving graduation awards are recognized. At that time, recognition is given to graduating students for superior academic achievement, leadership, and service. Selection of the recipients, except where noted otherwise, is made by vote of the pharmacy faculty in conjunction with the scholarship and awards committee.

Achievers of Excellence Scholarship and Awards Ceremony

Each fall an awards ceremony is held to recognize those students in the School of Pharmacy who receive scholarships or awards from the school, the university or the school's constituent groups. Most of these awards are competitive and are confirmed by the School of Pharmacy scholarship and awards committee.

Student Leadership Recognition

Annually, student leaders are recognized for their efforts on behalf of the school and the university.

Doctor of Pharmacy Graduation Awards

Douglas Adcock Memorial Award

An annual cash award established in memory of Douglas Adcock, a 1977 graduate of the School of Pharmacy, is presented to a student who plans a career in the public health service or who exhibits the ability to overcome adversity with professionalism.

Pharmacy Alumni Association Award

The Alumni Association of the School of Pharmacy gives an engraved plaque to the graduate who has exhibited outstanding leadership in school affairs. Selection is made by the board of directors of the Pharmacy Alumni Association in conjunction with the scholarship and financial aid committee.

The American College of Apothecaries Award

The graduating student who intends to practice in an independent community pharmacy after graduation and who has shown outstanding scholastic achievement and participation in school activities receives an engraved silver bowl from the American College of Apothecaries.

American Pharmacists Association Service Award

A certificate is presented by the American Pharmacists Association-Academy of Student Pharmacists (APhA-ASP) to the graduating student who has done the most for the student branch of the association. Selection is made by the APhA-ASP Executive Board.

First DataBank Medical Writing Award

An *Evaluations of Drug Interactions* loose leaf edition is presented to a graduating doctor of pharmacy student who has demonstrated excellence in medical writing.

Merck Awards

Merck & Company Inc. of Rahway, N.J., presents a Merck Manual and Merck Index to graduating students for noteworthy academic achievement in the area of pharmaceutical chemistry.

Mylan Pharmaceutical Excellence in Pharmacy Award

Mylan Pharmaceuticals Inc. of Birmingham, Ala., presents a plaque and a limited edition lithograph to a graduate in the top 20 percent of the class who exhibits exceptional skills in the area of drug information dissemination.

The Natural Medicines Comprehensive Database Award

Recognition is presented to the senior student who has shown an interest in the use of natural medicines. The recipient also must have proven academic and extracurricular activities demonstrating outstanding promise in the assessment, evaluation and delivery of patient care related to the use of natural medicines. The recipient receives a copy of the natural medicines comprehensive database, a subscription to the Natural Medicines Continuing Education series and a certificate.

Pharmacists Mutual Award

One year of pharmacists liability insurance is presented by the Pharmacists Mutual Insurance Co. of Algona, Iowa, to a graduate, based on academic achievement and professional pharmacy outlook.

Pharmacy Student Organization Awards

Honors are presented to graduating students based on a combination of scholastic achievement, strength of character, dedication and leadership evidenced during residency in the School of Pharmacy as a member of a university recognized pharmacy student organization. Selection is made by the respective pharmacy student organization officers.

TEVA Outstanding Student Award

A personalized plaque and cash award are presented by TEVA Pharmaceuticals of Sellersville, Pa., to a graduate. The criteria are scholastic achievement, professional pharmacy outlook and participation in school activities.

United States Public Health Service Excellence in Public Health Pharmacy Practice Award

A framed certificate and book award is presented to a graduate whose public and community service efforts are recognized.

Fall Scholarships and Awards

A listing of the over 85 UMKC School of Pharmacy scholarships and awards sponsored through pharmacy donors, alumni and friends of the school and their award descriptions can be found on the School of Pharmacy website under the *Scholarships* section.

Other Financial Assistance and Awards

Gracia Bremer Loan Fund

An endowment through the unitrust of Gracia Bremer and Mercantile Bank was established in 1996 for pharmacy students enrolled in years one through five of the first professional program who need additional financial support while pursuing a pharmacy degree.

George H. Hargrave Pharmacy Student Loan Fund

An endowment through the unitrust of George H. and Edith L. Hargrave was established in 1994 for pharmacy students enrolled in years one through five of the first professional program who need additional financial support while pursuing a pharmacy degree.

University College

Located in the UMKC Student Success Center
UMKCUCollege@umkc.edu

Mailing Address

University of Missouri-Kansas City
5100 Rockhill Road
Kansas City, MO 64110-2499

Associate Vice Provost-University College:
Kim McNeley, Ph.D.

General Information

What is a University College?

University College is an administrative structure that coordinates the overall academic experience of incoming exploratory/undecided students and continuing students in transition between majors. University College is a portal to the ultimate academic unit in which the student will be granted a degree.

Exploratory or Transitioning Student

Exploratory students are students that are simply not ready to select a major, whether at the time that they enter UMKC or after realizing their initial decisions regarding a major are not what they want. Nationally, a large percentage of students entering colleges and universities are unsure of their academic plans. Estimates indicate that as high as 70% of students change their major at least one time during their academic careers.

Mission

Our mission is to offer every exploratory or transitioning student the opportunity for success through the engagement with faculty and staff, the development of educational plans, the clarification of academic and career goals, and the understanding of the skills developed through UMKC Essentials.

The University College will contribute to the University through the development of a focused community of staff, students, and faculty with a shared responsibility for each student's achievement of advising goals and progress toward degree completion.

Explore, Network, and Decide

Exploratory students are expected to take an active role in their education through systematic exploration, networking, and active decision making. UC student success teams will provide a supportive environment for this approach. UCollege student success teams will be made up of: the Associate Vice Provost for University College and Undergraduate Advising, University College Retention Coordinators/Academic Advisors, seminar series faculty, librarians, peer mentors, and Student Success Center staff.

Cross-Campus Collaboration

The mission of University College is impossible without a multidisciplinary participation and collaboration among all undergraduate academic units. Students in University College explore academic options across the University. Faculty selected to mentor students through the UCollege seminar series are purposely drawn from a breadth of disciplines. Close collaboration between UCollege and all academic units is critical to the successful exploration and ultimate transition of students to their most appropriate academic homes in the College of Arts and Sciences or one of UMKC's schools.

Academic Advising

University College Retention Coordinators will partner with each student in the development and completion of educational goals. Retention Coordinators will provide cross-college academic advising and connections with potential academic units, and facilitate ongoing support and evaluation of each student's progress.

Advising Expectations

- **Fostering Academic Success**
University College Retention Coordinators will partner with each student in the development and completion of educational goals. Retention Coordinators will provide academic advising and connections with potential academic units, and facilitate ongoing support and evaluation of each student's progress. Students are required to regularly engage with their UCollege Retention Coordinator for Strategic Planning, Enrollment Planning, and End of Term check in sessions during each term (at a minimum).
- **Registration Approvals**

All University College students are required to secure an UCollege Retention Coordinator's approval to register for classes. To gain this approval, students must fully participate in enrollment advising expectations set by their UCollege Retention Coordinator prior to enrollment. This advising may include contact with other academic units and/or the completion of additional assessment so that course selection may be optimized. Students' registration must include enrollment in a least one course led by a University College instructor each semester. The appropriate University College seminar and general education curriculum may be administratively added to students' enrollment to ensure that students are making purposeful progress toward major selection.

- Declaration of Major

All UCollege students are required to complete process of a Declaration of Major with the appropriate academic unit and the University Registrar. All UCollege students will be advised of the advising process of the academic unit to which they are transitioning.

Enrollment

- Enrollment for Term

Students must enroll in all required courses and make appropriate selections from optional courses as discussed and documented in their enrollment advising meeting.

All UCollege students should complete enrollment, prior to the first day of classes. All changes to courses indicated as required by the UCollege Retention Coordinator during enrollment advising should be approved by the UCollege Retention Coordinator.

All UCollege students on academic probation are required to complete enrollment prior to the first day of classes. After this day enrollment holds will not be lifted, and therefore no enrollment will be permitted for the term.

- Adding/Dropping a Class

Additions of courses after the first week of classes are deemed unusual and typically negatively impact students' ability to succeed. Students wishing to add/drop after the published deadlines must petition UCollege for an exception to normal academic policy. Forms submitted after the published deadlines must be accompanied by an appropriate, approved petition.

All UCollege students on academic probation are required to complete all courses required by their UCollege Retention Coordinator and documented in their enrollment advising.

Academic Status Related To Grade Point Average

Undergraduate degree-seeking students' academic status is assessed at the end of every term, whether the student is full-time or part-time for that term. A summer session is considered the same as a semester for the purpose of the following regulations:

- In general, students will be placed on academic probation whenever their official UM grade-point average falls below 2.0 (C average). First time college freshman admitted to UMKC on the basis of high school records, who have grade-point averages between 1.50 and 1.99 at the end of the first semester of either full- or part-time study will be placed on academic warning. Students on academic warning must achieve an overall 2.0 average by the end of their second semester or be placed on regular probation.
- Students on academic probation will be restored to good standing whenever the UM grade-point average reaches 2.0 or the GPA level established by their academic units.
- Students on academic probation must remove themselves from probation within three successive semesters (including the semester in which they originally were placed on probation). Otherwise they are ineligible to re-enroll without the approval of the academic units.
- Students are responsible for knowing their academic status by referring to Pathway and their permanent transcript.
- UMKC students transitioning from an academic unit into University College will be reviewed under the above stipulations. Students on probation or dismissed (ineligible to re-enroll) from another UMKC academic unit may be admitted into University College under contracts. In order to be admitted into University College, the student must submit a Petition for Exception including an Academic Recovery plan. This petition must be approved prior to the first day of the term.

Dean's List – Term Performance

The Dean's List is a recognition of excellent academic performance. Students must complete a minimum full-time program of 12 graded hours to qualify for the dean's list with a minimum of a 3.5 grade.

University Requirements

General Education

UMKC Essentials is the university-wide curriculum that all undergraduate students will complete. The 30-credit hour program includes a First Year Experience course; three critical thinking courses in the areas of Arts & Humanities, Natural & Physical Sciences, and Social & Behavioral Sciences; a Culture and Diversity course; a Civic & Urban Engagement course; two courses in Composition and one course in Communication; and a Math Pathway course.

Constitution Course

Every undergraduate student must take a course covering the United States Constitution and the Missouri State Constitution before graduation. Course options are included in the program requirements section below.

Exit Examinations

Information on exit examinations is available in the Undergraduate Academic Regulations and Information (p. 488) section of the catalog.

Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), 'any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution'. To satisfy this requirement at UMKC, students access the exam through the Canvas site. This requirement will be listed in the degree audit system as, 'Take State Mandated Missouri Higher Education Civics Achievement Examination', and listed on the transcript as 'Missouri Civics Examination'.

Student Learning Outcomes

Students participating in the program will:

1. Identify and engage with relevant faculty, staff, and community contacts to further career and major exploration;
2. Demonstrate an understanding of the value of UMKC Essentials and the relevance of this knowledge and skills to their academic and career goals;
3. Demonstrate how to effectively access and interact with academic information sources (Undergraduate Catalog, Pathway, PlanMyDegree); Identify and utilize appropriate campus resources and opportunities that can contribute to his/her educational experience, goals, and campus engagement (i.e. Writing Studio, UMKC Tutoring, Peer Academic Leadership Program, and Career Services);
4. Identify broad areas of his/her academic interests, skills, and values as a step toward major & career selection;
5. Develop short- and long- term academic plans and initiate proactive steps toward completion; Identify and comply with relevant academic policies, processes, and procedures related to advising, course planning, and major exploration;
6. Demonstrate an understanding of the value of workplace and community diversity;
7. Demonstrate an understanding of the value of thorough and ongoing personal assessment, balanced with timely decision-making as components to career planning;
8. Demonstrate factual knowledge (terminology, classifications, methods, trends) gained about career decision-making and development;
9. Develop knowledge of specific skills, competencies, and points of view needed by professionals in the fields in which they hold interest; Demonstrate how to effectively utilize information sources related to possible career options (i.e. Handshake, O*Net, Occupational Outlook Handbook U.S. Bureau of Labor Statistics, Faculty and field informational interviews);
10. Use written and oral communication to discover, develop, and articulate plans, ideas and viewpoints regarding career and major choice;
11. Address and interpret evidence gained from multiple sources including self-assessments (interests, skills, values), course experiences/grades work volunteer experiences, extracurricular activities, and other experiences;
12. Define challenges and develop solutions in choosing a major/career path;
13. Develop a personal portfolio which includes a realistic plan to reach career and major goals.

University College Requirements and Regulations

Progress Toward Decision: Admission/Declaration

Hours Completed

- During the term in which the completion of **45 hours** credit hours of acceptable college work occurs and admission requirements have been met, students will complete the administrative process of transitioning to the ultimate academic unit in which their degree will be granted.
- Students transferring into UMKC with greater than **45 hours** of acceptable college work will be required to meet all admission requirements during their initial Fall or Spring term at UMKC. Declaration of major and/or admission processing must be completed by 20th day of the following term.
- Students unable to make a decision regarding their major by the guidelines noted above must provide a plan for the upcoming academic semester and/or requirements and petition University College for permission to continue.
- Purposeful/Required Course Enrollment to Support Decision-making
 - All University College students will enroll in the appropriate level University College seminar course(s) during both Fall and Spring semesters. These courses are: UNIV 100, UNIV 102, UNIV 202.
 - Early and continuous enrollment in the appropriate UMKC Essentials courses, as well as, mathematics and/or foreign languages courses are required depending upon the student's selected exploratory meta major.
 - A grade of C- or higher is required in UNIV 100, UNIV 102, UNIV 202, First Semester Experience, ENGLISH 110 ENGLISH 110, ENGLISH 225, and/or MATH (100 or 200 level) courses.
 - Critical courses will be designated for each plan of study based on academic unit recommendations. Required courses for each enrollment term will be determined by the student's UCollege Retention Coordinator based on the student expressed academic interests.

University College Requirements focus on the completion of the UMKC Essentials that build foundational skills required for all fields. Students select one of four exploratory meta majors and utilize both UMKC Essentials and specified Major Critical Courses to explore and identify their optimal academic plans (degrees, majors, and minors). Options linked below highlight these exploratory course options by meta major.

Arts, Culture, and Human Expression Meta-Major (p. 1952)

Numbers, Functions, Science and Technology Meta-Major (p. 1955)

Individual and Group Behavior Meta-Major (p. 1953)

Life and Health Sciences Meta-Major (p. 1954)

Arts, Culture, and Human Expression Meta-Major

First-Year Exploratory Plan of Study

First Year

Fall Semester	Credits	Spring Semester	Credits
UNIV 100 (may be required)		1 UNIV 102	2
GEFSE 101		3 ENGLISH 225, COMM-ST 110, or COMM-ST 277	3
ENGLISH 110		3 Exploratory Critical Course (or MATH/STAT Course if not completed)	3
MATH 116 or STAT 115		3 Exploratory Critical Course or additional Critical Thinking course *	3
GECRT-AH 101		3 Foreign Language	3
Exploratory Critical Course or Foreign Language		3	
		16	14

Total Credits: 30

Code	Title	Credits
Interest Exploration Through Critical Courses		
Historical Perspective		
ART-HIST 201	From Cave Paintings to Cathedrals	3
ART-HIST 202	From Michelangelo to Modernism	3
HISTORY 201	European History to 1600	3
HISTORY 202	European History since 1600	3
HISTORY 206	World History To 1450	3
HISTORY 208	World History since 1450	3
Mode of Expression		
ART 105	Introduction to Photography	3
ART 112	Foundation Drawing	3
ART 114	Foundation Digital Design	3
ART 121	Foundation 2D Design	3
COMM-ST 220	Introduction: Modern Communications Media	3
COMM-ST 250	Introduction to Film and Video Production	3
COMM-ST 260P	Introduction To Web Communications	4
CONSVTY 118	Electronica	3
CONSVTY 125	History and Development of Rock and Roll	3
CONSVTY 126	Introduction to World Music	3
CONSVTY 103N	Fundamentals of Music	3
CONSVTY 120N	Music Appreciation	3
THEATRE 101	Introduction To Acting	3
THEATRE 130	Foundations Of Fine Arts Theatre	3
THEATRE 210	Introduction To Design For The Theater	3
Culture		
ANTHRO 103	Introduction To Cultural Anthropology	3

BLKS 201	Global Systems and the Origins of Black American Culture and Institutions	3
LLS 201	Introduction to Latinx and Latin American Studies	3
PHILOS 210	Introduction to Philosophy	3
WGS 201	Introduction To Women's, Gender, and Sexuality Studies	3
Written Text		
CLASSICS 119	Myth and Literature	3
CLASSICS 131	Seven Wonders and Beyond: Archaeological Wonders of the Ancient World	3
ENGLISH 120	Literary Monstrosities	3
ENGLISH 123	True Lives: Autobiographical Arts and Acts	3
ENGLISH 126	Popular Literature	3
ENGLISH 207	World Literature in English	3
ENGLISH 214	Introduction To Fiction	3
ENGLISH 215	Introduction To Poetry	3
ENGLISH 216	The Craft of Creative Writing	3
ENGLISH 242	Women Writing/Women Reading	3
ENGLISH 273	Science Fiction	3
ENGLISH 278	Asian American Literature	3
TCH-ED 201	Children's Literature	3

Individual and Group Behavior Meta-Major

First-Year Exploratory Plan of Study

First Year

Fall Semester	Credits	Spring Semester	Credits
UNIV 100 (may be required)		1 UNIV 102	2
GEFSE 101		3 ENGLISH 225, COMM-ST 110, or COMM-ST 277	3
ENGLISH 110		3 Foreign Language (or MATH/STAT Course if not completed)	3
MATH 110, 116, or STAT 115		3 Exploratory Critical Course	3
GECRT-SS 101		3 Exploratory Critical Course	3
Exploratory Critical Course or additional Critical Thinking course *		3 Constitution Course or additional Critical Thinking course *	3
		16	17

Total Credits: 33

Code	Title	Credits
Interest Exploration Through Critical Courses		
ANTHRO 103	Introduction To Cultural Anthropology	3
CJC 101	Introduction To Criminal Justice	3
CJC 215		3
CJC 220		3
CJC 280	Gangs and Crime	3
CJC 282	Criminal Justice & Criminology in Popular Media	3
COMM-ST 140	Principles Of Communication	3
ECON 150	Introduction To Labor Studies	3
ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
GEOG 200	World Geography I	3
GEOG 202	World Geography II	3
HISTORY 101	U.S. History to 1877	3

HISTORY 102	U.S. History Since 1877	3
HISTORY 201	European History to 1600	3
HISTORY 202	European History since 1600	3
HISTORY 206	World History To 1450	3
HISTORY 208	World History since 1450	3
HLSC 110	Personal Wellness	3
NURSE 252	Human Growth and Development	3
PHILOS 210	Introduction to Philosophy	3
POL-SCI 220	Introduction To Comparative Politics	3
POL-SCI 221	Introduction to Comparative Politics and Research	3
POL-SCI 230	International Relations	3
PSYCH 210	General Psychology	3
SOCIOL 101	Sociology: An Introduction	3
SOCIOL 201	Introduction To Social Psychology	3
SOCIOL 203	Social Problems	3
SOCIOL 211	Social And Psychological Development Through The Life Cycle	3
UPD 260	History Of Planning And Urban Design	3
WGS 201	Introduction To Women's, Gender, and Sexuality Studies	3

Life and Health Sciences Meta-Major

First-Year Exploratory Plan of Study

First Year

Fall Semester	Credits	Spring Semester	Credits
UNIV 100 (may be required)		1 UNIV 102	2
GEFSE 101		3 ENGLISH 225, COMM-ST 110, or COMM-ST 277	3
ENGLISH 110		3 MATH/STAT Course appropriate for area(s) of interest (or Exploratory Critical Course if complete)	2-5
MATH/STAT Course appropriate for area(s) of interest		2-5 Exploratory Critical Course	3-5
GECRT-SC 101		3 Exploratory Critical Course, Constitution Course, or additional Critical Thinking course*	3-4
Exploratory Critical Course or additional Critical Thinking course*		3-4	
		15-19	13-19

Total Credits: 28-38

Code	Title	Credits
Interest Exploration Through Critical Courses		
Continuous enrollment in one or more of the following:		
BIOLOGY 102 & 102L	Biology and Living and Biology and Living Laboratory	4
CHEM 115 & 115L	Elements Of Chemistry I and Elements Of Chemistry, Laboratory I	5
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II	5
Health		

BIOLOGY 108 & 108L	General Biology I and General Biology I Laboratory	4
BIOLOGY 109 & 109L	General Biology II and General Biology II Laboratory	4
BIOLOGY 112	Microbiology and Living	3
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
CHEM 206	Human Nutrition (Focus B)	3
HLSC 110	Personal Wellness	3
HLSC 120	Anatomy & Physiology I	4
HLSC 160	Anatomy and Physiology II	4
LS-PHYS 217	Human Physiology	3
PBHL 158	Public Health Principles	3
Our Environment		
CHEM 160 & 160L	Chemistry, Society, And The Environment and Laboratory For Chemistry, Society, And The Environment	4
ENV-SCI 110R & ENV-SCI 110L	Understanding the Earth: Introduction to Environmental Science and Laboratory and Understanding the Earth Laboratory	5
ENV-SCI 210	Issues in Environmental Science	3
GEOLOGY 220	General Geology	3
GEOLOGY 250L	Field Methods in Earth and Environmental Science	3
UPD 260	History Of Planning And Urban Design	3

Numbers, Functions, Science, and Technology Meta-Major

First-Year Exploratory Plan of Study

First Year

Fall Semester	Credits	Spring Semester	Credits
UNIV 100 (may be required)		1 UNIV 102	2
GEFSE 101		3 ENGLISH 225, COMM-ST 110, or COMM-ST 277	3
ENGLISH 110		3 MATH Course appropriate for area(s) of interest (or Exploratory Critical Course if complete)	2-5
MATH Course appropriate for area(s) of interest		2-5 Exploratory Critical Course	3-5
GECRT-SC 101		3 Exploratory Critical Course, Constitution Course, or additional Critical Thinking course*	3-4
Exploratory Critical Course or additional Critical Thinking course *		3-4	
		15-19	13-19

Total Credits: 28-38

Code	Title	Credits
Interest Exploration Through Critical Courses		
ACCTNG 210	Introduction To Financial Accounting	3
ASTR 150	Astronomy: Motions of the Cosmos	3
ASTR 153L		2
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II	5

COMP-SCI 101	Problem Solving and Programming I	3
ECON 201	Introduction to Economics I	3
ECON 202	Introduction To Economics II	3
GEOG 203	Introduction to Geographic Information Systems	4
or UPD 203	GIS For Urban Planning	
GEOLOGY 220	General Geology	3
MIS 202	Computer Applications In Management	3
PHILOS 222	Foundations Of Logic and Scientific Reasoning	3
PHYSICS 210	General Physics I	4
PHYSICS 240	Physics For Scientists and Engineers I	5

UMKC INSTRUCTIONAL DESIGN & TECHNOLOGY/UMKC ONLINE

Online courses can take a variety of forms, from online synchronous to online asynchronous. Make sure you understand the requirements for each type of online course before you register. Definitions used for the delivery of online courses at UMKC can be found at the Registrar's page under the Codes and Definitions.

Additional information related to online training, courses, tutoring and other resources that support online learning can be found at the UMKC Instructional Design & Technology homepage located at: <https://idt.umkc.edu/>.

For more information regarding state authorization, including where distance education programs are approved, as well as a complete listing of distance education programs, please refer to the UMKC Online web page: <https://online.umkc.edu/>.

UNIVERSITY LIBRARIES

University Libraries

Miller Nichols Library (<http://library.umkc.edu/>)

800 E. 51st Street

Service Desk (816) 235-1526

Administration (816) 235-1531

Fax: (816) 235-5531

<http://library.umkc.edu/>

Health Sciences Library (<http://library.umkc.edu/hsl/>)

School of Medicine (<http://www.med.umkc.edu/>), Second Floor

2411 Holmes Street

(816) 235-1880

<http://library.umkc.edu/hsl> (<http://library.umkc.edu/hsl/>)

Leon E. Bloch Law Library

School of Law (<http://www.law.umkc.edu/>)

500 E. 52nd Street

(816) 235-1650

<http://law.umkc.edu/library> (<http://law.umkc.edu/library/>)

Mailing Address:

University of Missouri-Kansas City

University Libraries

5100 Rockhill Road

Kansas City, MO 64110-2499

University Libraries (<http://library.umkc.edu/ulstaff/>)Administration

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Associate Dean of Libraries:

Cindy Thompson (<https://cf1.umkc.edu/intapps/lookup/?LastName=thompson>)

Associate Dean of Special Collections and Archives:

Sandy Rodriguez (<https://cf1.umkc.edu/intapps/lookup/?LastName=rodriguez>)

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Description of the Libraries

The University Libraries (<http://library.umkc.edu/>) consist of the Miller Nichols Library and the Health Sciences Library, and we partner with the Leon E. Bloch Law Library. The University Libraries is an integral partner within UMKC and the greater Kansas City community and seeks to inspire and empower learners engaged in research, discovery, services, and creativity to reach their goals.

The University Libraries provide research facilities, resources and services in support of academic programs. We partner with UMKC Student Disability Services and are committed to providing services and assistance to all members of the UMKC Community. Information about accessibility can be found on the Web site at <http://library.umkc.edu/accessibility> (<http://library.umkc.edu/disability/>) and by calling 816-235-5612 or the Miller Nichols Library at 816-235-1526. The Library accepts calls through the National Relay Service (711) and the Missouri Relay Service (800-735-2966).

The Miller Nichols Library (<http://library.umkc.edu/>) serves primarily the College of Arts and Sciences (<http://cas.umkc.edu/>), the Conservatory (<http://conservatory.umkc.edu/>), and the Schools of Management (<http://www.umkc.edu/bloch/>), Education (<http://www.umkc.edu/education/>),

Biological and Chemical Sciences (<https://sbc.umkc.edu/>), and Computing and Engineering (<http://www.sce.umkc.edu/>). Specialized libraries include: the Leon E. Bloch Law Library (<http://law.umkc.edu/library/>) in the School of Law (<http://law.umkc.edu/>) and the Health Sciences Library (<http://library.umkc.edu/hsl/>) located in the School of Medicine (<http://med.umkc.edu/>), and serving the schools of Medicine (<http://med.umkc.edu/>), Dentistry (<http://dentistry.umkc.edu/>), Nursing & Health Studies (<http://sonhs.umkc.edu/>) and Pharmacy (<http://pharmacy.umkc.edu/>). UMKC faculty, students and staff have access to all collections and services, subject to the policies in effect at each library location.

Other Collections:

- Marr Sound Archives (<http://library.umkc.edu/marr/>) (Miller Nichols Library)
- Music/Media (<https://library.umkc.edu/music-media/>) (Miller Nichols Library)
- Dr. Kenneth J. LaBudde Special Collections (Miller Nichols Library)
- University Archives (http://www.umkc.edu/University_Archives/) (Miller Nichols Library)
- The State Historical Society of Missouri (<http://shs.umsystem.edu/about/kansascity.shtml/>) (Research Center-Kansas City - Newcomb Hall) Associate Director - Lucinda Adams (<http://shs.umsystem.edu/about/staff.shtml/>)

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¹ Associate or Adjunct Graduate Faculty

² Members of UMKC Graduate Faculty

³ Members of UMKC Doctoral Faculty

⁴ Located at UM-St. Louis campus

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